UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF
PESTICIDES AND TOXIC SUBSTANCES

MEMORANDUM

SUBJECT: Title III Speakers Handbook

FROM: Charles L. Elkins, Director
Office of Toxic Substances (TS-799)

James L. Makris, Director
Preparedness Staff, OSWER (WH-562A)

THRU: Susan Bullard, Chair
Outreach Subcommittee, OEA (A-103)

TO: Addressees

Enclosed is a variety of material that may prove useful to those of you representing the Agency as a Title III Speaker. The material is organized under three general categories: Title III Speeches; Title III Talking Points and Outlines; and Supplemental Title III Information. Within these categories, the Title III Speaker will find information ranging from a generic Title III speech to talking points on Section 313 that are suitable for industry groups. There is also supplemental information that speakers may wish to use in their own speeches. Periodic updates of material will be forthcoming and self explanatory.

We wish to impress on each of you the importance of your role as a Title III Speaker in putting the entire program in context. A good measure of the success of this important program lies with the public's and the regulated communities' understanding. As a Title III Speaker you may provide the only direct link between the audience and the program. It is, therefore, vital that each of you consider this as you accept speaking engagements and prepare your speeches.

If you have additional information and would like to include it in the handbook, or if you need assistance in obtaining supporting materials for presentations, please contact Mike McDonell at FTS 475-8995.

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MEMORANDUM

SUBJECT: Update of Title III Speakers Handbook

FROM: Susan Bullard, Chair Susan
Outreach Subcommittee, OEA (CA-103)

TO: Addressees

Attached you will find new material for insertion into the Title III Speakers Handbook. Please discard the old material and add the new material as follows:

- Index
- Tab A-1- General Audience Speech, Revised 3/24/89
- Tab A-2- General Audience Speech "Now It's Everybody's Job" Title III, Jim Makris
- Tab A-3- Notes on SARA Toxic Release Inventory and Congressman Waxman's Statement
- Tab A-4- General Audience Speech "Update on EPA's Implementation and Enforcement of Section 313 of SARA Title III", Mike Shapiro
- Tab A-5- Discard
- Tab C-2- The Emergency Planning and Community Right-to-Know Act Section 313 Reporting Requirements (pamphlet December 1988)

°Tab C-3- Special: Publicly Available Title III Documents

°Tab C-4- Roster (updated)

°Tab C-7- Community Right-to-Know and Small Business (booklet)

°Tab C-8- Toxic Chemical Release Inventory Questions and Answers (booklet)

°Tab C-9- Chemicals in Your Community (booklet)

°Tab C-11- It's not over in October! A Guide for Local Emergency Planning Committees (booklet)

°Tab C-13- Chemical Risks Communication (booklet)

°Tab C-14- Title III Fact Sheet (August 1988)

°Tab C-15- TRI Fact Sheet

If you have any questions regarding this material or the Speakers Handbook, please contact Mike McDonell at 475-8995. It is our intention to revise the Handbook peridically throughout the year; your suggestions and contributions are requested.

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TAB A

GENERAL AUDIENCE SPEECH

EMERGENCY PLANNING AND COMMUNITY RIGHT-TO-KNOW ACT OF 1986

GOOD MORNING. THANK YOU FOR INVITING ME TO SPEAK AT THIS IMPORTANT CONFERENCE AND SHARE INFORMATION ABOUT EPA'S EMERGENCY PLANNING AND COMMUNITY RIGHT-TO-KNOW PROGRAM. DURING MY TIME HERE WITH YOU TODAY, I'LL TALK ABOUT WHAT WE HAVE ACCOMPLISHED TO DATE AND WHAT YOUR ROLE MIGHT BE IN IMPLEMENTING THE PROGRAM.

YOU MIGHT ASK, WHY A NEW LAW? THROUGHOUT THE 1970's OUR KNOWLEDGE OF THE PRESENCE AND EFFECTS OF ENVIRONMENTAL HAZARDS GREW BY LEAPS AND BOUNDS. WE LEARNED MORE ABOUT THE CONTAMINANTS THAT WERE POLLUTING OUR AIR, OUR WATER AND OUR LAND, AND WE TOOK MANY STEPS TO CONTROL THEM. THEN, A CATASTROPHE HALFWAY AROUND THE WORLD BROUGHT AMERICANS FACE-TO-FACE WITH THE DESTRUCTIVE POTENTIAL OF CHEMICAL ACCIDENTS. ON DECEMBER 4, 1984, A CLOUD OF METHYL ISOCYANATE GAS KILLED MORE THAN 2,000 PEOPLE IN BHOPHAL, INDIA. RECOGNIZING THAT THE POTENTIAL MIGHT EXIST FOR SUCH A DISASTER IN OUR OWN COUNTRY, CONGRESS ENACTED THE EMERGENCY PLANNING AND COMMUNITY RIGHT-TO-KNOW ACT. THAT LAW ENACTED WITH THREE PREDOMINANT GOALS: ONE, PREVENTING INJURIES AND PROPERTY DAMAGE CAUSED BY CHEMICAL ACCIDENTS; TWO, INFORMING COMMUNITIES AND SAFETY AUTHORITIES ABOUT THE LOCATION OF HAZARDOUS MATERIALS, AND, THREE, PROVIDING THE PUBLIC WITH INFORMATION ABOUT THE TOTAL ANNUAL RELEASES OF CHEMCIALS INTO THE ENVIRONMENT.

THE ACT IS REVOLUTIONARY IN THAT FOR THE FIRST TIME IT REQUIRES INDUSTRIES AND OTHERS TO REPORT INFORMATION NECESSARY TO DEVELOP EMERGENCY RESPONSE PLANS AND PUBLIC POLICY AT THE COMMUNITY LEVEL, AND, IT EMPOWERS LOCAL COMMUNITY GROUPS TO OBTAIN THIS INFORMATION.

HOW MUCH DO YOU KNOW ABOUT HAZARDOUS CHEMICALS IN YOUR COMMUNITY? IF YOU FOUND OUT THAT SUCH CHEMICALS WERE PRESENT IN YOUR NEIGHBORHOOD, WOULD YOU KNOW HOW TO GET MORE INFORMATION ABOUT THEM?

IF YOU'RE LIKE MOST AMERICANS, YOUR ANSWERS TO THOSE QUESTIONS PROBABLY ARE "NOT MUCH" AND "NO". THIS NEW LAW IS DESIGNED TO IMPROVE THE ABILITY OF AMERICA'S COMMUNITIES -- AND CITIZENS -- TO DEAL SAFELY AND EFFECTIVELY WITH THE MANY HAZARDOUS CHEMICALS THAT ARE USED THROUGHOUT OUR SOCIETY.

FOR THE LAW TO BE EFFECTIVE, INTERESTED CITIZENS, INDUSTRY, HEALTH OFFICALS, EMERGENCY RESPONSE OFFICALS AND GOVERNMENTS AT ALL LEVELS MUST WORK TOGETHER. IN RESPONSE TO THE LAW'S REQUIREMENTS, INDUSTRIES MUST: ONE, PROVIDE THE LEPCs, SERCs, AND FIRE DEPARTMENTS WITH INFORMATION ABOUT THE PRESENCE OF HAZARDOUS CHEMICALS IN THE COMMUNITY; TWO, SET UP PROCEDURES FOR NOTIFYING THE ENTITIES AND THE PUBLIC OF CHEMICAL EMERGENCIES; AND THREE, PREPARE REPORTS TO THE STATE AND TO EPA ON ANNUAL RELEASES OF TOXIC CHEMICALS INTO THE AIR, WATER AND SOIL.

CITIZENS, HEALTH PROFESSIONALS, PUBLIC INTEREST AND LABOR REPRESENTATIVES, STATE AND LOCAL OFFICIALS, EMERGENCY PLANNERS MUST ALL WORK TOGETHER TO USE THIS DATA FOR PLANNING AND RESPONSE AT THE COMMUNITY LEVEL.

THE MAJOR ELEMENTS OF THE EMERGENCY PLANNING AND COMMUNITY RIGHT-TO-KNOW ACT ARE: EMERGENCY PLANNING. ACCIDENTAL RELEASE REPORTING, -- OR, EMERGENCY NOTIFICATION -- AND REPORTING ON HAZARDOUS CHEMICAL STORAGE, USE AND RELEASE.

THE EMERGENCY PLANNING PROVISIONS -- SECTIONS 301, 302, 303 -- ARE DESIGNED TO DEVELOP STATE AND LOCAL GOVERNMENT'S EMERGENCY RESPONSE AND PREPAREDNESS CAPABILTIES THROUGH BETTER COORDINATION AND PLANNING, ESPECIALLY WITHIN THE LOCAL COMMUNITY. THE LAW REQUIRES GOVERNORS OF EACH STATE TO SET UP STATE EMERGENCY RESPONSE COMMISSIONS, AND TO DESIGNATE LOCAL EMERGENCY PLANNING COMMITTEES COMPOSED OF LOCAL GOVERNMENT REPRESENTATIVES, CITIZENS, NEWS MEDIA AND INDUSTRY REPRESENTATIVES, HEALTH OFFICIALS, EMERGENCY RESPONDERS AND OTHERS.

ONE IMPORTANT RESPONSIBILITY OF THE COMMITTEES WAS TO DEVELOP EMERGENCY RESPONSE PLANS BY OCTOBER 17, 1988. PLANS MUST INCLUDE:

--IDENTIFICATION OF FACILITIES WITHIN THE COMMUNITY WHERE HAZARDOUS CHEMCIALS ARE USED;

--IDENTIFICATION OF TRANSPORTATION ROUTES FOR EXTREMELY HAZARDOUS SUBSTANCES USED IN, OR PASSING THROUGH, THE COMMUNITY;

--ESTABLISHMENT OF EMERGENCY REPSONSE PROCEDURES TO BE FOLLOWED BY INDUSTRIAL FACILITIES AND THE COMMUNITY, INCLUDING EVACUATION PLANS, IF NECESSARY;

--APPOINTMENT OF FACILITY AND COMMUNITY COORDINATORS TO IMPEMENT THE COMMUNITY'S EMERGENCY PLAN;

--ISSUANCE OF EMERGENCY TELEPHONE NUMBERS, ASSISTANCE LOCATIONS AND OTHER NOTIFICATION PROCEDURES;

--ORGANIZATION OF EMERGENCY RESPONSE PLAN EXERCIZES WITHIN THE COMMUNITY.

THE PLANNING PORTION OF THE EMERGENCY PLANNING AND COMMUNITY RIGHT-TO-KNOW LAW IS CENTERED ON A LIST OF CLOSE TO 400 EXTREMELY HAZARDOUS SUBSTANCES IDENTIFIED BY EPA. FACILITIES WHICH HANDLE ANY OF THOSE CHEMICALS IN CERTAIN QUANTITIES ARE SUBJECT TO ALL THE EMERGENCY PLANNING REQUIREMENTS IDENTIFIED IN THE LAW AND DEVELOPED IN THE COMMUNITY'S EMERGENCY RESPONSE PLAN. ADDITIONALLY, FOLLOWING PUBLIC COMMENT, THE STATE CAN DESIGNATE NEW FACILITIES TO BE SUBJECT TO THOSE REQUIREMENTS.

IF A FACILITY HANDLES ANY OF THE HAZARDOUS SUBSTANCES JUST DISCUSSED, IT IS REQUIRED TO NOTIFY THE LOCAL EMERGENCY PLANNING COMMITTEE AND THE STATE EMERGENCY RESPONSE COMMISSION. SECTION 304 REQUIRES THE FACILITY TO NOTIFY THE LOCAL EMERGENCY PLANNING COMMITTEE AND THE STATE EMERGENCY RESPONSE COMMISSION IMMEDIATELY IF THERE IS A RELEASE OF ANY OF THOSE SUBSTANCES (OR HAZARDOUS SUBSTANCES IDENTIFIED UNDER THE SUPERFUND LAW) IN EXCESS OF A CERTAIN AMOUNT.

OTHER PROVISIONS IN THE LAW, COVERED IN SECTIONS 311 AND 312, REQUIRE COMPANIES TO MAKE AVAILABLE TO THE STATE, LOCAL COMMUNITIES AND FIRE DEPARTMENTS, THE SAME INFORMATION ABOUT HAZARDOUS CHEMICALS THAT THE COMPANIES MUST SHARE WITH THEIR EMPLOYEES UNDER THE REGULATIONS OF OSHA -- THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION. FOR EACH CHEMICAL COVERED BY THOSE REQUIREMENTS, FACILITIES MUST EITHER PREPARE AND SUBMIT MATERIAL SAFETY DATA SHEETS FOR EACH CHEMICAL, OR SUBMIT A LIST OF SUCH CHEMICALS TO THE LOCAL EMERGENCY PLANNING COMMITTEE, THE STATE EMERGENCY RESPONSE COMMISSSION AND THE LOCAL FIRE DEPARTMENT. THAT REQUIREMENT WENT INTO EFFECT ON OCTOBER 17, 1987. ORIGINALLY COVERING ONLY CERTAIN SECTORS SUCH AS MANUFACTORING, OSHA'S REQUIREMENTS HAVE BEEN EXPANDED TO COVER VIRTUALLY ALL EMPLOYERS ESTIMATED TO EXCEED 4 MILLION FIRMS. TITLE III'S

THRESHOLDS WOULD ELIMINATE SOME OF THESE REQUIREMENTS BUT ALL ARE POTENTIALLY SUBJECT TO REQUESTS FOR INFORMATION BEFORE REPORTING THRESHOLDS. THUS ALL FIRMS SHOULD FAMILIARIZE THEMSELVE WITH THE PROVISIONS OF TITLE III.

THE LAW ALSO REQUIRES FACILITIES TO SUBMIT AN EMERGENCY AND HAZARDOUS CHEMICAL INVENTORY FORM TO THE STATE, LOCAL COMMITTEES AND FIRE DEPARTMENTS. THE FORM MUST INDICATE AN ESTIMATE OF THE MAXIMUM AMOUNT OF CHEMICALS PRESENT AT THE FACILITY AT ANY TIME DURING THE PRECEDING CALENDAR YEAR, AN ESTIMATE OF THE AVERAGE DAILY AMOUNT OF SUCH CHEMICALS AND INFORMATION ABOUT THEIR GENERAL LOCATION.

IN ADDITION TO THAT INFORMATION, A LOCAL COMMITTEE, A STATE COMMISSION OR LOCAL FIRE DEPARTMENT MAY REQUEST A FACILITY TO PROVIDE MORE DETAILED INFORMATION. AVAILABILITY OF THAT INFORMATION IS ESSENTIAL TO THE LOCAL COMMITTEE IN DEVELOPING AN EFFECTIVE EMERGENCY RESPONSE PLAN.

THE FINAL SECTION OF THE LAW — SECTION 313 -- REQUIRES CERTAIN INDUSTRIAL FACILITIES TO PROVIDE ANNUAL REPORTS OF THE TOXIC CHEMICALS THAT THEY RELEASE FROM THEIR FACILITIES OVER THE PREVIOUS YEAR. THIS PROVISION DIFFERS FROM THE EMERGENCY NOTIFICATION REQUIREMENTS IN THAT IT FOCUSES ON ANNUAL RELEASES. THIS ANNUAL INFORMATION MUST BE SUBMITTED TO THE EPA AND THE STATE, AND EPA IS TO CREATE A TOXIC RELEASE INVENTORY -- A NATIONAL DATA BASE OF ANNUAL REPORTS ON TOXIC CHEMICAL RELEASES FROM MANUFACTURING FACILITIES ACROSS THE NATION, TO ASSIST IN RESEARCH AND IN THE DEVELOPMENT OF POSSIBLE FUTURE REGULATIONS, GUIDELINES AND STANDARDS.

THESE REPORTING REQUIREMENTS WILL PROVIDE THE GOVERNMENT AND THE PUBLIC WITH A BETTER PICTURE OF THE NATURE OF ROUTINE CHEMICAL RELEASES BOTH ROUTINE AND ACCIDENTAL. ON A NATIONAL SCALE, SECTION 313 IS EXPECTED

TO COVER AS MANY AS 30,000 FACILITIES IN THE MANUFACTURING SECTOR OF THE ECONOMY, THAT MANUFACTURE PROCESS OR USE THE MORE THAN 300 CHEMICALS IDENTIFIED AS REPORTABLE SUBSTANCES. EPA'S NATIONAL DATABASE MUST BE ACCESSIBLE TO ANY CITIZEN VIA COMPUTER TELECOMMUNICATION AND OTHER MEANS.

IN ORDER TO MAINTAIN THE DELICATE BALANCE BETWEEN THE PUBLIC'S RIGHT-TO-KNOW AND THE RIGHT OF PRIVATE INDUSTRY TO PROTECT PROPRIETARY INFORMATION, THE LAW ALLOWS SOME OF THE INFORMATION PROVIDED TO EPA, LOCAL COMMITTEES, FIRE DEPARTMENTS AND TO THE STATE TO BE DESIGNATED AS "TRADE SECRET", THOUGH HEALTH AND SAFETY INFORMATION WILL STILL BE PROVIDED. THE LAW PROVIDES FOR DISCLOSURE OF TRADE SECRET INFORMATION UNDER CERTAIN CIRCUMSTANCES TO HEALTH PROFESSIONALS WHO NEED THE INFORMATION FOR DIAGNOSTIC PURPOSES, OR TO LOCAL OFFICIALS WHO NEED IT FOR ASSESSMENT ACTIVITIES. CITIZENS MAY CHALLENGE TRADE SECRET CLAIMS BY PETITIONING EPA. IT IS ENCOURAGING TO NOTE THAT NOT MANY "TRADE SECRET" CLAIMS HAVE BEEN MADE THUS FAR.

THE PUBLIC HAS AN IMPORTANT ROLE TO PLAY BY WAY OF ENSURING THAT THE GOALS OF THE EMERGENCY PLANNING AND COMMUNITY RIGHT-TO-KNOW ACT ARE ACHIEVED. CITIZENS CAN CONTRIBUTE TO THE EMERGENCY PLANNING PROCESS BY TAKING THE FOLLOWING STEPS:

--CHECK WHETHER A LOCAL PLANNING COMMITTEE HAS BEEN FORMED AND GET INVOLVED AT THE COMMITTEE MEETINGS; IF CITIZENS FIND THAT COMMITTEES HAVE NOT BEEN FORMED, OR THAT THEIR ACTIVITY IS BEING CONFINED OR STIFLED BY ENTRENCHED AUTHORITIES, THEY CAN PUT PRESSURE ON STATE AND LOCAL OFFICIALS TO CORRECT THE SITUATION. THE LAW ENTITLES CITIZENS TO SUE IF THE ESTABVLISHED MECHANISMS FAIL TO PROVIDE THE REQUIRED INFORMATION.

--REVIEW AND COMMENT ON THE COMMUNITY'S EMERGENCY RESPONSE PLAN:

--REQUEST INFORMATION ABOUT LOCAL INDUSTRIAL FACILITIES FROM THE LOCAL

COMMITTEE.

-- VISIT LOCAL INDUSTRIES AND ASK QUESTIONS: HAVE YOU COMPLIED WITH THE REPORTING REQUIREMENTS? WHAT HAVE YOU DONE TO REDUCE CHEMICAL HAZARDS? WHAT ARE YOU PLANNING TO DO TO CUT BACK ON YOUR TOXIC CHEMICAL EMISSIONS?

NOW, HAVING SAID THAT YOU SHOULD GET INVOLVED AS AN INDIVIDUAL CITIZEN, I RECOGNIZE THAT IT IS NOT SUFFICIENT MERELY TO ENCOURAGE YOU, WISH YOU WELL AND WALK AWAY. YOU DO HAVE SOME SUBSTANTIAL SUPPORT, IF YOU CHOOSE TO BECOME ACTIVELY INVOLVED IN HELPING TO CARRY OUT THIS VITAL LAW.

FIRST, THE LAW ITSELF, FROM THE TITLE TO THE TEXT, SAYS THAT IT SUPPORTS YOU. THE WORDS ARE "COMMUNITY RIGHT TO KNOW"; NOT "COMMUNITY PRIVILEGE TO KNOW" OR "GOOD IDEA TO KNOW"...IT IS YOUR LEGAL RIGHT TO LEARN WHETHER OR NOT YOUR ENVIRONMENT IS, OR MAY BE, THREATENED.

SECOND, THE US. ENVIRONMENTAL PROTECTION AGENCY IS PROVIDING INFORMATION AND SUPPORT TO THE PUBLIC. UNTIL RECENTLY WE HAD CONCENTRATED ON PUBLISHING REGULATIONS AND HOLDING NUMEROUS MEETINGS WITH INDUSTRY GROUPS, BECAUSE THEIR LEAD TIMES AND START-UP DATES TO MEET SOME OF THE STATUTORY DEADLINES REQUIRED THAT THEY GET MOVING VIRTUALLY FROM THE DAY THE ACT WAS SIGNED INTO LAW. NOW, HAVING MET OUR EARLY OBJECTIVES WE HAVE AND CONTINUE TO CREATE A VARIETY OF INFORMATION MATERIALS TO INFORM AND EDUCATE THE PUBLIC ABOUT THIS LAW AND EPA'S PROGRAM FOR IMPLEMENTING IT. WE HAVE PREPARED A BROCHURE THAT PROVIDES AN OVERVIEW OF THE LAW, INCLUDING ALL THE DETAILS THAT A CITIZEN WOULD NEED TO BECOME AN INFORMED COMMUNITY PARTICIPANT. ADDITIONALLY WE ARE ABOUT TO BEGIN PRODUCTION OF A VIDEOTAPE PRESENTATION, ALSO FOR THE NON-TECHNICAL AUDIENCE, THAT WILL PROVIDE A THOROUGH OVERVIEW OF THE EMERGENCY PLANNING AND COMMUNITY RIGHT-TO-KNOW.

WE HAVE GIVEN GUIDANCE TO STATE AND LOCAL OFFICIALS, AS WELL AS PRIVATE ORGANIZATIONS TO HELP THEM INTERPRET AND USE THE INFORMATION THAT WILL BE OBTAINED. IN SHORT, YOU NOT ONLY HAVE A RIGHT TO KNOW, BUT A RIGHT TO UNDERSTAND. THE MERE PRESENCE OF A TOXIC CHEMICAL MEANS LITTLE IN TERMS OF ASSESSING PUBLIC HEALTH AND SAFETY. THE AMOUNT, THE PATTERN OF MOVEMENT IN THE ENVIRONMENT AND MANY OTHER FACTORS ARE CRUCIAL QUESTIONS THAT MUST BE ADDRESSED. I THINK, HOWEVER, THAT OUR SOCIETY IS BEGINNING TO MOVE AWAY FROM THE IDEA THAT EVERY TIME THE WORD CHEMISTRY IS UTTERED, THE CONVERSATION MUST END FOR ALL BUT A FEW SELECTED EXPERTS. MUCH OF THE KNOWLEDGE NEEDED TO UNDERSTAND AND INTERPRET CHEMICAL DATA CAN BE TRANSLATED INTO INFORMATION THAT WILL BE USEFUL TO THE COMMUNITY AT LARGE. THIS LAW IS AN IMPORTANT FIRST STEP IN PROVIDING THAT KNOWLEDGE.

THE MORE INFORMED AND INVOLVED THE PUBLIC IS, THE BETTER EQUIPPED COMMUNITIES WILL BE TO RESPOND TO THE PRESENCE OF HAZARDOUS CHEMICALS. WE ARE AT THE BEGINNING OF A LONG JOURNEY AND THERE ARE MANY HURDLES AND MANY UNKNOWNS. HOWEVER, WITH A STRONG PUBLIC/PRIVATE PARTNERSHIP, I BELIEVE THAT WE CAN MEET THE CHALLENGES.

IF EVERYONE DOES HIS OR HER PART THE COMMUNITY RIGHT-TO-KNOW LAW CAN MAKE LIFE SAFER FOR ALL OF US. BY INCREASING PUBLIC AWARENESS AND IMPROVING OUR HANDLING OF CHEMICALS AND CHEMICAL ACCIDENTS, TOGETHER WE MAY SAVE SOME LIVES.

THANK YOU.

GENERAL AUDIENCE SPEECH

EMERGENCY PLANNING AND COMMUNITY RIGHT-TO-KNOW ACT OF 1986

GOOD MORNING. THANK YOU FOR INVITING ME TO SPEAK AT THIS IMPORTANT CONFERENCE AND SHARE INFORMATION ABOUT EPA'S EMERGENCY PLANNING AND COMMUNITY RIGHT-TO-KNOW PROGRAM. DURING MY TIME HERE WITH YOU TODAY, I'LL TALK ABOUT WHAT WE HAVE ACCOMPLISHED TO DATE AND WHAT YOUR ROLE MIGHT BE IN IMPLEMENTING THIS NEW LAW.

YOU MIGHT ASK, WHY A NEW LAW? THROUGHOUT THE 1970's OUR KNOWLEDGE OF THE PRESENCE AND EFFECTS OF ENVIRONMENTAL HAZARDS GREW BY LEAPS AND BOUNDS. WE LEARNED MORE ABOUT THE CONTAMINANTS THAT WERE POLLUTING OUR AIR, OUR WATER AND OUR LAND, AND WE TOOK MANY STEPS TO CONTROL THEM. THEN, A CATASTROPHE HALFWAY AROUND THE WORLD BROUGHT AMERICANS FACE-TO-FACE WITH THE DESTRUCTIVE POTENTIAL OF CHEMICAL ACCIDENTS. ON DECEMBER 4, 1984, A CLOUD OF METYHL ISOCYANATE GAS KILLED MORE THAN 2,000 PEOPLE IN BHOPAL, INDIA. RECOGNIZING THAT THE POTENTIAL MIGHT EXIST FOR SUCH A DISASTER IN OUR OWN COUNTRY, CONGRESS ENACTED THE EMERGENCY PLANNING AND COMMUNITY RIGHT-TO-KNOW ACT. THAT LAW WAS ENACTED WITH THREE PREDOMINANT GOALS: ONE, PREVENTING INJURIES AND PROPERTY DAMAGE CAUSED BY CHEMICAL ACCIDENTS; TWO, INFORMING COMMUNITIES AND SAFETY AUTHORITIES ABOUT THE LOCATION OF HAZARDOUS MATERIALS; AND, THREE, PROVIDING THE PUBLIC WITH INFORMATION ABOUT THE TOTAL ANNUAL RELEASES OF CHEMICALS INTO THE ENVIRONMENT.

THE ACT IS REVOLUTIONARY IN THAT FOR THE FIRST TIME IT REQUIRES INDUSTRIES AND OTHERS TO REPORT INFORMATION NECESSARY TO DEVELOP EMERGENCY RESPONSE PLANS AND PUBLIC POLICY AT THE COMMUNITY LEVEL, AND IT EMPOWERS LOCAL COMMUNITY GROUPS TO OBTAIN THIS INFORMATION.

HOW MUCH DO YOU KNOW ABOUT HAZARDOUS CHEMICALS IN YOUR COMMUNITY? IF YOU FOUND OUT THAT SUCH CHEMICALS WERE PRESENT IN YOUR NEIGHBORHOOD, WOULD YOU KNOW HOW TO GET MORE INFORMATION ABOUT THEM?

IF YOU'RE LIKE MOST AMERICANS, YOUR ANSWERS TO THOSE QUESTIONS PROBABLY ARE "NOT MUCH" AND "NO". THIS NEW LAW IS DESIGNED TO IMPROVE THE ABILITY OF AMERICA'S COMMUNITIES - AND CITIZENS - TO DEAL SAFELY AND EFFECTIVELY WITH THE MANY HAZARDOUS CHEMICALS THAT ARE USED THROUGHOUT OUR SOCIETY.

FOR THE LAW TO BE EFFECTIVE, INTERESTED CITIZENS AND GOVERNMENTS AT ALL LEVELS MUST WORK TOGETHER. IN RESPONSE TO THE LAW'S REQUIREMENTS, INDUSTRIES MUST: ONE, PROVIDE THE PUBLIC WITH INFORMATION ABOUT THE PRESENCE OF HAZARDOUS CHEMICALS IN THE COMMUNITY; TWO, SET UP PROCEDURES FOR NOTIFYING THE PUBLIC OF CHEMICAL EMERGENCIES; AND THREE, PREPARE REPORTS TO THE PUBLIC ON ANNUAL RELEASES OF TOXIC CHEMICALS INTO THE AIR, WATER AND SOIL.

CITIZENS, HEALTH PROFESSIONALS, PUBLIC INTEREST AND LABOR REPRESENTATIVES, STATE AND LOCAL OFFICIALS, EMERGENCY PLANNERS MUST ALL WORK TOGETHER TO USE THIS DATA FOR PLANNING AND RESPONSE AT THE COMMUNITY LEVEL.

THE MAJOR ELEMENTS OF THE EMERGENCY PLANNING AND COMMUNITY RIGHT-TO-KNOW ACT ARE: EMERGENCY PLANNING, ACCIDENTAL RELEASE REPORTING, - OR, EMERGENCY NOTIFICATION - AND REPORTING ON HAZARDOUS CHEMICAL STORAGE, USE AND RELEASE.

THE EMERGENCY PLANNING PROVISIONS - SECTIONS 301, 302, AND 303 - ARE DESIGNED TO DEVELOP STATE AND LOCAL GOVERNMENT'S EMERGENCY RESPONSE AND PREPAREDNESS CAPABILITIES THROUGH BETTER COORDINATION AND PLANNING, ESPECIALLY WITHIN THE LOCAL COMMUNITY. THE LAW REQUIRES GOVERNORS OF EACH STATE TO SET UP STATE EMERGENCY RESPONSE COMMISSIONS AND TO DESIGNATE LOCAL EMERGENCY PLANNING COMMITTEES COMPOSED OF LOCAL GOVERNMENT REPRESENTATIVES, CITIZENS, NEWS MEDIA AND INDUSTRY REPRESENTATIVES, HEALTH OFFICIALS, EMERGENCY RESPONDERS AND OTHERS.

THE PRIMARY RESPONSIBILITY OF THE COMMITTEES IS TO DEVELOP EMERGENCY RESPONSE PLANS BY OCTOBER 17, 1988. PLANS MUST INCLUDE:

-- IDENTIFICATION OF FACILITIES WITHIN THE COMMUNITY WHERE HAZARDOUS CHEMICALS ARE USED;

-- IDENTIFICATION OF TRANSPORTATION ROUTES FOR EXTREMELY HAZARDOUS SUBSTANCES USED IN, OR PASSING THROUGH, THE COMMUNITY;

-- ESTABLISHMENT OF EMERGENCY RESPONSE PROCEDURES TO BE FOLLOWED BY INDUSTRIAL FACILITIES AND THE COMMUNITY, INCLUDING EVACUATION PLANS, IF NECESSARY:

-- APPOINTMENT OF FACILITY AND COMMUNITY COORDINATORS TO IMPLEMENT THE COMMUNITY'S EMERGENCY PLAN;

-- ISSUANCE OF EMERGENCY TELEPHONE NUMBERS, ASSISTANCE LOCATIONS AND OTHER NOTIFICATION PROCEDURES;

-- ORGANIZATION OF EMERGENCY RESPONSE PLAN EXERCISES WITHIN THE COMMUNITY.

THE PLANNING PORTION OF THE EMERGENCY PLANNING AND COMMUNITY RIGHT-TO-KNOW LAW IS CENTERED ON A LIST OF CLOSE TO 400 EXTREMELY HAZARDOUS SUBSTANCES IDENTIFIED BY EPA. FACILITIES WHICH HANDLE ANY OF THOSE CHEMICALS IN CERTAIN QUANITIES ARE SUBJECT TO ALL THE EMERGENCY PLANNING REQUIREMENTS IDENTIFIED IN THE LAW AND DEVELOPED IN THE COMMUNITY'S EMERGENCY RESPONSE PLAN. ADDITIONALLY, FOLLOWING PUBLIC COMMENT, THE STATE CAN DESIGNATE NEW FACILITIES TO BE SUBJECT TO THOSE REQUIREMENTS.

IF A FACILITY HANDLES ANY OF THE HAZARDOUS SUBSTANCES JUST DISCUSSED, IT IS REQUIRED TO NOTIFY THE LOCAL EMERGENCY

PLANNING COMMITTEE AND THE STATE EMERGENCY RESPONSE COMMISSION. SECTION 304 REQUIRES THE FACILITY TO NOTIFY THE LOCAL EMERGENCY PLANNING COMMITTEE AND THE STATE EMERGENCY RESPONSE COMMISSION IMMEDIATELY IF THERE IS A RELEASE OF ANY OF THOSE SUBSTANCES (OR HAZARDOUS SUBSTANCES IDENTIFIED UNDER THE SUPERFUND LAW) IN EXCESS OF A CERTAIN AMOUNT.

OTHER PROVISIONS IN THE LAW, COVERED IN SECTIONS 311 AND 312, REQUIRE COMPANIES TO MAKE AVAILABLE TO THE STATE, LOCAL COMMUNITIES AND FIRE DEPARTMENTS, THE SAME INFORMATION ABOUT HAZARDOUS CHEMICALS THAT THE COMPANIES MUST SHARE WITH THEIR EMPLOYEES UNDER THE REGULATIONS OF OSHA - THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION. FOR EACH CHEMICAL COVERED BY THOSE REQUIREMENTS, FACILITIES MUST EITHER PREPARE AND SUBMIT MATERIAL SAFETY DATA SHEETS FOR EACH CHEMICAL, OR SUBMIT A LIST OF SUCH CHEMICALS TO THE LOCAL EMERGENCY PLANNING COMMITTEE, THE STATE EMERGENCY RESPONSE COMMISSION AND THE LOCAL FIRE DEPARTMENT. THAT REQUIREMENT WENT INTO EFFECT ON OCTOBER 17, 1987.

THE LAW ALSO REQUIRES FACILITIES TO SUBMIT AN EMERGENCY AND HAZARDOUS CHEMICAL INVENTORY FORM TO THE STATE, LOCAL COMMITTEES AND FIRE DEPARTMENTS. THE FORM MUST INDICATE AN ESTIMATE OF

THE MAXIMUM AMOUNT OF CHEMICALS PRESENT AT THE FACILITY AT ANY TIME DURING THE PRECEDING CALENDAR YEAR, AN ESTIMATE OF THE AVERAGE DAILY AMOUNT OF SUCH CHEMICALS AND INFORMATION ABOUT THEIR GENERAL LOCATION.

IN ADDITION TO THAT INFORMATION, A LOCAL COMMITTEE, A STATE COMMISSION OR LOCAL FIRE DEPARTMENT MAY REQUEST A FACILITY TO PROVIDE MORE DETAILED INFORMATION AS LONG AS THAT INFORMATION IS ESSENTIAL TO THE LOCAL COMMITTEE IN DEVELOPING AN EFFECTIVE EMERGENCY RESPONSE PLAN.

THE FINAL SECTION OF THE LAW -- SECTION 313 -- REQUIRES CERTAIN INDUSTRIAL FACILITIES TO PROVIDE ANNUAL REPORTS OF THE TOXIC CHEMICALS THAT WERE RELEASED FROM THEIR FACILITIES OVER THE PREVIOUS YEAR. THIS PROVISION DIFFERS FROM THE EMERGENCY NOTIFICATION REQUIREMENTS IN THAT IT FOCUSES ON ANNUAL RELEASES AND PUBLIC INFORMATION. THIS ANNUAL INFORMATION MUST BE SUBMITTED TO THE EPA AND THE STATE, AND EPA IS TO CREATE A TOXIC RELEASE INVENTORY -- A NATIONAL DATA BASE OF ANNUAL REPORTS ON TOXIC CHEMICAL RELEASES FROM MANUFACTURING FACILITIES ACROSS THE NATION TO BE PROVIDED TO THE PUBLIC. THIS INFORMATION WILL ALSO BE USED BY EPA AND OTHER AGENCIES AND TO ASSIST IN RESEARCH AND IN THE DEVELOPMENT OF POSSIBLE FUTURE REGULATIONS, GUIDELINES AND STANDARDS.

THESE REPORTING REQUIREMENTS WILL PROVIDE THE GOVERNMENT AND THE PUBLIC WITH A BETTER PICTURE OF THE NATURE OF CHEMICAL RELEASES, BOTH ROUTINE AND ACCIDENTAL. ON A NATIONAL SCALE, SECTION 313 IS EXPECTED TO COVER AS MANY AS 30,000 FACILITIES IN THE MANUFACTURING SECTOR OF THE ECONOMY THAT MANUFACTURE, PROCESS OR USE THE MORE THAN 300 CHEMICALS IDENTIFIED AS REPORTABLE SUBSTANCES. EPA'S NATIONAL DATABASE MUST BE ACCESSIBLE TO ANY CITIZEN VIA COMPUTER TELECOMMUNICATIONS AND OTHER MEANS.

IN ORDER TO MAINTAIN THE DELICATE BALANCE BETWEEN THE PUBLIC'S RIGHT-TO-KNOW AND THE RIGHT OF PRIVATE INDUSTRY TO PROTECT PROPRIETARY INFORMATION, THE LAW ALLOWS SOME OF THE INFORMATION PROVIDED TO EPA, LOCAL COMMITTEES, FIRE DEPARTMENTS AND TO THE STATE TO BE DESIGNATED AS "TRADE SECRET", THOUGH HEALTH AND SAFETY INFORMATION WILL STILL BE PROVIDED. THE LAW PROVIDES FOR DISCLOSURE OF TRADE SECRET INFORMATION UNDER CERTAIN CIRCUMSTANCES TO HEALTH PROFESSIONALS WHO NEED THE INFORMATION FOR DIAGNOSTIC PURPOSES, OR TO LOCAL OFFICIALS WHO NEED IT FOR ASSESSMENT ACTIVITIES. CITIZENS MAY CHALLENGE TRADE SECRET CLAIMS BY PETITIONING EPA.

THE PUBLIC HAS AN IMPORTANT ROLE TO PLAY BY WAY OF ENSURING THAT THE GOALS OF THE EMERGENCY PLANNING AND COMMUNITY RIGHT-

TO-KNOW ACT ARE ACHIEVED. CITIZENS CAN CONTRIBUTE TO THE EMERGENCY PLANNING PROCESS BY TAKING THE FOLLOWING STEPS:

-- CHECK TO SEE IF A LOCAL PLANNING COMMITTEE HAS BEEN FORMED AND GET INVOLVED IN THE COMMITTEE MEETINGS; IF CITIZENS FIND THAT COMMITTEES HAVE NOT BEEN FORMED, OR THAT THEY ARE NOT RESPONSIVE TO THE INTENT OF THE LAW, OR THAT THEIR ACTIVITY IS BEING CONFINED OR STIFLED BY ENTRENCHED AUTHORITIES, THEY CAN PUT PRESSURE ON STATE AND LOCAL OFFICIALS TO CORRECT THE SITUATION. THE LAW ENTITLES CITIZENS TO SUE IF THE ESTABLISHED MECHANISMS FAIL TO PROVIDE THE REQUIRED INFORMATION.

-- REVIEW AND COMMENT ON THE COMMUNITY'S EMERGENCY RESPONSE PLAN;

-- ASK FOR INFORMATION ABOUT LOCAL INDUSTRIAL FACILITIES FROM THE LOCAL COMMITTEE.

-- VISIT LOCAL INDUSTRIES AND ASK QUESTIONS: HAVE YOU COMPLIED WITH THE REPORTING REQUIREMENTS? WHAT HAVE YOU DONE TO REDUCE CHEMICAL HAZARDS? WHAT ARE YOU PLANNING TO DO TO CUT BACK ON YOUR TOXIC CHEMICAL EMISSIONS?

NOW, HAVING SAID THAT YOU SHOULD GET INVOLVED AS AN INDIVIDUAL CITIZEN, I RECOGNIZE THAT IT IS NOT SUFFICIENT MERELY TO ENCOURAGE YOU, WISH YOU WELL AND WALK AWAY. YOU DO HAVE SOME SUBSTANTIAL SUPPORT, IF YOU CHOOSE TO BECOME ACTIVELY INVOLVED IN HELPING TO CARRY OUT THIS VITAL LAW.

FIRST, THE LAW ITSELF, FROM THE TITLE TO THE TEXT, SAYS THAT IT SUPPORTS YOU. THE WORDS ARE "COMMUNITY RIGHT-TO-KNOW"; NOT "COMMUNITY PRIVILEGE TO KNOW" OR "NICE TO KNOW IF YOU CAN FIND OUT" ...IT IS YOUR LEGAL RIGHT TO LEARN ABOUT THE CHEMICALS IN YOUR COMMUNITY AND TO MAKE YOUR OWN INFORMED DECISIONS AS TO WHETHER THESE CHEMICALS ARE A THREAT TO YOUR HEALTH OR ENVIRONMENT.

SECOND, THE U.S. ENVIRONMENTAL PROTECTION AGENCY IS PROVIDING INFORMATION AND SUPPORT TO THE PUBLIC. UNTIL RECENTLY WE HAD CONCENTRATED ON PUBLISHING REGULATIONS AND HOLDING NUMEROUS MEETINGS WITH INDUSTRY GROUPS, BECAUSE THEIR LEAD TIMES AND START-UP DATES TO MEET SOME OF THE STATUTORY DEADLINES REQURIED THAT THEY GET MOVING VIRTUALLY FROM THE DAY THE ACT WAS SIGNED INTO LAW. NOW, HAVING MET OUR EARLY OBJECTIVES WE ARE PREPARING A VARIETY OF INFORMATION MATERIALS TO INFORM AND EDUCATE THE PUBLIC ABOUT THIS LAW AND EPA'S PROGRAM FOR IMPLEMENTING IT. WE WILL SOON BE GOING TO PRESS WITH A BROCHURE THAT WILL PROVIDE AN OVERVIEW OF THE LAW, INCLUDING ALL THE DETAILS THAT A CITIZEN WOULD NEED TO BECOME AN INFORMED COMMUNITY PARTICIPANT. ADDITIONALLY WE ARE ABOUT TO BEGIN PRODUCTION OF A VIDEOTAPE PRESENTATION, ALSO FOR THE NON-TECHNICAL AUDIENCE, THAT WILL PROVIDE A THOROUGH OVERVIEW OF EMERGENCY PLANNING AND COMMUNITY RIGHT-TO-KNOW.

LATER ON WE WILL BE PROVIDING DETAILED GUIDANCE WHICH WILL HELP STATE AND LOCAL OFFICIALS, AS WELL AS PRIVATE ORGANIZATIONS, INTERPRET THE DATA THAT WILL BE OBTAINED. IN SHORT, YOU NOT ONLY HAVE A RIGHT TO KNOW, BUT A RIGHT TO UNDERSTAND. THE MERE PRESENCE OF A TOXIC CHEMICAL MEANS LITTLE IN TERMS OF ASSESSING PUBLIC HEALTH AND SAFETY. THE AMOUNT, THE PATTERN OF MOVEMENT IN THE ENVIRONMENT, AND MANY OTHER FACTORS ARE CRUCIAL QUETIONS THAT MUST BE ADDRESSED. I THINK, HOWEVER, THAT OUR SOCIETY IS BEGINNING TO MOVE AWAY FROM THE IDEA THAT EVERY TIME THE WORD CHEMISTRY IS UTTERED, THE CONVERSATION MUST END FOR ALL BUT A FEW SELECTED EXPERTS. MUCH OF THE KNOWLEDGE NEEDED TO UNDERSTAND AND INTERPRET CHEMICAL DATA CAN BE TRANSLATED INTO INFORMATION THAT WILL BE USEFUL TO THE COMMUNITY AT LARGE. THIS LAW IS AN IMPORTANT FIRST STEP IN PROVIDING THAT KNOWLEDGE.

THE MORE INFORMED AND INVOLVED THE PUBLIC IS, THE BETTER EQUIPPED COMMUNITIES WILL BE TO RESPOND TO THE PRESENCE OF HAZARDOUS CHEMICALS. WE ARE AT THE BEGINNING OF A LONG JOURNEY AND THERE ARE MANY HURDLES AND MANY UNKNOWNS. HOWEVER, WITH A STRONG FEDERAL, STATE, AND PUBLIC/PRIVATE PARTNERSHIP, I BELIEVE THAT WE CAN MEET THE CHALLENGES.

IF EVERYONE DOES HIS OR HER PART THE COMMUNITY RIGHT-TO-KNOW LAW CAN MAKE LIFE SAFER FOR ALL OF US. BY INCREASING

PUBLIC AWARENESS AND IMPROVING OUR HANDLING OF CHEMICALS AND CHEMICAL ACCIDENTS, TOGETHER WE MAY SAVE SOME LIVES.

THANK YOU.

SEP - 8 1988

NOW, IT'S EVERYBODY'S JOB

by

Jim Makris, Director
Preparedness Staff
Environmental Protection Agency

It has been almost four years since the catastrophic event in Bhopal, which, although it occurred more than half way around the world, had a profound effect upon the conduct of the American chemical industry and spawned a series of programs unique in the annals of American industrial and governmental relationships.That event, which killed more than 2500 citizens and injured, perhaps, hundreds of thousands more, stimulated Americans - citizens, the press, state legislators, the United States Congress and the administration to ask several important questions about the chemical and related industries - "COULD SUCH AN EVENT HAPPEN HERE? IF SO, WHAT CAN I DO TO PROTECT MYSELF WHEN IT OCCURS? HOW DO I PREVENT IT FROM HAPPENING?"

The inability of Governments at all levels and industry to provide acceptable answers to those questions in early 1985 stimulated the development of a remarkable series of public and private sector initiatives. It began with the Environmental Protection Agency's Air Toxics Strategy and the Chemical Emergency Preparedness Program. This voluntary program recognized the vital necessity of focusing actions regarding chemical safety at the local level - the level where the citizens are most affected, where the economy operates, where the emergency managers respond, where the action to correct can take place most swiftly. The program urged the establishment of a broadly based local committee which, with information in hand, would interact with local industry around contingency planning and prevention of accidents. At the same time, several important State legislative initiatives dealing with community right-to-know, emergency response planning and accident mitigation were passed.

Concurrently, several other important institutions weighed in. The Chemical Manufacturers' Association established their Community Awareness and Emergency Response Program (CAER), a program which trained plant managers and officials to go into their local community and discuss issues of chemical safety, establish local committees in conjunction with State and local chemical and industrial councils and develop emergency plans.
The prestigious American Institute of Chemical Engineers established their Center for Chemical Process Safety (CCPS) and immediately began to produce important technical manuals and

guidance documents on chemical safety which would be useful to the user as well as the producer. Included in their efforts was the important recognition that a new emphasis on safety in the chemical engineering curriculum was needed.

It was into this setting that Title III of the Superfund Amendments and Reauthorization Act of 1986 became law. It was in full recognition of all that had gone on before. This law made it very clear that this program would be implemented quite differently from most Federal programs - that in this instance, full success would ride on everyone's shoulders; everyone had a job.

From one perspective, Title III merely deals with a requirement that several specific items of chemical data be developed, provided, received, stored, assimilated, managed, disclosed, explained, understood, interpreted, used and acted upon by industry, state and local governments and committees and citizens. This is a view occasionally taken by those few who find the law a "mountain of paper" and "an administrative nightmare." Fortunately, most have looked beyond this burden and seen the true intent and purpose for this important program. They have found it a valuable mechanism for protecting emergency service employees, for stimulating renewed interest in emergency management and environmental concerns, for affording local citizens the opportunity to have a significant impact on the safety of their local community, and for providing a structured forum in which industry, government and citizens can deal in their collective self interest.

As a result of Title III, the community has an established structure with broad based membership at the local level, the local emergency planning committee, which is guided, managed and driven by a formal organization at the state level, the state emergency response commission. These organizations, and other related State and federal agencies have available to them an unprecedented amount of facility specific data dealing with the presence of extremely hazardous substances in their community, information on accidental releases of chemicals including data regarding the environmental and public health implications of the releases, the amount and location of tens of thousands of other chemicals which have been determined to constitute a concern to workers under the Hazard Communications Standard and the quantity of annual emissions of 328 specific substances which have been determined to present public health or environmental concern.

How is it working? Every State and eligible territory has established the appropriate state level commission and over 3500 local committees have been formed. It is estimated that 50,000 people are involved in these committees and supporting governmental organizations, with at least an equivalent number from the private sector. Hundreds of thousands of notifications by facilities with extremely hazardous substance and MSDS materials have been submitted to appropriate authorities and more than 70,000 reports have been submitted under the toxics release inventory. Very few trade secrets have been claimed. It is clear that many facilities have not yet complied with the requirements and attention is now turning to the enforcement side of the law, which, indeed, provides some very harsh and stringent penalties for those who choose not to meet Title III requirements. Federal, State and local officials, and especially the local emergency planning committees must take direct outreach and notification steps to be sure that all who should know about this law, do know; and that all who do know, comply. The members of the local committee are frequently in the best position to know that a facility has not reported and to take action toward demanding the data.

Another important step toward assuring that the law is successful, is the continued development and distribution of important tools for using the information made available under Title III to assess risk, establish priorities and take steps toward the mitigation of those risks. These tools have been and are being developed by the Center for Process Safety, the Chemical Manufacturers Association, environmental organizations and EPA and other Federal agencies. For example, US EPA recently published its report to the Congress - Review of Emergency Systems - which identifies the state of current technology in the areas of alerting, monitoring, prevention and management systems. While the obligation of the law is to prepare specific contingency plans by October 1988, equally important is the strengthening of the structure and the use of the data, in conjunction with industry, to reduce the risks using these and other available tools.

More than half of the states have passed new or modified laws to achieve the purposes or to be conformance with the requirements of Title III. We expect this trend to continue and to be further supported by such action at the county and local level. Often, these laws extend to state, county and local officials with the full range of enforcement authorities available in Title III including the important ability to enter and inspect facilities. They also include liability protection for government employees and volunteers responsible for developing the plans and receiving the information provided under this law. Further, these laws include explicit funding mechanisms - either through filing fees,

penalties or appropriated funds which provides the important financial base needed to insure program continuity.

In conclusion, the programs initiated under Title III and the addition legislation it has spawned presents an opportunity for us all. It requires changed attitudes and the development of new relationships among the various components of the affected population. It will require timely submission and careful and continuous analysis of the data. It will require targeted programs of enforcement, outreach and training. It will require honesty, consistency, responsiveness and effected leadership from industry and government at all levels. But, even with all that in place, it will require the active participation of individuals, working together toward the common objective of increased public health and safety from the risk of hazardous chemicals. But, it won't work unless we all do it together.

Comments on the Emergency Plannng and Community Right-to-Know Act of 1986

Given by Jim Makris at the APCA Government Affairs Conference March 15, 1988 in Washington, D.C.

In October of 1986, President Reagan signed the Superfund Amendments and Reauthorization Act of 1986, which included Title III, the Emergency Planning and Community Right-to-Know Act.

That particular action introduced into our nation a new relationship between government at all levels, Federal, State and local, industry and the private sector, environmental and other public interest organizations, and the general public, regarding information related to chemical safety and public awareness, dealing with the presence of hazardous chemicals in communities as well as what that presence means to individuals in all walks of life.

The Emergency Planning and Community Right-to-Know Act guaranteed for the first time that throughout America citizens would all have available information on the presence of hazardous chemicals, have technical information regarding their effect on the environment and health, and permit them to make important decisions on the quality of their life and take actions regarding that risk.

This legislation is a direct result of the Bhopal tragedy and is a first step in emphasizing chemical prevention rather than chasing spills after they occur.

Such an extraordinary legislative guarantee carries with it some important burdens for individuals, governments and industries. As a result of the new information flow, very technical data would have to be developed, provided, received, assimilated, managed, disclosed, explained, understood, stored, interpreted, used and acted upon by many people and organizations who didn't have a long time or much resources to get ready to deal with these issues.

Although there's always been a structure in the United States Government to deal with hazardous materials events, there was not a focused Federal, State or local program to deal explicitly with the issues of chemical releases or chemical accidents. The event in Bhopal at the end of 1984 changed all that.

When the American chemical industry was unable to give sufficient answers to what happened in Bhopal, could it happen here, what can we do to prevent it, and if it does occur what should we do to protect ourselves, an enormous chain of actions went into place. Some of them were legislative, some of them were clamors at the Federal or at the State level, some of them were clamors by the media, some of them were demands by the people.

The Administrator of the Environmental Protection Agency put into place the Chemical Emergency Preparedness Program, CEPP, which said that we need to recognize that the basic responsibility for comprehending the risks at a local level, for trying to lower those risks, and for dealing with an event if it occurs must take place at the lowest levels of government, at the State and local levels, preferably the local and with

those individuals who have been trained to deal with emergencies for a good many years with the advice and guidance of folks they weren't accustomed to working with, chemists, scientists, risk evaluators and to some extent physicians and emergency technicians who understood the implications of chemical exposure.

We determined that it was essential that dialogue take place between the community and its experts with industry - the processor, owner, user, developer of the chemicals. The CEPP provided a focus for such dialogue and said, let's get organized at the community level, let's ask some serious questions of industry and let's start to work together to develop a program which will protect that population.

At the same time the EPA along with other Federal agencies was doing this, the Chemical Manufacturers Association was designing a program called Community Awareness and Emergency Response (CAER) that had a slightly different twist: it said, industry, here is some guidance and advice on how you as a plant manager need to involve yourself with the local community, how you need to get out there and start explaining what it is that you're doing and work with that local community in developing the learning and monitoring systems and participating in contingency planning. This type of initiative has been undertaken on an international level as well with the United Nations Environmental Program's Appel project.

So what we had is a government initiative, CEPP, and an industry initiative, CAER, both of which were headed in the same direction - that the public is best protected by an integrated program that involves industry

working in cooperation with elected officials and emergency managers, governmental authorities, risk assessors and health officials. The United States Congress liked that. They adopted the basic program and added some other ideas.

The major sections of the law involve threshold planning quantities; lists of extremely hazardous substances; provisions for industry to estimate yearly routine emmission of certain chemicals; provisions for firms to disclose inventories of hazardous chemicals; community right-to-know; trade secrets preliminary regulations; guidance on how to develop a contingency plan; and a prevention study including a review of emergency systems for monitoring and detecting releases of hazardous chemicals. Further, a spill screening system called the Accidental Release Information Profile (ARIP) Program helps EPA identify chronic spillers and target field inspections and safety audits.

Industry? They cooperated for the most part, particularly large industry. At the moment we're still suggesting that some smaller companies, particularly non-manufacturing companies, that haven't cooperated may have done so not out of lack of desire, but out of lack of knowledge; they haven't got the word and they may not understand the issues. The local emergency planning committees and other outreach programs are now to get their arms around some of those smaller companies and obtain compliance.

State Emergency Response Commissions are established, and Local Emergency Planning Committees are established. These are the infrastructure put into place in States and local communities to plan for responding to

chemical emergencies and to deal with all the information generated by the Act. There are thousands of people, both volunteers and professionals, operating in this program right now. A lot of them are public citizens. Most of them are people adding to their existing day-to-day jobs.

The Environmental Protection Agency, now having got through the bulk of its rulemaking dealing with emergency preparedness and right-to-know information, is presently figuring out what we're going to do with all this data.

The Congress wrote a "process" law; there's very little in the law that indicates intent. What it does is set forth some specific lists, locations, orgnizational structure, deadline dates, but it doesn't really deal with what do you do with all the data. That was left to the imagination of EPA and local and State officials who now have access by law to an extraordinarily large amount of new information.

What we're doing is generating some training programs for contingency planning and exercise. Working very closely with the Federal Emergency Management Agency and the Department of Transportation and the United States Coast Guard, who have a fair amount of experience in this area, we're designing methods and ways of establishing, reviewing, training for the development of these plans.

Clearly, implementation of this new Act is everybody's job - Congress has decided people have a right-to-know. Lots of State legislatures, more than half at the last count, have decided that people have a right to know and have written or are writing similar laws. Lots of communities through

ordinances and programs at the local level have decided that people have a right-to-know. And the entire population from industry, professionals, etc., are responsible to participate in that process; to participate in the case of the Federal Government by providing guidance, stimulation, creating an environment in which it can occur, and on the part of industry by providing the information that's been mandated in a useful form and accompanying it with assistance. Professionals in the discipline having to do with chemicals can help by becoming actively involved in this process and sharing expertise to interpret the data, and help citizens understand what it means.

Environmental groups and citizens each have their responsibilities. Environmental groups have undertaken the responsibility to keep the pressure on to make sure it works; and citizens have to start becoming involved with the process and putting political pressure on all the parties that are involved to be sure that it occurs.

The Title III law has in fact made a major contribution toward improving chemical safety not only for purposes of environmental health, but also for purposes of public health.

With all of the levels of government, industry, and the public working together, the American chemical process, industry can become safer and thus better protect the public from the hazards of spills of extremely hazardous chemicals.

NOTES ON THE SARA TOXIC RELEASE INVENTORY
AND CONGRESSMAN WAXMAN'S STATEMENT
MARCH 22, 1989

- The EPA agrees with Congressman Waxman that section 112 of the Clean Air Act has not been adequate to address the air toxics problem. The structure of Section 112, designed 18 years ago, is inadequate to address today's problems.

- The Administration has made a commitment to recommend amendments to the Clean Air Act to address acid rain, non-attainment for criteria pollutants, and air toxics.

- Activity to consider air toxics legislation is ongoing in the Congress. Members of the Senate Environment and Public Works Committee will have a draft bill shortly. Congressman Dingell has introduced a bill, H.R.4, which would address major sources accounting for 1.8 billion pounds of the 2.4 billion pounds in the TRI.

- In addition to the pollutants directly regulated under the Section 112 authority, the Agency has, through its NAAQS program, taken regulatory actions which have resulted in substantial reductions in the SARA TRI chemicals. Through the implementation of the ozone and particulate matter ambient standards, the Agency has estimated that air toxics emissions over the last decade have been reduced by about 40% of from what they would otherwise have been.

- An upcoming proposal to regulate treatment, storage and disposal facilities under RCRA will result in an estimated yearly reduction of more than 2 billion pounds of toxic air releases (these are sources apart from those required to report under SARA although there is overlap).

THE INVENTORY

- The National Inventory, when completed in the near future, will be a valuable tool in getting a general picture of toxic chemical releases to air, water and land. The data represented estimated gross emissions, rather than actual exposure, but as such can serve as a flag of potential health or environmental problems which warrant further investigation. Since the data are submitted by the manufacturers themselves, without additional monitoring or verification by either the manufacturers or the Federal government, facility-by-facility analyses are subject to error.

- The final National Inventory will be released to the public as soon as it is completed in late Spring. The Agency believes that this Inventory will prove to be very useful to EPA as well as the public. It is likely to provide new insights into potential health and environmental problems which have not been addressed by Federal, state, or local authorities which warrant further investigation. EPA plans to factor the results of its analysis of the Inventory into its shaping of the new Clean Air Amendments.

- The preliminary data cited by the Congressmen are data which EPA released to Congressman Waxman on March 2, 1989 in response to a request by the Congressman. As Congressman Waxman indicates in his release, the data are preliminary at this time and could change prior to their final release in the National Inventory.

OSHA REGULATIONS

- OSHA is to be commended for its recent actions to revise its permissible exposure limits for numerous toxicants.

- The OSH Act has provisions designed to allow OSHA to easily adopt (on a wholesale basis) general recommended standards (NIOSH and American Council of Governmental and Industrial Hygienists (ACGIH) recommended standards). The Clean Air Act has no provision that authorizes a broad, multipollutant approach.

- The OSH Act required OSHA to adopt the ACGIH standards existing when the Act passed. OSHA did so. In 1988 the Agency dealt with a considerable backlog of recommendations by adopting an revising these standards and adding more.

WHY SECTION 112 OF THE CLEAN AIR ACT SHOULD BE AMENDED

- Section 112 was written almost 20 years ago in anticipation of a small number of hazardous air pollutants that should be regulated apart from criteria pollutants such as ozone.

- The growth in the scientific information base since then has resulted in a SARA TRI that reports on hundreds of toxics emitted from tens of thousands of sources.

- Section 112 has proved to be a difficult authority to implement in part because of the nature of some of the required findings. The orientation towards chemical-by-chemical regulation further complicates addressing sources such as those in the TRI whose emissions may contain a variety of toxic constituents. Recent court interpretations (the "vinyl chloride" opinion of Judge Bork, 1987, and the recent finding by Judge Green, 1989) have made the 112 findings even more elaborate and difficult by requiring a two-step decision on each chemical: ((1) what is a "safe" level of exposure considering health data alone, (2) what level provides an ample margin of safety considering health plus cost and feasiblity of control) and by requring concurrent decisions on all categories of sources emitting a partiuclar chemical.

- In order to address the numerous chemicals in the SARA TRI the Clean Air Act needs to be changed to authorize EPA to take a multipollutant control approach in which industrial source categories are regulated for all of the air toxics of concern that they emit. Authority is needed to address this problem through the application of technology-based emission standards across many source categories.

March 22, 1989

DATA QUALITY EFFORTS

On July 1, 1988, EPA received the first Form R's from industry required by Section 313 of the Emergency Planning And Community Right-to-Know Act. EPA has entered that information into a computer data base. On March 2, 1989, EPA responded to an inquiry from Congressmen Henry A. Waxman for air emissions data.

At the time of the release of data to Mr. Waxman, OTS had verified 100% of the emissions numbers over 100,000 pounds.

In addition, all emissions numbers under 100,000 pounds, which represented more than 5% of the emissions of a particular type (e.g. fugitive air emissions, underground injection), were sampled. Of the 200 numbers validated under this exercise, 2 minor data entry errors were found, which totaled less than 1,000 pounds.

Of a random selection of forms sent to the Chemical Manufacturers Association member companies, the overall data entry error rate has been less than 1.5%.

Finally, in the month since the material was released to Mr. Waxman, a wide variety of data quality activities have been undertaken. These will affect the data sent to Mr. Waxman in two ways:

a) about 2,000 duplicate submissions have been deleted from the data base; and

b) a large number of submitter errors in the Standard Industrial Classification code field have been fixed.

A copy of the Waxman response (and attachments) is included in this package.

The data quality efforts described above will mean that States accessing the EPA data base, at this point in time, will find slightly different numbers, but we expect the picture at the national level to be consistent.

For further information please contact Steve Newburg-Rinn at FTS 382-3381.

TITLE III - WIN PORTER

I. INTRODUCTION

GOOD MORNING. I'M PLEASED TO HAVE BEEN INVITED TO SPEAK AT THIS VERY IMPORTANT CONFERENCE AND TO SHARE INFORMATION ABOUT EPA'S CHEMICAL EMERGENCY PREPAREDNESS AND PREVENTION PROGRAM. DURING MY TIME HERE WITH YOU TODAY I WOULD LIKE TO GIVE YOU A BRIEF OVERVIEW OF WHAT WE HAVE ACCOMPLISHED TO DATE WITH THE EPA PROGRAM. I ALSO WANT TO TALK ABOUT INDUSTRY'S ROLE IN IMPLEMENTING TITLE III, ABOUT YOUR OWN CAER EFFORT AND ABOUT THE INTERNATIONAL IMPLICATIONS OF THE ACTIVITIES UNDERWAY IN THE U.S. TO ADDRESS CHEMICAL EMERGENCIES.

AS YOU KNOW, FY 1987 WAS THE SECOND YEAR OF THE CHEMICAL EMERGENCY PREPAREDNESS AND PREVENTION PROGRAM. THIS PROGRAM WAS INITIATED IN JUNE OF 1985 AS PART OF THE AGENCY'S AIR TOXICS STRATEGY. THE MAJOR GOALS OF THE PROGRAM WERE:

- TO PROMOTE COMMUNITY AWARENESS OF CHEMICAL HAZARDS
- TO ASSIST IN THE DEVELOPMENT OF STATE AND LOCAL PREPAREDNESS PROGRAMS
- TO DEVELOP A CHEMICAL ACCIDENT PREVENTION PROGRAM

LAST YEAR OUR PROGRAM WAS ENHANCED BY THE ADOPTION OF TITLE III OF THE SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT. THIS STATUTE WAS ENACTED WITH SIMILAR GOALS IN MIND AND INCLUDED REQUIREMENTS TO:

- DEVELOP A STATE AND LOCAL EMERGENCY PLANNING STRUCTURE
- PROVIDE CERTAIN INFORMATION TO CITIZENS THROUGH INDUSTRY REPORTING
- PROVIDE FOR BROAD PARTICIPATION IN THE PLANNING PROCESS

DURING THE PAST YEAR OUR PREPAREDNESS STAFF HAS BEEN WORKING TO MEET THE MANY STATUTORY DEADLINES IMPOSED BY TITLE III. ALL OUR MAJOR PROGRAM OBJECTIVES AND DEADLINES HAVE BEEN MET. IN SUMMARY:

- FIVE RULEMAKINGS HAVE BEEN COMPLETED.
- THREE GUIDANCE DOCUMENTS AND AN INTERIM REPORT TO CONGRESS HAVE BEEN PRODUCED.
- NINE STATUTORY DEADLINES HAVE BEEN MET.

LET ME DESCRIBE SOME OF THE REQUIREMENTS OF TITLE III AND WHAT THEY MEAN FOR INDUSTRY.

II. TITLE III--PROVISIONS AND IMPLICATIONS

INDUSTRY HAS AN IMPORTANT ROLE TO PLAY IN THE IMPLEMENTATION OF MAJOR SECTIONS OF TITLE III. THESE SECTIONS AND THEIR IMPLICATIONS INCLUDE THE FOLLOWING.

EMERGENCY PLANNING (§301-303)

THE EMERGENCY PLANNING SECTIONS ARE DESIGNED TO DEVELOP STATE AND LOCAL GOVERNMENT'S EMERGENCY RESPONSE AND PREPAREDNESS CAPABILITIES THROUGH BETTER COORDINATION AND PLANNING, ESPECIALLY WITHIN THE LOCAL COMMUNITY. THEY REQUIRE THE ESTABLISHMENT OF STATE EMERGENCY RESPONSE COMMISSIONS (SERCS) WHICH IN TURN, MUST DESIGNATE LOCAL EMERGENCY PLANNING DISTRICTS AND COMMITTEES TO DEVELOP EMERGENCY RESPONSE PLANS.

INDUSTRY CAN MAKE A VALUABLE CONTRIBUTION TO THE EFFECTIVE OPERATION OF BOTH THE STATE COMMISSIONS AND THE LOCAL PLANNING COMMITTEES. A NUMBER

OF STATES HAVE ALREADY ENLISTED THE ASSISTANCE OF INDUSTRY AND TRANSPORTATION OFFICIALS ON THEIR COMMISSIONS. THE MORE EXPERTISE ON A STATE COMMISSION, THE BETTER EQUIPPED THAT COMMISSION WILL BE TO MEET THE OBJECTIVES OF TITLE III AND TO ASSIST COMMUNITIES IN FULFILLING THEIR RESPONSIBILIITIES TO THEIR CITIZENS.

TITLE III PLANNING IS CENTERED AROUND THE LIST OF 406 EXTREMELY HAZARDOUS SUBSTANCES IDENTIFIED BY EPA IN A FEDERAL REGISTER NOTICE OF APRIL 22, 1987. THE LIST INCLUDES THE THRESHOLD PLANNING QUANTITIES FOR EACH SUBSTANCE. IF A FACILITY PRODUCES, USES OR STORES MORE OF THE LISTED CHEMICAL THAN THE THRESHOLD QUANTITY, THEN IT IS SUBJECT TO ALL THE EMERGENCY PLANNING REQUIREMENTS UNDER SECTIONS 301-303. ADDITIONALLY, FOLLOWING PUBLIC COMMENT, STATE COMMISSIONS CAN DESIGNATE NEW FACILITIES AS SUBJECT TO THESE REQUIREMENTS. AFFECTED FACILITIES WERE REQUIRED TO NOTIFY STATE COMMISSIONS THAT THEY ARE COVERED BY THESE REQUIREMENTS BY MAY 17, 1987, AND THEY SHOULD REPORT IMMEDIATELY IF THEY HAVE NOT ALREADY DONE SO. AFFECTED FACILITIES SHOULD ALSO HAVE APPOINTED A FACILITY COORDINATOR BY SEPTEMBER 17, 1987, TO WORK WITH THE LOCAL PLANNING COMMITTEE IN THE IMPLEMENTATION OF AN EMERGENCY RESPONSE PLAN.

EMERGENCY NOTIFICATION (§304)

FACILITIES WHERE A LISTED HAZARDOUS SUBSTANCE IS PRODUCED, USED, OR STORED MUST IMMEDIATELY NOTIFY THE LOCAL EMERGENCY PLANNING COMMITTEE AND THE STATE EMERGENCY RESPONSE COMMISSION IF THERE IS A RELEASE OF THESE SUBSTANCES ABOVE A REPORTABLE QUANTITY (RQ) THRESHOLD. THIS INCLUDES THE SAME SUBSTANCES IDENTIFIED UNDER THE PLANNING PROVISIONS I HAVE JUST DISCUSSED,

PLUS THOSE CHEMICALS LISTED UNDER SECTION 103(a) OF THE SUPERFUND LAW. THE INITIAL NOTIFICATION CAN BE BY TELEPHONE, BY RADIO, OR IN PERSON. EMERGENCY NOTIFICATION REQUIREMENTS INVOLVING TRANSPORTATION INCIDENTS CAN BE SATISFIED BY DIALING 911, OR BY CALLING THE OPERATOR. FURTHERMORE, A FOLLOW-UP WRITTEN EMERGENCY NOTICE IS REQUIRED AS SOON AS PRACTICABLE AFTER A RELEASE. THIS NOTIFICATION REQUIREMENT WENT INTO EFFECT WHEN THE NEW SUPERFUND BILL WAS SIGNED INTO LAW IN OCTOBER OF LAST YEAR.

COMMUNITY RIGHT TO KNOW (§311, 312)

THERE ARE TWO COMMUNITY RIGHT TO KNOW REPORTING REQUIREMENTS IN TITLE III. FIRST, FACILITIES THAT MUST PREPARE OR HAVE AVAILABLE MATERIAL SAFETY DATA SHEETS (MSDS) UNDER THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) REGULATIONS MUST NOW SUBMIT COPIES OF EITHER THESE OR A LIST OF MSDS CHEMICALS TO THE LOCAL EMERGENCY PLANNING COMMITTEE, THE STATE EMERGENCY RESPONSE COMMISSION, AND THE LOCAL FIRE DEPARTMENT. THIS REQUIREMENT WENT INTO EFFECT ON OCTOBER 17, 1987. EPA IS ENCOURAGING SUBMITTAL BY LIST RATHER THAN BY MSDS IN ORDER TO MINIMIZE THE PAPERWORK BURDEN FOR STATE AND LOCAL GOVERNMENTS AND FIRE DEPARTMENTS. UPON REQUEST OF A LOCAL PLANNING COMMITTEE OR FIRE DEPARTMENT, HOWEVER, A FACILITY MUST ALSO SUBMIT THE MSDS FOR A PARTICULAR CHEMICAL ON ITS LIST. IN CARRYING OUT THIS REQUIREMENT, EPA HAS ESTABLISHED THRESHOLD QUANTITIES FOR HAZARDOUS CHEMICALS BELOW WHICH FACILITIES DO NOT HAVE TO REPORT. EPA HAS ALSO REDUCED THE NUMBER OF REPORTING CATEGORIES FROM 23 TO 5 IN ORDER TO MINIMIZE PAPERWORK.

THE SECOND COMMUNITY RIGHT TO KNOW REPORTING REQUIREMENT UNDER TITLE III REQUIRES FACILITIES TO SUBMIT AN EMERGENCY AND HAZARDOUS CHEMICAL

INVENTORY FORM. THE FINAL FORM WAS PUBLISHED IN THE FEDERAL REGISTER ON OCTOBER ?? 1987. THE HAZARDOUS CHEMICALS AND THE ENTITIES TO WHICH THE INFORMATION IS SUBMITTED ARE THE SAME AS IDENTIFIED UNDER THE FIRST REPORTING REQUIREMENT. AGAIN, WITH RESPECT TO THIS REQUIREMENT, EPA MAY ESTABLISH THRESHOLD QUANTITIES FOR HAZARDOUS CHEMICALS BELOW WHICH REPORTING IS NOT REQUIRED. THE FORM MUST PRESENT AN ESTIMATE OF THE MAXIMUM AMOUNT OF THE CHEMICALS PRESENT AT THE FACILITY AT ANY TIME DURING THE PRECEDING CALENDER YEAR, AN ESTIMATE OF THE AVERAGE DAILY AMOUNT OF SUCH CHEMICALS, AND INFORMATION ABOUT THEIR GENERAL LOCATION.

IN ADDITION TO THIS INFORMATION, A LOCAL COMMITTEE, STATE COMMISSION, OR LOCAL FIRE DEPARTMENT MAY REQUEST A FACILITY TO PROVIDE MORE DETAILED INFORMATION.

TOXIC CHEMICAL RELEASE REPORTING (§313)

ANOTHER SECTION OF TITLE III FALLS OUTSIDE THE JURISDICTION OF MY PROGRAM AND IS HANDLED BY THE OFFICE OF PESTICIDES AND TOXIC SUBSTANCES. SECTION 313 REQUIRES FACILITIES TO SUBMIT ANNUAL REPORTS ON THE RELEASE OF TOXIC CHEMICALS INTO THE AIR, WATER AND SOIL. THE PURPOSE OF SECTION 313 IS TO CREATE A TOXIC RELEASE INVENTORY — A NATIONAL DATA BASE OF ANNUAL REPORTS ON TOXIC CHEMICAL RELEASES FROM MANUFACTURING FACILITIES ACROSS THE NATION. FACILITIES SUBJECT TO THIS REPORTING REQUIREMENT MUST COMPLETE TOXIC CHEMICAL RELEASE FORMS FOR SPECIFIED CHEMICALS. THESE FORMS MUST BE SUBMITTED TO EPA AND STATE OFFICIALS DESIGNATED BY THE GOVERNOR.

THE REPORTING REQUIREMENT APPLIES TO OWNERS AND OPERATORS OF FACILITIES THAT:

- HAVE 10 OR MORE FULL-TIME EMPLOYEES
- ARE IN STANDARD INDUSTRIAL CLASSIFICATION CODES 20 THROUGH 39
- HAVE MANUFACTURED, PROCESSED OR OTHERWISE USED A LISTED TOXIC CHEMICAL IN EXCESS OF SPECIFIED THRESHOLD QUANTITIES.

ON JUNE 1, 1987, EPA PUBLISHED A FORMAT FOR TOXIC CHEMICAL RELEASE REPORTING IN THE FEDERAL REGISTER. BASED UPON DATA RECEIVED VIA THESE FORMS, EPA MUST MAINTAIN A NATIONAL TOXIC CHEMICAL RELEASE INVENTORY. THIS INVENTORY WILL ASSIST IN RESEARCH AND IN THE DEVELOPMENT OF POSSIBLE FUTURE REGULATIONS, GUIDELINES, AND STANDARDS.

THESE REPORTING REQUIREMENTS WILL PROVIDE THE GOVERNMENT AND THE PUBLIC WITH A BETTER PICTURE OF THE NATURE OF ROUTINE CHEMICAL RELEASES NATIONWIDE. IMPLEMENTED ON A NATIONAL SCALE, SECTION 313 COULD AFFECT AS MANY AS 35,000 FACILITIES. BEYOND THE INFORMATION GATHERING REQUIREMENTS OF SECTION 313, EPA MUST ALSO ESTABLISH A NATIONAL DATABASE ACCESSIBLE TO ALL CITIZENS VIA COMPUTER TELECOMMUNICATION.

REVIEW OF EMERGENCY SYSTEMS (§ 305)

SECTION 305 AUTHORIZES THE FEDERAL EMERGENCY MANAGEMENT AGENCY TO PROVIDE $5 MILLION EACH YEAR BETWEEN 1987 AND 1990 FOR TRAINING GRANTS TO SUPPORT STATE AND LOCAL GOVERNMENTS. OVER THE PAST YEAR EPA HAS WORKED WITH FEMA TO MAKE THIS FUNDING AVAILABLE TO ALL STATES EXCEPT NEBRASKA (WHICH DID NOT APPLY).

UNDER SECTION 305, EPA IS REQUIRED TO REVIEW EMERGENCY SYSTEMS FOR MINOTORING, DETECTING, AND PREVENTING RELEASES OF EXTREMELY HAZARDOUS SUBSTANCES AT REPRESENTATIVE FACILITIES THAT PRODUCE, USE, OR STORE THEM. A FINAL REPORT OF FINDINGS AND RECOMMENDATIONS IN THIS AREA IS DUE NEXT YEAR. WE WOULD LIKE TO HAVE INDUSTRY'S ASSISTANCE AND COOPERATION IN COMPLETING THIS REPORT, AND I INVITE YOUR PARTICIPATION IN THIS ENDEAVOR.

TRADE SECRETS (§ 322-323)

SECTION 322 OF TITLE III ADDRESES TRADE SECRETS AND APPLIES TO EMERGENCY PLANNING, COMMUNITY RIGHT-TO-KNOW, AND TOXIC CHEMICAL RELEASE REPORTING. INFORMATION ON CHEMICALS MAY BE WITHELD UNDER CERTAIN CONDITIONS, BUT THE GENERIC CLASS OR CATEGORY OF THE CHEMICAL MUST ALWAYS BE PROVIDED. SECTION 323 PROVIDES FOR DISCLOSURE OF INFORMATION UNDER CERTAIN CIRCUMSTANCES TO HEALTH PROFESSIONALS WHO NEED THE INFORMATION FOR DIAGNOSTIC PURPOSES OR TO LOCAL OFFICIALS WHO NEED IT FOR ASSESSMENT ACTIVITIES.

III. TITLE III AND THE CMA CAER PROGRAM

I BELIEVE WE CAN ALL AGREE THAT OUR TITLE III PROGRAM AND THIS ORGANIZATION'S EFFORT SO APPROPRIATELY CALLED CAER TRULY COMPLEMENT ONE ANOTHER. CMA HAS LONG BEEN INVOLVED IN TRYING TO PROVIDE THE KIND OF INFORMATION THAT WILL ALLOW APPROPRIATE RESPONSE TO CHEMICAL EMERGENCIES. YOU HAVE BEEN LEADERS IN THE AREA OF CORPORATE RESPONSIBILITY, AND YOU DESERVE CREDIT FOR YOUR EFFORTS.

AT THE SAME TIME, THE FEDERAL PROGRAM BRINGS ANOTHER DIMENSION TO REGULATIONS, GUIDELINES, AND STANDARDS.

THE EFFORT TO PROVIDE RELIABLE INFORMATION AND RESPONSE. PLANNING HAS TRADITIONALLY BEEN A PUBLIC SECTOR RESPONSIBILITY, AND PLANNING IS REALLY WHAT TITLE III IS ALL ABOUT. THROUGH OUR REGULATIONS AND REQUIREMENTS, AND WITH AS MUCH SUPPORT AND ASSISTANCE AS WE CAN PROVIDE, WE WANT TO HELP COMMUNITIES TO PREVENT ACCIDENTS TO THE EXTENT POSSIBLE AND TO RESPOND EFFECTIVELY WHEN ACCIDENTS DO OCCUR.

A FEW YEARS AGO PUBLIC/PRIVATE PARTNERSHIP IN BUILDING AND SUSTAINING OUR COMMUNITIES BECAME SOMETHING OF A BUZZWORD. IT'S WORTH RISKING A BIT OF A CLICHE TO SAY THAT THESE KINDS OF PARTNERSHIPS ARE STILL NEEDED TODAY. AND THEY ARE NEEDED IN THE AREA OF ENVIRONMENTAL PROTECTION AS MUCH AS IN ANY OTHER AREA I CAN THINK OF. IT IS BECAUSE I PERSONALLY BELIEVE IN THIS CONCEPT THAT I SUGGEST WE MUST BOTH CONTINUE THE EFFORTS WE ARE SUPPORTING INDIVIDUALLY. WHILE NEITHER PROGRAM MAY BE ADEQUATE ALONE, OUR COMBINED ENDEAVORS CAN GO FAR IN PROTECTING COMMUNITIES FROM THE RISKS WE ALL ACCEPT AS A CONSEQUENCE OF LIVING IN A TECHNOLOGICALLY ADVANCED SOCIETY.

IV. THE INTERNATIONAL DIMENSION OF CHEMICAL EMERGENCY PREPAREDNESS

JUST AS YOU, THE PRIVATE SECTOR, AND I, THE PUBLIC OFFICIAL, DO NOT OPERATE IN ISOLATION FROM ONE ANOTHER, SO TOO ARE WE ALL A PART OF THE INTERNATIONAL COMMUNITY. LEE THOMAS, THE EPA ADMINISTRATOR, HAS RECENTLY NOTED IN AN AGENCY MANAGEMENT FORUM THAT SEVERAL THINGS ARE HAPPENING TO CHANGE THE WAY WE APPROACH SOLVING ENVIRONMENTAL PROBLEMS. ONE OF THESE IS THAT POLLUTION AND ENVIRONMENTAL MANAGEMENT HAVE BECOME MORE GLOBAL IN SCOPE. THE U.S. AND OTHER COUNTRIES BOTH IMPORT AND EXPORT CHEMICALS, PESTICIDES, WASTE FOR RECYCLING. COMPANIES INVOLVED IN ACTIVITIES WITH ENVIRONMENTAL CONSEQUENCES ARE FREQUENTLY MULTI-NATIONAL. DEVELOPING

NATIONS SEEK TO LEARN FROM THE EXPERIENCES OF MORE DEVELOPED PARTS OF THE WORLD, AND THEY LOOK TO THE U.S. EPA AND TO THE AGENCY FOR INTERNATIONAL DEVELOPMENT FOR ADVICE IN HOW TO AVOID MISTAKES.

IN THE AREA OF BILATERAL RELATIONS, EPA'S PREPAREDNESS STAFF THIS PAST YEAR CO-CHAIRED JOINT RESPONSE TEAMS WITH CANADA AND MEXICO AND DEVELOPED JOINT CONTINGENCY PLANS FOR RESPONDING TO RELEASES ALONG OUR NORTHERN AND SOUTHERN BORDERS.

IN MULTILATERAL EFFORTS, THE STAFF INITIATED AND IS MANAGING THE U.S. ACTION IN A PREPAREDNESS/PREVENTION PROJECT WITH THE ORGANIZATION FOR ECONOMIC COOPERATION AND DEVELOPMENT AS A RESULT OF A MINISTERIAL LEVEL MEETING ON CHEMICALS. THEY ARE WORKING WITH THE UNITED NATIONS ENVIRONMENTAL PROGRAM ON PROTOCOLS FOR INTERNATIONAL NOTIFICATION OF RELEASES AND ASSISTANCE IN RESPONSE ACTIONS. THEY ARE ALSO WORKING WITH THE WORLD HEALTH ORGANIZATION IN DEVELOPING CHEMICAL PROFILE CARDS ON TOXIC CHEMICALS. IN FACT, JIM MAKRIS, HEAD OF OUR PREPAREDNESS STAFF, IS HERE WITH ME TODAY. HE HAS JUST RETURNED FROM AN OECD MEETING, AND I'M SURE HE WOULD BE HAPPY TO RESPOND TO ANY SPECIFIC QUESTIONS ABOUT THIS.

AS WE MEET IN NEW YORK -- THE HOME OF THE UNITED NATIONS -- AND WITH A U.N. ENVIRONMENTAL PROGRAM REPRESENTATIVE, A MEMBER OF THE PRIVATE SECTOR, AND A PUBLIC OFFICIAL ALL ON THE SAME PANEL, WE CANNOT HELP BUT REFLECT ON THE FACT THAT OUR CHALLENGES REALLY ARE GLOBAL IN NATURE. OTHER CHALLENGES THAT FACE US INCLUDE:

- THE REALITY THAT WE CAN MEASURE POLLUTION TODAY BETTER THAN WE CAN MANAGE IT

- OUR LACK OF UNDERSTANDING OF THE CROSS-MEDIA EFFECTS OF

POLLUTION

- THE NEED TO ADDRESS THE INCREASING PUBLIC FEAR OF TOXICS

THESE ISSUES CANNOT BE RESOLVED EFFECTIVELY IF WE SEE OURSELVES AS EACH EXISTING IN A VACUUM. IT HAS BEEN MY PLEASURE TO BE A MEMBER OF A PARTNERSHIP AT THIS CONFERENCE. I LOOK FORWARD TO CONTINUING TO WORK TOGETHER TOWARD THE GOALS I BELIEVE WE ALL SHARE.

MAR 13 1990

Update on EPA's Implementation and Enforcement of Section 313 of SARA Title III

by

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When Congress passed SARA Title III in October 1986, it presented a formidable challenge to both EPA and the regulated community. The many tight deadlines, different lists, and complex reporting requirements tested the skills of both regulators and the reporting facilities in implementing this extraordinary information collection legislation. Specifically with respect to the Toxic Release Inventory (TRI) under Section 313, EPA had a little more than a year to promulgate regulations, inform the regulated community of their obligations, prepare and deliver training to both its own staff and the regulated community, and prepare to receive one the largest quantities of data ever reported to the Agency. Industry for its part had to organize information and prepare for the complex task of estimating releases and treatment efficiencies, knowing that EPA's regulations would only be finalized a few months before the reporting deadline.

How have we done? Well, by any measure a lot has been accomplished over the past two and a half years. Nevertheless, much remains to be done if we are to realize Congress' intention of providing the public and regulatory Agencies with a multi-media database upon which analysis can be performed to set priorities, identify problems and pursue management of toxic chemicals over all environmental media. This paper presents the current status of reporting and implementation of section 313 and gives some perspectives on where the EPA is headed over the next year.

Current Reporting Status

EPA has received about 75,000 reports from about 17,500 facilities. These results are in comparison to our estimate that about 30,000 facilities would have reporting obligations. Is our compliance rate 55 percent as these figures might suggest? Not necessarily, the 30,000 figure was a rough estimate based on very limited data available from one state. Therefore, we cannot really conclude that the response rate is as low as 55 percent.

For example, comparing the national percentages with similar figures for states that have had very good right-to-know programs in place suggests that compliance rates may be closer to 75 percent. In any event, it's clear that there are facilities that are not reporting. Enforcement actions against non-compliers will be discussed in a later section of this paper. In addition, our regional offices are continuing to conduct a variety of outreach efforts, including phone calls targeted at non-reporters in industry segments that we believe have the potential for using section 313 chemicals. As a result of this activity, we are continuing to receive a trickle of late reports for 1987, even while we are beginning to get the 1988 early returns.

For facilities that have reported, we have been able to tabulate some preliminary breakdowns by industry type. The table below presents major industrial categories by the percentage of all reporting facilities that are attributable to that category:

Industry Group	Percentage of all Reporting Facilities
Chemicals	22
Fabricated Metals	13
Electrical	8
Food	8
Primary Metals	7
Rubber/Plastic	6
Transportation	5
Machines	4
Paper	4
Lumber	4
Stone/Glass	4
Textiles	3
Petroleum/Coal	2
Instrumentation	2
Furniture	2
Printing	1
Leather	1
Apparel	<1
Tobacco	<1
Miscellaneous	2
Unknown	4

As might be anticipated, the chemical industry leads the pack, responsible for over 20 percent of all facilities reporting. In addition, looking at the information another way, almost 50 percent of all chemical facilities with 10 or more employees reported, again by far the largest percentage of any major industry group.

We are detecting a fairly high error rate on forms that we have received. These include clear mistakes, inconsistencies, or

incomplete reports. We did anticipate that the error rates would be high in the first reporting year, based on the complexity of the reporting requirements as well as experience we've had with previous, much simpler reporting regulations under the Toxic Substances Control Act. As discussed below many of these errors are easy to identify and fix, and should not significantly affect the ultimate usefulness of the data base.

Some of the common errors that we have found include the following:

- Failure to include all sections of the form with each report;

- Missing facility identification information, e.g. name or address, SIC code, Dun and Bradstreet Number, technical contact;

- Missing chemical identification, e.g., chemical name or mixture identification, CAS Number, inconsistent CAS Number and name;

- Unacceptable certification, photocopied signature or no signature;

- Incomplete release information, no basis of estimate;

- Incorrect codes, e.g., off-site codes for on-site treatment, CAS Numbers not on the 313 list;

- Missing cross references, e.g. release to water without receiving stream, off-site transfer without location reference;

- Placing blanks in fields where NA is needed;

- Double counting releases, e.g., entering both a range and an estimated value, listing the same release for release to water and release to POTW.

We are also beginning to look at whether the data that are in the correct format are reasonable estimates, and we are pursuing two courses to validate this information. First, a certain portion of the forms that have been submitted will be subject to phone call followup by our technical specialists. These calls will focus on responses that appear to be questionable from a technical standpoint, even though they may be reported in the correct format. To the degree that this followup uncovers errors in reports, these errors will be corrected in the database. Second, we are planning to conduct approximately 200 in depth site audits utilizing contractor personnel. These site audits will not be enforcement inspections, rather they will be

audits designed to uncover any systematic problems in reporting that might be affecting the overall quality of the database.

We have completed the pilot study of 25 facilities. While this is too small a sample to draw broad conclusions, the results are interesting, and worth mentioning here.

Number of chemicals reported		70
Number with incorrect use/activity	24	
Number which are not 313 chemicals	11	
Number which did not exceed thresholds	2	
Number of 313 chemicals not reported (below threshold)		122
Number of chemicals that should have been reported but were not		7

Because they voluntarily participated in the study, these facilities probably felt that they had done a good job of reporting, so the results presented here reflect better than average data quality. They suggest that these firms did a pretty good job in deciding what to report, however they had a lot of difficulty in characterizing the uses of the chemicals that they did report. The 7 chemicals that should have been reported, but were not, were generally contaminants of mixtures.

In the opinion of our contractor, release estimates were generally done in a reasonable manner. About 80 percent of estimates were in close agreement with the contractor's assessment and another 17 percent were within a factor of 10.

One area of good news, at least for us, is the status of trade secret claims under section 313. As you probably know EPA did not finalize its Title III trade secret regulations until after the first section 313 reporting deadline on July 1. Therefore, we sent out letters to companies that made trade secret claims, requesting them to resubmit and validate their claims using the format finalized in our trade secret regulations. There was a lot of uncertainty on the part of the Agency and the public as to just what percentage of chemicals would actually be claimed trade secret under Title III and section 313 in particular. Now that the dust has settled and the final substantiations have been submitted, we can address fears that a large percentage of the data would be withheld from the public. In fact, a very small percentage of chemicals are being claimed as trade secrets. We have claims on less than 40 chemicals out of the 75,000 reports that we've received. Even these substantiations may be further reduced once EPA further reviews and validates the claims.

Database Status

What is happening to all this information as it comes pouring into the Agency? EPA has established the Title III Reporting Center in Washington. All of the TRI reports as well as other data received by the Agency under Title III are being handled by this facility. All of the reports submitted to date have been entered into the EPA computer system. At present we are in the midst of a fairly intensive effort at data clean up. This involves performing a variety of consistency checks and audits of the data to identify obvious errors that submitters have made as well as errors created by EPA's contractors during the initial round of data entry. The kinds of submitter errors that we are able to detect include incorrect chemical names or CAS numbers, obviously incorrect codes for things like SIC code or DUNS number, and so forth. About 2,000 forms were so incomplete that they could not be entered into the computer and had to be returned to the submitters for revision. Almost all of these have been returned promptly to us. In addition, certain data problems are not due to either industry or EPA error, but would greatly complicate the public's use of the database. For example, Los Angeles County has been entered fourteen different ways, which would complicate a user's efforts to retrieve facilities for that county!

We expect that this data cleanup process should be substantially complete at the end of March.

Making the database available to the public involves some additional steps. We have negotiated with the National Library of Medicine (NLM) to be the agent for making the TRI database accessible to the public. They will be mounting the database as part of the series of files that they have on their TOXNET System. This system has a great deal of chemical specific information on many of the chemicals in the 313 list already; therefore it will be a good compliment to the TRI release information. For example, other NLM files include information on basic physical/chemical properties, toxicity, and use of many of the 313 chemicals. In addition, the National Library of Medicine system was attractive to us because it is relatively inexpensive to use and has already established a good user support base and a program for training potential users. As part of EPA's agreement with NLM, we will be funding them to enhance the user friendliness of the database and to incorporate certain basic statistical analysis functions which are not already available on the NLM computer system. The resulting TRI database will be both user friendly and capable of performing many of the basic analyses that people would want to obtain from the system. We expect this system to be available late this spring.

Of course while all this data entry and programming is going

on, people still want access to the information. Right now the Title III Reporting Center is making available hard copies of the reports. People can either request copies in writing or they can go to the reporting center and ask to review copies there. A couple of thousand such requests have been submitted; the requestors range from company representatives to environmental groups to private citizens. Once the public database is accessible, we will continue to provide special access support to those individuals who need limited information and don't have access to computer retrieval opportunities.

Several other non-computer routes of access will also be available to the public. For example, we will distribute microfiche versions of the database to public libraries in all counties of the country. CD-ROM versions of the database will be made available at major libraries, state and EPA offices. Finally, EPA is planning a national report on the TRI data. This report will provide statistical summaries of the release information, organized according to a variety of categories of interest, including industry, chemical, and geographic area.

Status of Enforcement Activity

As I indicated in the reporting status discussion, we believe that there are non-reporters, and clearly this is a serious concern. The usefulness of the database depends ultimately on having a relatively high response rate as well as good quality data. Recognizing that the quality of the data is something that will evolve and improve over time, our initial concern is to make sure that facilities who should be reporting are in the TRI system. Therefore, we are targeting most of our enforcement activities during this fiscal year to identifying facilities that should be reporting but are not. Each of the EPA's Regional Offices has developed a targeting list for inspections based on a combination of information that we've been able to provide from Headquarters as well as their own sources of information. In essence, our regions are targeting facilities in industry groups where we believe there should be reporting and identifying facilities in those industry groups that have not yet submitted reports.

As you probably have heard, enforcement actions have already begun. Based on inspections that were conducted last summer and fall, in December 1988 EPA announced 25 enforcement actions against companies that had failed to report, requesting a total of $1.5 million dollars in penalties. It's important to emphasize that this action, while dramatic because of the number of cases involved, does not represent a one shot effort. Inspections are continuing throughout the year.

EPA has also issued its enforcement response policy for section 313, which provides guidance on penalty levels for

various types of violations, including non-reporting. Maximum penalties available under the law are quite steep, $25,000 per violation per day, and each chemical can be a separate violation in the case of non-reporting. EPA's policy provides a graded penalty structure based on factors such as the severity of the infraction, the size of the facility, and whether the violation is self-identified versus the detected through EPA enforcement inspections. For example, when EPA returned incomplete forms to submitters last year, no immediate penalties were assessed. To the degree that facilities submitted corrected notices within a specified time limit, there were no penalties levied against them. On the other hand, a large facility making chemicals in considerable quantities who fails to report and is detected through an on site inspection can face penalties up to $25,000 per chemical.

Our penalty policy this year does not invoke per day penalties except in very extreme cases. I should point out, however, that EPA was criticized by a number of environmental groups for this "soft" approach. Moreover, as time goes by it will be less and less likely that firms making a good faith effort to comply with environmental laws would be unaware of section 313. Thus it is possible that the magnitude of penalties will increase in the future.

Regulatory Status

Even as we worried about how to handle the forms that were submitted in 1988, we had to put in place the reporting requirements for this year. By July 1, 1989, facilities must report on releases that occurred during calendar year 1988. The good news is that EPA has not made any modifications in the basic reporting regulations for this year's submissions. This does not mean, however, that there are no changes to worry about. The reporting threshold for manufacturing and processing has gone down from 75,000 to 50,000 pounds, so that facilities will have to re-check their reporting threshold eligibility. In addition, the supplier notification requirements became effective in January 1, 1989, so companies that are chemical suppliers have an additional legal responsibility to notify their customers. In theory, this activity would not actually be reflected in reports that we receive at the Agency until July 1 of 1990. However, I expect that as facilities learn that chemical mixtures they are using contain 313 chemicals, a number of them will be inclined to factor that information into their July 1, 1989 reports.

When we finalized the basic reporting regulations we indicated that we would be going back to reconsider the issue of whether to require facilities to provide some indication of peak release or frequency of releases. For a variety of reasons we

delayed the start of that activity. However, we have recently initiated work to evaluate the need for peak release reporting. As a result, somewhere down the line reporting requirements could be altered. We also plan to initiate work on minor amendments to the regulations, in order to address problems that have arisen in interpreting the present rules, for example in the area of article definition. Again, any such changes would not affect the next round of reporting.

Finally, there will be some changes in the list that will be effective for the July 1, 1989 reports. Titanium dioxide and acid blue 9 have already been delisted from the inventory. We expect that final action may occur on some additional chemicals before the deadlines. The chemicals that appear farthest along in the process right now include melamine and benzyl butyl phthalate. There is some chance that we could finalize decisions on sodium hydroxide and sodium sulfate before the reporting deadline, but these cases are less likely to be finished than the first two. Sodium hydroxide, in particular, has been somewhat controversial.

In our review of petitions over the last several months a number of significant policy issues have been raised:

- Certain chemicals on the list, such as ethylene and propylene, appear to have limited direct human toxicity, but are released in large quantities and contribute to the formation of photochemical smog, which is associated with significant health and environmental effects. Is this an appropriate reason for including chemicals on this list?

- Certain individual members of the broad categories may not share the toxicity concerns generally associated with these categories. Should EPA follow a chemical by chemical approach in delisting individual members from the categories? Such an approach could impose an enormous burden on the Agency's review process and greatly complicate compliance determinations by facilities.

We are addressing these and other questions as they are raised by individual petitions.

Outreach to Industry

We held a number of exercises over the summer of 1988 to find out how we could do a better job of informing industry about the reporting obligations and assisting industry in providing better quality reports. These activities included a series of debriefing panels with technical representatives of firms that had reported as well as a review of problems and questions that

arose in our regional offices and in our Title III Hotline. One of the comments that came across consistently was that although a number of our guidance materials were very good they were getting to the right people very late in the reporting cycle, frequently after it was too late to affect the quality of the reports. As a result, we are distributing reporting materials somewhat earlier this year. Camera ready copies of the forms and guidance materials have been distributed to our regional offices and to our trade association contacts. We have just published a notice of availability of these materials in the Federal Register. Moreover, every facility that submitted a report last year will be getting a complete reporting package, including the revised form, instructions and updated versions of the guidance materials that we found to be of the most frequent use to facilities. We have also added instructions for magnetic media reporting to the package. Last year a few companies reported on diskettes, and this proved to be a very satisfactory approach for both the submitters and EPA, so we would like to encourage more firms to follow this approach this year.

In addition to mailings, EPA is continuing to supply speakers for various workshops and meetings to support outreach and training efforts. We have developed a fairly good set of training materials for a one to two day course on the nuts and bolts of section 313 reporting. These materials are available from EPA to anyone who wishes to build a course around them. Our regional staff have received training on using these materials.

There is also the ever popular Emergency Planning and Community Right-to-Know Hotline accessible through a toll free number. We have beefed up the staff and expanded the hours of availability compared with last year. But we still expect demand to be somewhat overwhelming as July 1 approaches, so it pays to begin looking at the reporting materials as soon as possible.

TRI Network

As we were preparing for the receipt of the first wave of the section 313 data, we recognized that it was not possible to predict the degree of public interest in or reaction to the information as it became available. However, as the reporting deadline approached we became increasingly concerned that EPA and its sister state agencies be able to respond in an intelligent and reasonable manner to a potential flood of questions that might come in - questions on how to gain access to the data and how to use the information or interpret the reports that have been made public. This is a unique problem in part because of the multi-media nature of the 313 database. No one program or area of expertise had adequate information to respond to the full range of issues that could be raised by section 313 data. Traditional program responsibilities both within EPA and the State Agencies had been divided along media lines. At EPA, for

example, there are separate programs for Air, Water, Hazardous Waste, and so forth. In addition, EPA recognized that if the ultimate objectives for public access to 313 data were to be met, the basic level of response to public inquires had to be developed at the state and ultimately the local level.

Therefore, EPA made the decision to put into place what is known as the TRI network. The TRI network consists of contacts at the federal, regional and state level who are designated to be the recipients of questions concerning different aspects of the Title III data. For example, a state may designate an overall lead contact as well as a series of media specific contacts for followup information. The underlying concept was that to the degree possible the public would be directed to the state network for response to questions, with the EPA staff at the regions and headquarters being available to provide backup information as well as overall guidance and information materials.

The TRI network has been put in place in all states and EPA regions. Over time additional names and relationships will be built into the network. In addition, members of the network have been provided with certain basic background materials produced by EPA:

- A brochure entitled "Toxic Chemical Releases and Your Right to Know," containing general information on the TRI and the state agencies responsible for receiving section 313 reports;

- Fact Sheets prepared by the State of New Jersey on 151 chemicals on the section 313 list;

- A list of Questions and Answers pertaining to the TRI data interpretation and access;

- A summary of federal regulations pertaining to TRI chemicals.

For this year we are enhancing these materials and providing additional guidance. For example the Fact Sheets are being expanded to cover the remaining 313 chemicals and supplements are being developed to describe ecological effects associated with these chemicals. The regulations database is being enhanced to include state regulations.

We have circulated in draft form a Risk Screening Guide designed for use by state and local officials who wish to interpret the 313 emissions reports. The idea of the Risk Screening Guide is that the 313 data can be used for the purpose of screening potential hazardous situations to identify those of highest priority for a state or community to address in more depth. Based on the evaluations of the draft guide we intend to

revise it and make it available for wider dissemination by late spring.

We are also exploring how other analysis and assessment tools can be utilized in conjunction with the 313 data. But at this stage we have not made any decision to go forward on our own with linking modeling systems to the 313 data.

Public Use of the TRI Data

Of course, all of the work that we're putting into making the database readily accessible to the public and providing a response network of federal and state officials would not really be very useful if in fact no one is interested in the 313 data. Just how eager is the public for this information and how will they use it? Up to now the results have been mixed. Certainly we have not seen the kind of wide-spread reaction to the initial round of reporting that perhaps some people may have anticipated or feared. On the other hand, we have seen a number of instances where the 313 data have been used and publicized quite effectively, for example:

- In Silicon Valley the Silicon Valley Toxic Coalition used the 313 data to identify the "dirty dozen" toxic chemical releasers. Extensive local press coverage resulted from this report as well as from some of the companies' attempts to respond to the charges made by the coalition.

- The Natural Resources Defense Council did an extensive analysis of Maryland air emissions reported under TRI, identifying the principal facilities as well as the principal chemicals contributing to the air toxics burden in that State. Again, significant press coverage accompanied the release of NRDC report and analysis.

- The Massachusetts Public Interest Research Group analyzed releases to air, land,and water in that state.

The press has also picked up on the TRI data, and articles have appeared highlighting state or local emissions reports in newspapers across the country, including major Pennsylvania, Colorado, and Kentucky papers.

It's important to remember that this activity has occurred without the aid of our computerized national database. Although some states have gone ahead to computerize the data on their own, for the most part the studies that have been done to date have been the result of painstaking analysis of the hard copy forms. Once the national database in on line, similar studies can be conducted in minutes!

Much to their credit, a number of companies have taken the initiative in alerting their communities to the contents of their reports and attempting to explain the significance of the releases and what is being done about them. For example, Monsanto, Dow, and Tennessee Eastman, among others, have used the 313 reports as an opportunity to discuss with their communities the nature of their toxic chemical releases and what they were doing to control their releases. Especially in the case of Monsanto, this has resulted in considerable beneficial publicity for the firm.

As yet it is still rather difficult to access and analyze the 313 data, so these early instances of analysis, press coverage, and public awareness are probably just indicators of what can be expected in the future. The evidence seems to be that the interest in using the data is there on the part of public interest groups, that media attention will be focused on these issues as analyses are released, and that the result of this attention does not necessarily have to be adverse for the companies involved if they take a forthright position with respect to communicating their side of the story to the public and with respect to responsible management of toxic chemicals. Certainly those companies that have in place programs for waste minimization or waste reduction, and that have had the opportunity themselves to analyze the significance of their release reports are in much better shape than facilities who wait for others to publicize their releases.

EPA Use of the Data

Unlike some of the other parts of Title III, Congress envisioned that EPA itself would be a significant user of the section 313 data. We are extremely anxious to begin working with the data and the data manipulation programs that are being built into our database systems. EPA has established an agency-wide task force to identify potential uses of the data and to help encourage program offices to build the data into their ongoing activities. At this point, all of the Agency's main program offices have identified ways in which the TRI data will be used within their current program and priority setting processes. For example, the Air Program is building review of the TRI data into their assessment process for identifying potential candidates for regulation under the hazardous air pollutant program. The Office of Solid Waste is planning to look at the Toxic Release Inventory data as a potential source of information for identifying waste streams that may need to be classified as hazardous for regulation under RCRA. The Water Program is seeking to use the Title III data to indicate cases where pollutants need to be added to effluent permits under the NPDES system or where additional water quality criteria may have to be established.

These efforts are, of course, dependant on achieving an adequate overall coverage and quality to the data and we will be proceeding over the next year to evaluate the success of these uses.

Conclusion

As I stated at the outset, section 313 of Title III is a unique experiment in environmental data collection and public access. There is no question that it is costing significant resources, both by EPA and the affected industries, to implement this experiment. Thus far, I believe that implementation is going reasonably well, although not without some problems. But the critical period for the experiment is still ahead of us. Can we upgrade the coverage and quality of the reports? Will our data systems meet the objectives for easy access and use? Will people use the data, and if so, how effectively? Will use of the data lead to better environmental management decisions at the local, state, and federal level and by individual facilities? We have a lot of work to do before these questions can be answered.

EPA'S IMPLEMENTATION OF SECTION 313 of SARA TITLE III

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INTRODUCTION

The Toxic Release Inventory (TRI) mandated by section 313 of Title III is a unique part of Title III in a number of respects:

- It is the only reporting requirement for which EPA has a primary data receipt responsibility;
- It is the only part of Title III that focuses attention on releases from routine operations in addition to accidental or episodic releases;
- It is the only part of Title III that addresses environmental effects in addition to human health as a primary concern;
- It is the only part of Title III where Congress has specified that the public have access to the data through a computerized, national database.

Under the mandate of section 313 by July of this year up to 30,000 facilities will begin an annual process of reporting on their releases of specific toxic chemicals. Since each report is chemical specific, this process will yield up to 300,000 reports annually. The resulting database will be the first multi-media, chemical specific database covering releases of toxic materials in a consistent manner over time. As such it will serve not only the community right-to-know objectives of Title III, but also the broader planning and priority setting activities of states and EPA, and the needs of hosts of researchers, interest groups and policy makers. Before this potential can be realized, however, a number of things have to happen:

- EPA had to publish regulations and forms that convert the statutory language into meaningful, and, we hope, understandable forms and instructions;

- Facilities subject to the reporting requirements have to submit reports in a timely and responsible manner;

- EPA has to load the data onto a computer system, develop the necessary software to manipulate the information, and provide mechanisms for public access;

- Potential users have to understand what can and cannot be done with the information.

This paper describes a number of activities that EPA has underway or has completed to accomplish these objectives.

REPORTING REGULATIONS

The final forms and instructions for section 313 reporting were published on February 16, after an extensive regulatory development process. We had hoped to get these materials out a month earlier, but a number of issues arose relatively late in the process that ultimately resulted in delaying the final rule for the additional time. I frankly believe that the delay was worth it in the sense that the final regulations are much better as a result of taking the time to resolve these issues. The specific reporting requirements are described in another presentation for this seminar, so there is no need for us to repeat them here. However, I would like to point out a few of the areas where significant issues had to be resolved, and why EPA made the choices it did.

MIXTURE REPORTING

The threshold and release determinations for TRI reporting require facilities to consider not only pure chemicals, but also mixtures which contain the listed chemicals. This creates a number of problems, because chemical processors and users may not know whether these chemicals are present in the products they use. However, if chemicals present in mixtures are not subject to reporting because of lack of user knowledge, we believe that the usefulness of the data base would be severely undermined. In order to facilitate reporting on mixtures we therefore adopted a couple of measures to assure reporting of mixture components that could lead to significant releases:

- We adopted the OSHA de minimis cutoffs of 1 percent or 0.1 percent for carcinogens as cutoffs below

which threshold and release calculations are not necessary.

- We are requiring suppliers to notify their customers if section 313 chemicals are present in their products and the percentage composition, beginning with the first shipment in 1989. Prior to that year, facilities need only report on information that they have readily available, for example, on Material Safety Data Sheets and product literature.

We believe that taken together these provisions will assure that we ultimately receive the necessary information on mixtures, while at the same time reducing the need to make determinations where there is little potential for release. Moreover, by adopting the OSHA de minimis cutoffs and requiring that the supplier notification be attached to or included in the MSDS we hope to build on an existing framework for chemical hazard communication.

EXEMPTIONS

The term "otherwise use" applied to threshold determinations created a potential nightmare, since it conceptually could have covered a host of incidental activities that would be difficult to account for and of negligible importance from the perspective of enumerating emissions. To focus the reporting effort, we limited the application of "otherwise use" by introducing a number of exemptions including:

- certain laboratory uses;
- certain maintenance uses;
- use as part of the facility structure;
- maintenance of motor vehicles;
- personal use by employees;
- use as part of an article.

A word of caution is in order here, however. Although our intent in introducing these exemptions was to simplify and focus the reporting effort, some of the interpretations involved in specific cases can be quite tricky. If you think you may be eligible for one or more of these exemptions, I encourage you to read our explanations, definitions and question and answer material carefully.

FACILITY IDENTIFICATION

Although the TRI database will be a rich source of information, full realization of its analytic potential can only occur if we can relate the TRI data to other sources of information available to the EPA and states. The primary mechanism for accomplishing this linkage is through the facility identification. Consequently, we have incorporated a number of different identifiers in the TRI form to enable linkages to be made in a variety of different ways. These include the Dun and Bradstreet Number, RCRA ID Number, certain permit numbers, and even the longitude and latitude to enable linkage with geographic data bases and modelling systems.

LEVEL OF DETAIL IN RELEASE INFORMATION

Comments on our rulemaking ranged from those who would have wanted very detailed release data, including specific information for each wastestream or specific emission source, to those who believed that only a single number for each of the three media; air, land, and water, was called for by the act. Our interpretation tended to be more in keeping with the latter, although we did ask for a little more detail, for example separating point and non-point air sources, and stormwater releases where available. We that this was in keeping with the statutory intent, while at the same time yielding some useful detail. We are also requiring only annual totals be reported,although we will be considering an amendment in the near future to add some information on the frequency, duration and/or size variation of releases. People have argued that such data are essential for assessing effects that are dependent on short term peaks rather than long term cumulative exposures.

FACILITY OUTREACH

Clearly the TRI database will not be useful unless we obtain a high level of compliance by the affected facilities. Frankly the compliance experience under the other parts of Title III appears to be somewhat disappointing, based on what we have heard from states. For TRI we have the advantage of a little more lead time as well as a somewhat more focused covered population. Nevertheless we recognize that we have a major challenge ahead of us. To meet this challenge we have been implementing an extensive outreach program aimed at alerting facilities to their reporting obligations and providing them with the tools they need to report properly.

- We have been working with manufacturing trade associations to get the word out through workshops and special mailings.

- We produced a brochure on section 313 reporting designed to alert company managers and staff to their obligations under 313. For most facilities, this brochure should tell them enough to determine whether they are likely to have to report and where to go to get more information. We just distributed 225,000 of these brochures through direct mailing to all manufacturing facilities that we could identify with 10 or more employees.

- We have produced a series of aids to reporting, including:

  - expanded instructions and examples for the form;
  - a detailed technical guidance manual for estimating releases;
  - a series of mini-guidance documents with examples and suggestions specific to particular industry segments; fifteen have been published to date;
  - a synonyms list for the 313 chemicals;
  - an extensive question and answer document targeted to facilities;

- We have developed a training course for filling out the TRI form. The course has been piloted with EPA staff and is being offered in eight regions over the next month and a half. It is also available for adaptation by companies or industry groups.

- We have staffed a toll free hotline with capabilities for responding to both general questions and fairly technical questions.

- Each of our regions has supplemented its staff with experienced retired chemical engineers and chemists to assist in the outreach to facilities.

QUALITY ASSURANCE

Despite these efforts, it's obvious that there will be initial problems in reporting. Past experience suggests that the error rates in initial reporting will be fairly high. This has been borne out by the reports, about 200, that we have received to date. Almost all contain some errors, although the degree of seriousness varies considerably. Our data entry programs are being designed to identify the more obvious errors, and we will be getting back to companies to ask for corrections.

A much more serious potential problem is that of non-reporters. This will receive our highest enforcement priority in the first phases of TRI implementation because a

high response rate is crucial to the credibility of the database. Obviously we will not have unlimited resources to pursue non-compliers. However, we do have some resources and we're working on putting together a targeted enforcement strategy that focuses on those facilities that are most likely to have reporting obligations based on the nature of their activities.

Finally, we are considering a number of approaches to checking on the quality of the reports that we are getting, beyond the obvious errors discussed previously. We are presently developing algorithms for identifying questionable reports for further checking. We are also planning to conduct in depth audits of the background documentation supporting the reports for a limited number of facilities. These activities will provide a check on the quality of the reporting as well as feedback to us on areas where our instructions or guidance materials need improvement.

I should also point out that EPA is not the only agency that has a stake in the quality of the data, or the ability to control the quality. Many states will be active users of the TRI data. In many respects they are much better situated than EPA to assess the quality of the reports. We are therefore considering sponsoring one or more pilot studies to assess how states might contribute to the TRI quality assurance effort.

MAKING THE DATA AVAILABLE

According to the statute EPA must make the data available to the public through computerized telecommunications and "other means." EPA has established a facility for receipt of the TRI reports and entering them into EPA's computer system. Software for the database is currently being developed and should be available shortly. Given the large number of reports anticipated, and the fact that most of them will come in around June 30, we don't expect to have all the data loaded into EPA's computer by July 2. In fact we anticipate that it may be the beginning of 1989 before the first year's reports will be accessible for analysis on EPA's computers. From here our plan is to generate a tape which would be provided to a vendor who would make the database available to the public through an online service.

We have tentatively selected the National Library of Medicine as the vendor for this service and have begun to negotiate arrangements with them. NLM was selected in part because they already provide a number of chemical information data bases that contain information that will complement the TRI data. They also have a good user base and training program and a very reasonable fee structure. If

arrangements work as planned, the public data base will be available online by the spring of 1989.

However, people do not necessarily have to wait until spring to ask for the information. The public can ask for access to the hard copies of the reports after July 1 from EPA or their state agencies. We are currently in the process of planning how to arrange this access without disrupting our primary data entry activities. States must also consider this question, since they will be receiving the TRI reports the same time we will, and have the same obligation to make the information available to the public.

Even when the database is available online, however, we recognize that there will be continued demand for access to the data by other means, including versions of the database on magnetic or optical media, as well as standard reports summarizing the data. We are still in the process of working out our comprehensive distribution strategy, but certainly we will be including a number of these alternative modes of access to the information.

USE OF THE DATA

Although legally EPA will have satisfied its obligations when the database goes online for public access, in reality we can't ignore what will happen when this access begins. In order to make effective use of the information, state and local officials, as well as citizens and environmental groups will have to understand how the information can be used and interpreted. They will need to understand what can and cannot be done with the crude release information in the TRI database and how this information translates into potential risk considerations. They will need to understand the toxicity of the TRI chemicals and how to address concerns over the possible risks associated with these releases. EPA will be working with states to help develop an infrastructure that will be capable of utilizing the TRI database effectively and responding to public concerns about releases in their communities. Among the projects being initiated by the agency are:

- Development of profiles describing the properties of the TRI chemicals. In the short run we will be distributing fact sheets developed by New Jersey for 170 of the TRI chemicals and supplementing this with additional information available for chemicals for which no fact sheets have been developed.

- Development of questions and answer guides for use by state and local officials in responding to public inquiries.

- Preparation of a fact sheet that explains the basic

characteristics of the TRI data to the general public.

- Development of a risk screening guidance document to help state and local officials understand the use of the TRI database for risk identification and priority setting activities and to suggest further sources of information.

With the exception of the last item, these products are being targeted for availability to the appropriate audiences in July, to meet the need to respond to early public inquiries. Looking beyond these early products, there are a number of other projects under consideration for improving the capabilities of state and local agencies for dealing with issues raised by the availability of the TRI data. These include more comprehensive EPA authored chemical profiles and computerized tools for use with the release data. Implementation of these projects will, of course, depend on the perceived demand as well as our resources.

I should emphasize that these data use activities are aimed at building the capabilities of state and local agencies for interacting with the public and addressing risk issues raised by the data. For the most part we believe that EPA's role will be to provide technical backup, support and guidance to the states, not to be the primary interface for dealing with local concerns.

EPA USE OF THE TRI DATA

Even while we are planning to accommodate the public's right to access the data and use it effectively, EPA is also beginning to assess how the TRI database will fit into its own programs. Although the Office of Toxic Substances is implementing the database for EPA, in many respects the chief users within the agency are most likely to be our traditional media program offices; air, water, solid and hazardous waste. Over the past several months an agency wide Task Force has begun the job of educating the various offices across the agency about TRI and developing a coordinated strategy for use of the data. All of the media programs have drafted preliminary plans for incorporating the TRI data into their programs for priority setting and identification of significant problems for further, detailed investigation.

CONCLUSIONS

The TRI database can become a uniquely valuable resource for understanding the pathways by which toxic chemicals enter our environment, for setting priorities for detailed assessment activities, and for facilitating a productive dialogue among government officials, companies, and citizens

at a state and local level. The job of realizing this potential has just begun.

TITLE III--SECTION 313--PRIORITIES AND INITIATIVES

Susan F. Vogt
Office of Toxic Substances
Environmental Protection Agency

From EPA's point of view, the Emergency Planning and Community Right-to-Know Act presents both great opportunities and great challenges. Its promise lies in the wealth of new data that will be available on levels and sources of hazardous substances in the environment. Its challenge lies in assuring high quality data, incorporating it into existing knowledge, and using it responsibly.

As the program matures and the data become more and more reliable, information called for by the new law could become the "front end" of the Agency's toxic substances and other regulatory programs.

For industry, this new law signifies a new era. All but very limited secret information is now to be available to the public. For EPA, the goal is to obtain accurate data from the full range of companies affected by this law.

I understand that you as facility managers required to report under Title III, specifically Section 313, have some interest in the efforts that are both in the works at EPA and projects that are being planned. I'd like to share some of these with you today.

One of the most important tasks for the Office of Toxic Substances (OTS) in the early days of the Emergency Planning and Community Right-to-Know Act has been to both inform the regulated community of the need to report under Section 313 of the Act, and to develop a standardized form for use by industry in reporting on chemical emissions into the environment. These two priorities have involved the development of a variety of tools and guidance documents to assist managers like yourselves in complying with the law. Let me tell you about some of the tools that are available and how you can go about getting copies of them.

You may already be familiar with some of the guidance documents that we have developed to assist you in filling out the Section 313 reporting form. These include the brochure describing who should report under the law, and an instruction document for use in actually filling out the form. In addition, since many of you may have never before calculated releases of chemicals into the air, land, and water we have developed comprehensive technical guidance documents to assist you in doing just that. There are actually 17 industry-specific documents available. We have also developed an instruction manual for use by industry in training plant personnel on how to estimate releases.

Several other documents are available including a breakdown of Title III chemicals and their reporting requirements, and a document of synonyms and CAS numbers for the Section 313 chemicals. All of these documents are available through the Emergency Planning and Community Right-to-Know Hotline developed to assist in answering questions and providing copies of guidance documents to callers. The Hotline number is 1-800-535-0202.

As you can see, we have developed numerous tools to provide as much compliance assistance as possible to facility managers like yourselves in reporting chemical emissions into the environment under Section 313 of this law.

EPA management and staff involved in Title III, Section 313 activities understand that the completeness of the data base will be directly related to the level of industry compliance. We expect that the overall quality of the Section 313 data will improve over time, as facility personnel become more familiar with estimating emissions. If the number of facilities reporting is lower than it should be, then confidence in the true picture the data present will also be low. Therefore, OTS intends to focus efforts on industry compliance with the reporting requirement, and I encourage you to do the same.

OTS compliance monitoring activities in 1988 will focus primarily on finding non-reporters. EPA staff in headquarters and the regions are working to identify the potentially regulated facilities under this law through readily available mechanisms. States are also interested in assisting EPA with identifying non-reporters.

Because of the weight OTS places on compliance with Section 313, OTS has put a significant amount of resources and staff time into producing and distributing compliance materials as well as giving technical assistance to facilities in filling out the form. For example EPA has staff in every one of the 10 EPA Regional offices available to help facilities now. This assistance has included direct mailings of the brochure mentioned earlier to over 300,000 facilities in the covered SIC codes, providing information briefings and training sessions, and taking every opportunity to write articles and speak at appropriate meetings. We will be continuing these activities to some degree over the next several years because the statutory thresholds change, the chemical list may change, and the universe of potentially covered facilities is so large that we cannot expect to raise the consciousness of the manufacturing sector of the economy in just one year.

Once OTS receives all of this data, you may be wondering what we are planning to do with it. As most of you know by now, EPA is required by law to make the Section 313 data available on a computer database that will be available to the public. This is known as the Toxic Release Inventory (TRI) Database. One of the questions that we are asked by potential users of the TRI is "Will the data ba any good?" That is certainly a legitimate question especially considering the expected number of reports (over 300,000 per year) and resource-intensive effort that data quality control implies.

The Office of Toxic Substances will hold companies responsible for providing accurate and complete information. The Agency will also be proactive in assuring that the data are of high quality. Therefore, we are initiating several activities in the data quality assurance area. But, before I get into these, let me tell you what we are seeing in the over 300 forms that we have already received----

1) submitters have used the Proposed Form for reporting instead of the Final Form. The information content is different in these two forms and only the Final will be accepted by EPA.

2) The Rule requires in some places that the Submitter report "Not Applicable" in some places instead of leaving blanks. The purpose is so that it is clear that the question is answered.

3) Submitters are using non-Section 313 names. EPA has provided a list of standard chemical names and CAS numbers to be used in filling in the forms.

4) Submitters are sending the photocopied forms to EPA without original signatures. EPA requires original signatures on all forms.

5) Many submitters are sending cover letters with additional information. If this information is required on the form, it must be submitted on the form. If this is not information that EPA requires, the letters will be disregarded.

The reason for EPA's lack of ability to "second guess" minor errors or to account for additional information relates to the sheer expense of doing so on potentially 300,000 forms as well as the congressional expectation that companies, not EPA, be held responsible for providing all the information accurately and that EPA be responsible for mirroring in a consistent manner the information which is provided. EPA will, however, provide basic data quality activities.

One of the first quality assurance activities that is underway involves basic edit checking. The TRI database is being designed to contain a program that will automatically identify errors in a submission as a first-line defense against poor data quality. Most errors involve missing data, ambiguities regarding whether there should be additional data, or wrong data that is apparent through checking existing tables of values such as appropriate SIC codes or Chemical Abstract Service (CAS) numbers for listed chemicals, incorrect Dun and Bradstreet numbers, or zip codes not corresponding with the State. After the submission is uploaded to the mainframe computer, the edit program will identify all errors and flag those records. The next step will be automatic generation of notices of non-compliance to the facility.

Facilities receiving a notice of non-compliance are required to send a corrected form to both EPA and the State. OTS is considering a pilot data quality project in which a State would follow-up on incorrect and technically suspect submissions.

In addition to the state pilot project, OTS is planning on carrying out technical data audits. A submission may pass the basic edit checks and still contain inaccurate or wrong technical information. Therefore, in addition to the basic edit checks, OTS will include a check for suspicious technical data. For example, a facility reports that they use a volatile organic chemical but report zero releases to air. The check program will flag this record for investigation. These flags do not necessarily represent a violation so a notice of non-compliance will not be generated, instead, a report will be produced that can be used for targeting selected technical audits. OTS plans to use headquarters and regional personnel to conduct a selected number of such audits during the months of July through September of the first reporting year. These audits should assist OTS staff in identifying possible improvements to the instruction and technical guidance documents.

You have heard me refer to the TRI computer database, let me tell you a little about some of the efforts underway. The computer design has been approved and the actual coding of the computer program is in process. The system is designed so that a user will be able to search the records using various options including such things as chemical name, SIC code, facility name, geographical location (state, zip code, etc.) and others that may be added later.

In an attempt to make reporting easier for facilities OTS will accept submission on either a floppy disk or on magnetic tape. We have developed a guidance package describing how to provide the information in this manner. This guidance package has been reviewed by both the Chemical Manufacturers Association (CMA) and the Synthetic Organic Chemical Manufacturers Association (SOCMA). In addition, Monsanto and Dupont have been involved in a pilot project with EPA to test the guidance material. The results of this recently completed pilot project were very positive. The companies raised several technical questions and provided OTS with some very useful suggestions on ways to improve the guidance documents.

In addition to this project, in late 1988 OTS staff will begin working on developing an automated reporting form to be available on floppy disk for reporting on 1988 releases. We plan to initiate a pilot project in 1989 using the automated form.

Several other projects that OTS is working on that involve the actual reporting of the data include an amendment to add peak release information on the form for the reporting of 1988 releases. We plan to evaluate the

initial list of Section 313 chemicals and the SIC codes to determine the possibility of adding or deleting chemicals before the 1988 release information is reported.

As you know, the purpose behind the information gathering provisions of the Emergency Planning and Community Right-to-Know Act is to provide information to the general public. Keeping this in mind, OTS has accepted the responsibility for developing some interpretive tools to assist users in understanding what the data is and possible uses. In other words, we are developing some "risk screening" tools for use by the general public, local and state governments.

In addition to the raw data that will be available on chemical releases through the TRI database, chemical fact sheets will also be available. These fact sheets will include information such as potential health effects resulting from exposure to the chemical, workplace controls and protective equipment, generic questions and answers on toxicology topics, and ecological hazards associated with the chemical. For 1988, and probably 1989, EPA will use the fact sheets already developed by New Jersey with additional information added, if necessary by EPA. In future years, EPA may develop a different fact sheet format.

In addition to the fact sheets, OTS is developing a Risk Screening Guidance Document. This document is intended to assist regional, state, and local officials in responding to public queries concerning the potential health and environmental impacts of routine emissions of the Section 313 chemicals into the air, water, and land.

OTS staff are working closely with State and local governments, representatives from the State Emergency Response Commissions, and the Local Emergency Planning Committees. We are providing information describing the TRI database, possible uses of, and limitations of the Section 313 data. We are also collecting a master list of state contact who may be called upon to answer questions or take actions. In all of our communications we are making every effort to assist states and localities in responding to citizens inquiry on the Section 313 data in a manner that encourages citizens to use these data as a springboard to collect additional data and not as the sole cause of action or alarm.

A series of meetings between EPA and State officials is ongoing and will continue over the next year. A variety of Title III topics will be covered including data management, enforcement, risk communication, training, and others.

I would like to emphasize the importance of positive relationships between the Federal government, state and local government, and industry in fulfilling the intent of the Emergency Planning and Community-Right-to-Know Act. Facility managers can go a long way in building positive relationships with concerned citizens by being available to answer questions on issues that may be raised due to the amount of new toxic information that will be available as a result of Title III. I encourage you to work with your industry associations, I understand that CMA has put together a manual to assist its membership in preparing for inquiries that may come about as a result of Title III chemical awareness.

I would like to close with a restatement of EPA's commitment to this data base and to carrying out Congressional intent regarding community right-to-know. We have and will continue to put money and time into facilities to report accurate and complete data and into designing a user-friendly data base so that those data can be used. In addition to the States, local governments, and the public, we at EPA intend to use these data in setting priorities for additional information gathering. If we all work together, the information in the Toxic Release Inventory will provide the first step in assuring that EPA's regulatory priorities are consistent with real world exposures; that we don't waste our time and yours chasing hypothetical hazards. I'm sure that is a goal we all share.

TAB B

Title III, Section 313

Suggested Talking Points for Solvents Workshops

February - March, 1988

Introduction

° In October 1986, the Emergency Planning and Community Right-to-Know Act of 1986 was passed. Popularly known as "Title III," this new law establishes requirements for Federal, State, and local governments and industry regarding emergency planning and 'community right-to-know' reporting on hazardous and toxic chemicals .

° From EPA's point of view, the Emergency Planning and Community Right-to-Know Act presents both great opportunities and great challenges. Its promise lies in the wealth of new data on levels and sources of hazardous substances in the environment that the law eventually will provide.

° As the program matures and the data become more and more reliable, information from the new law could become the "front end" of the Agency's toxic substances and other regulatory programs.

Overview of Title III

° There are four major planning and reporting requirements for industry under this law; each with a different deadline for compliance. Briefly summarized, they are:

-- All facilities that have specified quantities of chemicals designated under Title III as "extremely hazardous substances" on the premises must cooperate with state and local planning officials in preparing comprehensive emergency plans. This provision is under Sections 302 and 303 of the law.

-- Facilities that produce, use or store specified hazardous substances must report accidental releases of those substances, as well as hazardous substances identified by Superfund, above certain quantities to state and local response officials. This is Section 304.

-- All facilities that are required to prepare Material Safety Data Sheets (MSDSs) on hazardous chemicals used, processed or stored onsite in certain quantities, must submit copies of the MSDSs or a list of chemicals for which MSDSs are available, to state and local authorities. They must also report to local and state officials (including fire departments)on inventories (including locations) of chemicals on their premises for which MSDSs exist. This is Sections 311 and 312.

-- Owners and operators of certain facilities that manufacture, process, or otherwise use one of the 329 listed chemicals must report annually their releases of such chemicals to any environmental medium. This is Section 313, known as the Toxic Chemical Release Inventory, and will be the focus of my presentation today.

° Facilities handling solvents are likely to be subject to all of the reporting requirements I just discussed, 302, 304, 311 and 312. In section 313 alone, approximately one-third of the 328 listed chemicals and chemical compounds, in one sense or another, are solvents.

° Because we can offer you only a summary discussion here today of what is a very complex act, if you take nothing else away from this presentation, take the number of our toll-free information hotline -- 800-535-0202. You can get answers to your questions, either by working with our information specialists or by obtaining the fact sheets, brochures and other technical guidance materials.

Section 313 (move to slide presentation -- we suggest the listed 17 slides)

° The following slides will give you an overview of section 313.

1. Section 313 -- Toxic Chemical Release Reporting

2. What is the toxic chemical release inventory?

   -- It is the annual reporting of releases to air, water, land, and transferred to off-site facilities,

   -- by industrial facilities,

   -- and is reported to EPA and States.

3. Who must report?

   -- Owners and operators of facilities in Standard Industrial Classification Codes 20-39,

   -- that have 10 or more full-time employees,

   -- and that exceed manufacture, process or use thresholds of the 308 chemicals and 20 chemical categories that currently make up the section 313 chemical list. This list, by the way, is the combined Maryland and New Jersey toxic chemical lists. Of the 308 chemicals, 153 are listed hazardous wastes, 205 are CERCLA RQ chemicals, and 75 are water priority pollutants. A complete list of the chemicals and a copy of the reporting form and instructions was published in the February 16 Federal Register.

4. Thresholds that trigger reporting.

-- For any listed chemical, any facility that manufactured, imported, or processed more than 75,000 pounds per year in 1987 must report by July 1, 1988. That figure drops to 50,000 pounds per year in 1988, and 25,000 pounds per year in 1989 and thereafter.

-- If the facility "otherwise used" more than 10,000 pounds per year in 1987 it must also report. That figure does not change -- it remains at 10,000 pounds per year for subsequent years. Now let me tell you what we mean by some of these terms.

5. Manufacture.

-- Manufacture means to produce, prepare, import or compound one of the chemicals on the list, either directly or as a byproduct or an impurity. We'll get to de minimis in just a minute.

6. Process

-- In general, process includes making mixtures, repackaging, or using a chemical as a feedstock, raw material, or starting material for making another chemical. Processing also includes incorporating a chemical into an article.

7. Otherwise use

-- Applies to any use of a toxic chemical at a covered facility that is not covered by the terms "manufacture" or "process" and includes use of a toxic chemical contained in a mixture or trade name product. The slide gives you some examples.

8. Exemptions

-- There have been alot of questions about the "otherwise use" category, so here are some exemptions: Something that is part of the facility structure; routine janitorial and facility maintenance chemicals; personal use items; motor vehicle maintenance; and chemicals used in process water and non-contact cooling water. There is also an exemption for laboratories and for articles. Both of these are more fully defined in the final rule and information materials which you can obtain from the hotline.

9. De minimis mixture reporting

-- In determining whether the amount of a toxic chemical used at your facility exceeds the reporting threshold,

you are not required to count the amount of chemical present in a mixture if its concentration is less than 1 percent of the mixture, or its concentration is less than 0.1 percent of any mixture when the chemical is defined by OSHA as carcinogenic.

10. Trade secret provisions

-- You can claim only the chemical identity as a trade secret, and you most provide a generic name in its place. You will also have to substantiate the claim, and provide both sanitized and unsanitized versions of the form. The trade secret data will be kept separately. Beginning in 1989, section 313 will require suppliers of mixtures and trade name products to notify customers of the presence of section 313 listed chemicals in their products beyond those de minimis concentrations, and there are trade secret provisions for that as well.

Now lets look at what and how you report.

11. Reporting of releases.

-- You must report the total quantity of the chemical released during the year, including both accidental spills and routine emissions. Separate estimates must be provided for releases to air, water, and land (for example, deep well injection and permitted landfill).

-- All releases of a subject chemical must be reported, including those covered by permits. The release number reported for point air emissions, for example, could include permitted stacks, nonpermitted stacks, and an "accident" through a reactor vent.

-- You must identify off-site locations to which you shipped wastes containing the chemical and the quantities of that chemical sent to those locations, as well as the treatment or disposal methods used for wastes containing the chemical and estimates of their efficiency for each chemical.

-- You must provide the basis for your estimate, and for releases less than 1,000 pounds, you are allowed to report within ranges of 1-499 pounds and 500 to 999 pounds.

12. Reporting form.

-- The five-page reporting form has four major parts: facility identification, off-site locations, the chemical report, and supplemental information. In the interest of time, I'm going to show you the form fairly quickly.

13-17. Pages of the reporting form.

-- You can see that the form calls for facility-specific information, chemical specific information, a profile of the releases, and treatment. There is an optional section on waste minimization, and we hope you'll cooperate by filling that out as well.

° We have prepared a brochure specifically to help you with section 313 reporting, and I think a copy of that was included in your information package. A more detailed version of that brochure is at the printers now and will be available soon.

° Remember, these are annual reports, and must be submitted on or before July 1 for activities during the previous calendar year.

° In other words, the first reports are due on or before July 1, 1988 for 1987 releases and must be filed with EPA and with your state. So if you think you may be covered, it is important to begin now. The law does provide for significant penalties for firms that do not file.

° You are not required to measure or monitor releases for purposes of Section 313 reporting. The statute states "reasonable estimates" of releases. The rule requires reporting to no greater than 2 significant digits, and of course there's the range reporting for under 1,000 pounds.

° In general:

-- consider all sources of release;

-- choose the "best" approach based on the data/information you have on hand;

-- use approaches laid out in our guidance materials; and

-- document your calculations.

° To help you, we've prepared a main guidance manual that covers the basic approaches a facility can use to estimate releases: calculations based on monitoring data; mass balance; emission factors; and engineering calculations. It includes examples and references to additional data.

° We've also developed mini guidance documents that are aimed at specific industries. Of particular interest may be "Spray Application of Organic Coatings," "Application of Coatings by Roller, Knife," and "Printing." These documents show calculations specific to the type of release problems encountered in an industry using, for example, spray coatings.

° You've heard alot of detail about Section 313, but I think its important for you to know what is included, because the last part of my presentation focuses on public access to all of that information.

° EPA is required by law to make the data in the reports available to the public through a computer database "and other means." As the public becomes more aware of the toxic chemical information made available under all the provisions of the Emergency Planning and Community Right-to-Know Act, people may arrive at unfounded conclusions concerning the potential threat to the public.

° In some instances, public concern over the new reports could be entirely justified; toxic emissions into the air, water or soil could endanger the health of citizens or the welfare of the environment.

° The key word, however, is could. The simple fact that hazardous chemicals are used, stored or released in a community doesn't necessarily mean that public health and environmental quality are threatened.

° EPA management believes that EPA, along with industry, environmental groups, and state and local governments, has a responsiblity to help the public understand the significance of hazardous substances in the environment. We must do more than simply collect and verify the information and make it available, and EPA is developing a number of programs to help inform and educate community leaders, the news media and citizens about the relationship between hazardous substances in the environment and human health.

Conclusion

° Armed with the information required by the Emergency Planning and Community Right-to-Know Law, including the emergency preparedness plans required by sections 302/303, and bolstered by a better public understanding of the significance of hazardous chemicals in the environment, America's communities should be better prepared than they have ever been in the past to make informed, reasoned risk management decisions that will best reflect the needs and values of their citizens.

EMERGENCY PLANNING AND COMMUNITY RIGHT-TO-KNOW ACT (TITLE III OF SARA)

- **Four Major Sections:**
  - §301–303 Emergency Planning
  - §304 Emergency Notification
  - §311–312 Community Right-to-Know Reporting Requirements
  - §313 Toxic Chemical Release Inventory

TOXIC RELEASE INVENTORY

SECTION 313 OF THE
EMERGENCY PLANNING AND
COMMUNITY RIGHT TO KNOW ACT

2

WHAT IS THE TOXIC CHEMICAL RELEASE INVENTORY?

- **Annual reporting of releases to:**
  - Air
  - Water
  - Land
  - Off–site
- **By industrial facilities**
- **Report to EPA and States**

WHO MUST REPORT?

- **Owners and operators of covered facilities**
- **Covered facility:**
  - In SIC Codes 20–39
  - 10 or more full–time employees
  - Exceeds manufacture/process or use thresholds

"IN SIC CODE 20–39"

- **Facility vs. establishment**
- **Multi–establishment facilities covered if:**
  - All are 20–39
  - 20–39 establishments greater than 50 percent
  - One 20–39 establishment greater than any other

OPTIONAL ESTABLISHMENT REPORTING

- All establishments count toward thresholds, <u>but</u>
- Establishments may report separately <u>if</u>
- Total facility releases are accounted for
- No reporting of chemical not at the establishment

"FULL TIME EMPLOYEE"

- Full time equivalent (2,000 hours)
- 20,000 hours or more per calendar year
- For multi–establishment facilities – total of all

REPORTING THRESHOLDS

For any listed chemical:

- **The facility manufactured, imported, or processed more than:**
  - 75,000 lbs/yr in 1987
  - 50,000 lbs/yr in 1988
  - 25,000 lbs/yr in 1989 and thereafter
- **The facility otherwise used more than:**
  - 10,000 lbs/yr in 1987 and thereafter

MANUFACTURE

- **Produce**
- **Import**
- **Manufacture coincidentally:**
  - As a byproduct
  - As an impurity (subject to de minimis thresholds)

PROCESS

- **Processing is an incorporative activity**
  - Converting chemical
  - Change form or physical state
  - Blending or mixing
  - Inclusion in an article
  - Repackaging

OTHERWISE USE

- **Activities that support, promote, or contribute to the facility's activities**
- **Chemical does not become part of product:**
  - Catalysts/solvents/reaction terminators
  - Lubricants/refrigerants
  - Cleaners/degreasers/fuels

TOXIC CHEMICALS COVERED

- **Combined Maryland and New Jersey toxic chemical lists**
- **309 chemicals:**
  - 153 are listed hazardous wastes
  - 205 are CERCLA RQ chemicals
  - 75 are water priority pollutants
- **20 chemical categories**
- **Additions and deletions resulting from petition process**

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EXEMPTIONS

- Part of facility structure
- Routine janitorial and facility maintenance
- Personal use items
- Motor vehicle maintenance
- Process water and non–contact cooling water

LABORATORY EXEMPTION

- **Manufacture, process or use of a listed chemical in a laboratory under supervision of technical personnel**
- **Exceptions:**
  - Pilot plant operations
  - Specialty chemical production

ARTICLE EXEMPTION

- Article is defined in the rule
- Processing or use of an article is exempt from threshold and release calculations unless releases of a toxic chemical occur.

MIXTURES & TRADE NAME PRODUCTS

- **For 87–88**
- **Must factor in if:**
  - Know 313 chemical
  - Know composition
- **"Know" = labeling, MSDS, other supplier disclosure, own analysis**
- **For 89 and beyond:**
  - Supplier notification should increase knowledge
  - Mixture component reporting more likely

DE MINIMIS MIXTURE REPORTING

- Applies to respondent facilities and suppliers
- Concentration thresholds of 1 percent (.1 percent if an OSHA carcinogen)

SUPPLIER NOTIFICATION REQUIREMENT

- **Covers all suppliers of listed chemicals in mixtures and trade name products**
- **Suppliers must notify users of these products that may be subject to Section 313 reporting requirements (not consumer products)**
- **Suppliers of these products required to notify users**
  - Identity of 313 chemical(s)
  - Percent composition (de minimis applies)

SUPPLIER NOTIFICATION (Continued)

- **Requirements**
- **If MSDS required for product, attach to or include on MSDS or:**
  - Notify by other means
  - Phased–in for 1989 reports

REPORTING FORM

- **Four parts:**
  - Facility identification
  - Off–site locations
  - Chemical report
  - Supplemental information

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Form Approved OMB No.: 2070-0093
Approval Expires: 01/91

(Important: Type or print; read instructions before completing form.)

U.S. Environmental Protection Agency

EPA

TOXIC CHEMICAL RELEASE INVENTORY REPORTING FORM

EPA FORM **R**

Section 313, Title III of The Superfund Amendments and Reauthorization Act of 1986

PART I. FACILITY IDENTIFICATION INFORMATION

(This space for EPA use only.)

1.	1.1 Does this report contain trade secret information? ☐ Yes (Answer 1.2) ☐ No (Do not answer 1.2)	1.2 Is this a sanitized copy? ☐ Yes ☐ No	1.3 Reporting Year

2. CERTIFICATION (Read and sign after completing all sections.)

I hereby certify that I have reviewed the attached documents and that, to the best of my knowledge and belief, the submitted information is true and complete and that the amounts and values in this report are accurate based on reasonable estimates using data available to the preparers of this report.

Name and official title of owner/operator or senior management official

Signature	Date signed

3. FACILITY IDENTIFICATION

3.1	Facility or Establishment Name		
	Street Address		
	City	County	
	State	Zip Code	
3.2	This report contains information for: (check one) a. ☐ An entire covered facility. b. ☐ Part of a covered facility.		
3.3	Technical Contact	Telephone Number (include area code) ( ) -	
3.4	Public Contact	Telephone Number (include area code) ( ) -	
3.5	a. SIC Code	b.	c.
3.6	Latitude Deg. Min. Sec.	Longitude Deg. Min. Sec.	
3.7	Dun & Bradstreet Number(s) a. - -	b. - -	
3.8	EPA Identification Number (RCRA I.D. No.) a.	b.	
3.9	NPDES Permit Number(s) a.	b.	
3.10	Name of Receiving Stream(s) or Water Body(s) a.		
	b.		
	c.		
3.11	Underground Injection Well Code (UIC) Identification No.		

Where to send completed forms:

U.S. Environmental Protection Agency
P.O. Box 70266
Washington, DC 20024-0266
Attn: Toxic Chemical Release Inventory

PARENT COMPANY INFORMATION

4.1	Name of Parent Company
4.2	Parent Company's Dun & Bradstreet No. - -

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(Important: Type or print; read instructions before completing form.)

(This space for EPA use only.)

EPA FORM R
PART II. OFF-SITE LOCATIONS TO WHICH TOXIC CHEMICALS ARE TRANSFERRED IN WASTES

1. PUBLICLY OWNED TREATMENT WORKS (POTW)

Facility Name	
Street Address	
City	County
State	Zip

2. OTHER OFF-SITE LOCATIONS - Number these locations sequentially on this and any additional page of this form you use.

☐ **Other off-site location**

EPA Identification Number (RCRA ID. No.)

Facility Name	
Street Address	
City	County
State	Zip

Is location under control of reporting facility or parent company? ☐ Yes ☐ No

☐ **Other off-site location**

EPA Identification Number (RCRA ID. No.)

Facility Name	
Street Address	
City	County
State	Zip

Is location under control of reporting facility or parent company? ☐ Yes ☐ No

☐ **Other off-site location**

EPA Identification Number (RCRA ID. No.)

Facility Name	
Street Address	
City	County
State	Zip

Is location under control of reporting facility or parent company? ☐ Yes ☐ No

☐ *Check if additional pages of Part II are attached.*

(This space for EPA use only.)

EPA FORM R

PART III. CHEMICAL SPECIFIC INFORMATION

1. CHEMICAL IDENTITY

1.1	☐ Trade Secret (Provide a generic name in 1.4 below. Attach substantiation form to this submission.)
1.2	CAS # ☐☐☐☐☐☐-☐☐-☐ (Use leading zeros if CAS number does not fill space provided.)
1.3	Chemical or Chemical Category Name
1.4	Generic Chemical Name (Complete only if 1.1 is checked.)

2. MIXTURE COMPONENT IDENTITY (Do not complete this section if you have completed Section 1.)

Generic Chemical Name Provided by Supplier (Limit the name to a maximum of 70 characters (e.g., numbers, letters, spaces, punctuation)).

3. ACTIVITIES AND USES OF THE CHEMICAL AT THE FACILITY (Check all that apply.)

3.1	Manufacture:	a. ☐ Produce	b. ☐ Import	c. ☐ For on-site use/processing
		d. ☐ For sale/distribution	e. ☐ As a byproduct	f. ☐ As an impurity
3.2	Process:	a. ☐ As a reactant	b. ☐ As a formulation component	c. ☐ As an article component
		d. ☐ Repackaging only		
3.3	Otherwise Used:	a. ☐ As a chemical processing aid	b. ☐ As a manufacturing aid	c. ☐ Ancillary or other use

4. MAXIMUM AMOUNT OF THE CHEMICAL ON SITE AT ANY TIME DURING THE CALENDAR YEAR

☐☐ (enter code)

5. RELEASES OF THE CHEMICAL TO THE ENVIRONMENT

You may report releases of less than 1,000 lbs. by checking ranges under A.1.		A. Total Release (lbs/yr) A.1 Reporting Ranges 0	1–499	500–999	A.2 Enter Estimate	B. Basis of Estimate (enter code)	C. % From Stormwater
5.1 Fugitive or non-point air emissions	5.1a					5.1b ☐	
5.2 Stack or point air emissions	5.2a					5.2b ☐	
5.3 Discharges to water (Enter letter code from Part I Section 3.10 for streams(s).) 5.3.1 ☐	5.3.1a					5.3.1b ☐	5.3.1c
5.3.2 ☐	5.3.2a					5.3.2b ☐	5.3.2c
5.3.3 ☐	5.3.3a					5.3.3b ☐	5.3.3c
5.4 Underground injection	5.4a					5.4b ☐	
5.5 Releases to land 5.5.1 ☐☐☐ (enter code)	5.5.1a					5.5.1b ☐	
5.5.2 ☐☐☐ (enter code)	5.5.2a					5.5.2b ☐	
5.5.3 ☐☐☐ (enter code)	5.5.3a					5.5.3b ☐	

☐ (Check if additional information is provided on Part IV–Supplemental Information.)

6. TRANSFERS OF THE CHEMICAL IN WASTE TO OFF-SITE LOCATIONS

You may report transfers of less than 1,000 lbs. by checking ranges under A.1.	A. Total Transfers (lbs/yr) A.1 Reporting Ranges 0	1-499	500-999	A.2 Enter Estimate	B. Basis of Estimate (enter code)	C. Type of Treatment/ Disposal (enter code)
6.1 Discharge to POTW					6.1b ☐	
6.2 Other off-site location (Enter block number from Part II, Section 2.) ☐					6.2b ☐	6.2c ☐☐☐
6.3 Other off-site location (Enter block number from Part II, Section 2.) ☐					6.3b ☐	6.3c ☐☐☐
6.4 Other off-site location (Enter block number from Part II, Section 2.) ☐					6.4b ☐	6.4c ☐☐☐

☐ (Check if additional information is provided on Part IV-Supplemental Information)

7. WASTE TREATMENT METHODS AND EFFICIENCY

A. General Wastestream (enter code)	B. Treatment Method (enter code)	C. Range of Influent Concentration (enter code)	D. Sequential Treatment? (check if applicable)	E. Treatment Efficiency Estimate	F. Based on Operating Data? Yes	No
7.1a ☐	7.1b ☐☐☐	7.1c ☐	7.1d ☐	7.1e %	7.1f ☐	☐
7.2a ☐	7.2b ☐☐☐	7.2c ☐	7.2d ☐	7.2e %	7.2f ☐	☐
7.3a ☐	7.3b ☐☐☐	7.3c ☐	7.3d ☐	7.3e %	7.3f ☐	☐
7.4a ☐	7.4b ☐☐☐	7.4c ☐	7.4d ☐	7.4e %	7.4f ☐	☐
7.5a ☐	7.5b ☐☐☐	7.5c ☐	7.5d ☐	7.5e %	7.5f ☐	☐
7.6a ☐	7.6b ☐☐☐	7.6c ☐	7.6d ☐	7.6e %	7.6f ☐	☐
7.7a ☐	7.7b ☐☐☐	7.7c ☐	7.7d ☐	7.7e %	7.7f ☐	☐
7.8a ☐	7.8b ☐☐☐	7.8c ☐	7.8d ☐	7.8e %	7.8f ☐	☐
7.9a ☐	7.9b ☐☐☐	7.9c ☐	7.9d ☐	7.9e %	7.9f ☐	☐
7.10a ☐	7.10b ☐☐☐	7.10c ☐	7.10d ☐	7.10e %	7.10f ☐	☐
7.11a ☐	7.11b ☐☐☐	7.11c ☐	7.11d ☐	7.11e %	7.11f ☐	☐
7.12a ☐	7.12b ☐☐☐	7.12c ☐	7.12d ☐	7.12e %	7.12f ☐	☐
7.13a ☐	7.13b ☐☐☐	7.13c ☐	7.13d ☐	7.13e %	7.13f ☐	☐
7.14a ☐	7.14b ☐☐☐	7.14c ☐	7.14d ☐	7.14e %	7.14f ☐	☐

☐ (Check if additional information is provided on Part IV-Supplemental Information.)

8. OPTIONAL INFORMATION ON WASTE MINIMIZATION

(Indicate actions taken to reduce the amount of the chemical being released from the facility. See the instructions for coded items and an explanation of what information to include.)

A. Type of modification (enter code)	B. Quantity of the chemical in the wastestream prior to treatment/disposal: Current reporting year (lbs/yr)	Prior year (lbs/yr)	Or percent change	C. Index	D. Reason for action (enter code)
☐☐	_____	_____	_____ %	☐☐	☐☐

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(Important: Type or print; read instructions before completing form.)

(This space for EPA use only.)

EPA FORM R
PART IV. SUPPLEMENTAL INFORMATION

Use this section if you need additional space for answers to questions in Parts I and III. Number or letter this information sequentially from prior sections (e.g., D,E, F, or 5.54, 5.55).

ADDITIONAL INFORMATION ON FACILITY IDENTIFICATION (Part I - Section 3)

3.5	SIC Code		
3.7	Dun & Bradstreet Number(s)		
3.8	EPA Identification Number(s) RCRA I.D. No.)		
3.9	NPDES Permit Number(s)		
3.10	Name of Receiving Stream(s) or Water Body(s)		

ADDITIONAL INFORMATION ON RELEASES TO LAND (Part III - Section 5.5)

Releases to Land	A. Total Release (lbs/yr)	A.1 Reporting Ranges 0	1-499	500-999	A.2 Enter Estimate	B. Basis of Estimate (enter code)
5.5___ (enter code)	5.5___a					5.5___b
___ (enter code)	5.5___a					5.5___b
5.5___ (enter code)	5.5___a					5.5___b

ADDITIONAL INFORMATION ON OFF-SITE TRANSFER (Part III - Section 6)

	A. Total Transfers (lbs/yr)	A.1 Reporting Ranges 0	1-499	500-999	A.2 Enter Estimate	B. Basis of Estimate (enter code)	C. Type of Treatment/ Disposal (enter code)
6.___ Discharge to POTW	6.___a					6.___b	
6.___ Other off-site location (Enter block number from Part II, Section 2.)	6.___a					6.___b	6.___c.
6.___ Other off-site location (Enter block number from Part II, Section 2.)	6.___a					6.___b	6.___c.

ADDITIONAL INFORMATION ON WASTE TREATMENT (Part III - Section 7)

A. General Wastestream (enter code)	B. Treatment Method (enter code)	C. Range of Influent Concentration (enter code)	D. Sequential Treatment? (check if applicable)	E. Treatment Efficiency Estimate	F. Based on Operating Data? Yes	No
7.___a	7.___b	7.___c	7.___d	7.___e %	7.___f	
7.___a	7.___b	7.___c	7.___d	7.___e %	7.___f	
___a	7.___b	7.___c	7.___d	7.___e %	7.___f	
___a	7.___b	7.___c	7.___d	7.___e %	7.___f	
7.___a	7.___b	7.___c	7.___d	7.___e %	7.___f	

TECHNICAL GUIDANCE

- **General**
  - Detailed Instructions
- **Industry specific**
  - 18 different industries
- **Available by toll-free number or response card**
  - 800-535-0202
  - 202-479-2449 (Washington, D.C. and Alaska)

26

TRADE SECRET PROVISIONS

- Respondents may only claim chemical identity as trade secret, must provide generic name in its place
- Must provide substantiation up–front
- Sanitized and unsanitized versions of the form
- Trade secret data will be kept separately

TRADE SECRET CONSIDERATIONS – SUPPLIERS

- **Chemical identity may be declared trade–secret**
  - Supplier provides user with generic name
- **May claim percent composition trade secret**
- **Supplier must provide an upper bound limit**
- **Must retain records justifying trade secret claims**

RECORDKEEPING

- **Respondent must retain records for three years:**
  - Including records detailing basis of release estimates
  - Basis of notification (suppliers)

COMMUNITY RIGHT-TO-KNOW ASPECTS

- EPA is required to make the data available to the public through an on-line database
- Data also available through other means (reports, hardcopy)
- States also receive data and make it available

TAB C

United States
Environmental Protection Agency
Washington DC 20460

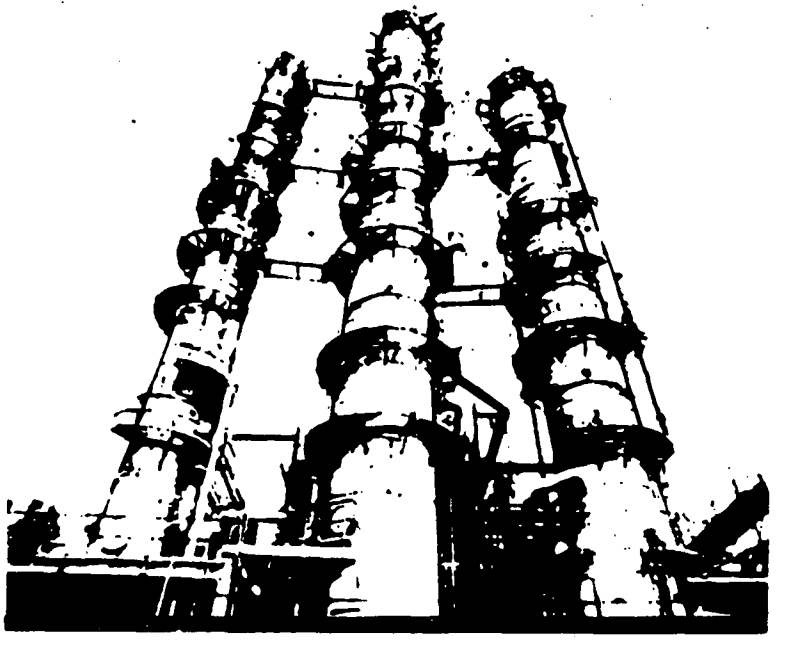
April
1988

EPA

Emergency Planning and Community Right-to-Know Law. . .

A New Videotape on Section 313

The Toxics Release Inventory:
Meeting the Challenge



Section 313 is part of Title III of the Superfund Amendments and Reauthorization Act of 1986, commonly known as SARA. Title III is a free-standing Act known as "The Emergency Planning and Community Right-to-Know Act of 1986." This Act contains four major sections to respond to the public's right-to-know about toxic releases to the environment: emergency planning, emergency notification, community right-to-know reporting requirements, and toxic chemical release reporting (section 313). Section 313 requires owners and operators of affected facilities to report to the Environmental Protection Agency (EPA) and the States, yearly, about the annual releases of toxic chemicals (from a list of over 300 chemicals and 20 chemical categories) to the air, water or land. The overall objective of this release reporting is to provide the basis and incentive to reduce and eliminate to the extent possible, the release of toxic chemicals into the environment.

Section 313 is important to those who must comply with the law and to inform the general public. This 19 minute overview videotape is designed to explain toxic release reporting to plant facility managers and others who need to know about the requirement. State governments, local Chambers of Commerce, labor organizations, public interest groups, and universities or secondary schools may also find the program useful and informative.

Copies of a brochure on section 313 accompany your copy of the tape. The brochure includes the list of chemicals subject to the law and where to obtain additional information.

How to Purchase

Write to: Color Film Corporation
Video Division
770 Connecticut Avenue
Norwalk, Connecticut 06854

Or Call: Toll Free: (800) 882-1120
Between 9:00 a.m. and
5:00 p.m. E.T.
Monday through Friday

- Orders must be prepaid.
- Prices include postage and handling.
- Include 7.5% state sales tax. (Connecticut residents and corporations only)
- 48-hour service with a certified check or money order.

Order Form

Name_____

Title_____

Organization_____

Address_____

_____

_____

Please send me____copy(s) of "The Toxics Release Inventory: Meeting the Challenge" (19 minutes)

(Place a check in the box for format and indicate number of copies)

3/4 inch	Beta I or II	VHS	
☐	☐	☐ x ____	= $ ____
$30.75	$22.95	$22.00	

Tax (Connecticut only) $

Enclosed is $ ____

Office of Pesticides
and Toxic Substances

EPA 560/4-88-001
December 1988

EPA The Emergency Planning and Community Right-to-Know Act

Section 313 Release Reporting Requirements

This brochure contains information about the Emergency Planning and Community Right-to-Know Act. This law establishes a structure at the state and local levels to assist communities in planning for chemical emergencies and requires facilities to provide information on various chemicals present in the community. The Act requires that this information be made available to the public. One of the requirements concerns the reporting of annual releases of toxic chemicals to the air, water, and land. These provisions are outlined in Section 313 which mandates annual release reporting for over 300 chemicals. Other reporting requirements are included elsewhere in the Act. This booklet deals with Section 313.

It is important that you read this information to see if you are subject to Section 313 reporting requirements. The first reports under this Section, covering the 1987 calendar year, were due by July 1, 1988. The next reports, covering the 1988 calendar year, are due July 1, 1989. EPA is responsible for administering this Section and developing a database that will make information in the reports available to the public.

The Emergency Planning and Community Right-to-Know Act is important in providing to the public information about chemicals in the community. I look forward to working with you to make its implementation a success.

Lee M. Thomas
Administrator,
Environmental Protection Agency

THE EMERGENCY PLANNING AND COMMUNITY RIGHT-TO-KNOW ACT

EPA has prepared this brochure to alert businesses to their reporting obligations under Section 313 of the Emergency Planning and Community Right- to-Know Act*, and to help you determine whether your facility is covered under the law. If you are covered, this brochure will also help you prepare to meet your reporting obligations. If you are uncertain whether you are covered, it will tell you how to get assistance.

This brochure deals with reporting requirements of only one section of the Emergency Planning and Community Right-to-Know Act: Section 313, which pertains to release reporting. Other planning and reporting requirements may also affect your business. The nearest EPA regional office can provide complete details, but the other basic requirements of the Act are as follows:

Facilities that have on their premises chemicals designated under the Act as "extremely hazardous substances" must cooperate with state and local planning officials in preparing comprehensive emergency plans (Sections 302 and 303);

■

Facilities must report accidental releases of "extremely hazardous substances" and CERCLA "hazardous substances" to state and local response officials (Section 304); and

■

* The Act is also known as Title III of SARA (the Superfund Amendments and Reauthorization Act of 1986).

Facilities must make Material Safety Data Sheets (MSDSs) available to local and state officials and must also report, to local and state officials, inventories (including locations) of chemicals on their premises for which MSDSs exist (Sections 311 and 312).

■

For more information on the Emergency Planning and Community Right-to Know Act, ask your regional EPA office for the Title III Fact Sheet; or call the Emergency Planning and Community Right-to-Know Information Hotline, (800) 535-0202 or (202) 479-2449 (in Washington, D.C. and Alaska).

REPORT TOXIC CHEMICAL RELEASES

Under Section 313 of the Emergency Planning and Community Right-to-Know Act, certain businesses are required to submit reports each year on the amounts of chemicals their facilities release into the environment, either routinely or as a result of accidents. The purpose of this reporting requirement is to inform government officials and the public about releases of toxic chemicals into the environment. Section 313 requires facilities to report releases to air, water, and land. The reports must be sent to the United States Environmental Protection Agency (EPA) and to designated state agencies. Reports are due by July 1 each year. Those who fail to report as required are subject to civil penalties of up to $25,000 a day.

The final Toxic Chemical Release Inventory rule under Section 313 was published in the *Federal Register* on February 16, 1988.

WHO MUST REPORT

A plant, factory, or other facility comes under the provisions of Section 313 if it meets all three of the following criteria:

If it conducts manufacturing operations (that is, if it is included in Standard Industrial Classification (SIC) codes 20 through 39, listed on page 9);

■

If, in addition, it has 10 or more full-time employees; and

■

If, in addition to the above, it manufactures, imports, processes, or in any other way uses any of the toxic chemicals listed on pages 15-22 in amounts greater than the "threshold" quantities specified below. At present, 307 individual chemicals and 20 categories of chemicals are covered. The list may be changed in future years.

■

THRESHOLDS

Thresholds are amounts of chemicals used during the calendar year that trigger reporting requirements.

If you *manufacture* or *process* any of the listed toxic chemicals, the threshold quantity will be:

- **75,000 pounds in 1987;**
- **50,000 pounds in 1988; and**
- **25,000 pounds in 1989 and subsequent years.**

If you *use* any listed chemical *in any other way* (without incorporating it into any product or producing it at the facility), the threshold quantity is:

- **10,000 pounds in 1987 and subsequent years.**

What is meant by the terms "***manufacture***," "***process***," or "***otherwise use***"?

- ***Manufacture*** - means to produce, prepare, import or compound one of the chemicals on the list. For example, if you make a dye for clothing by taking raw materials and reacting them, you are manufacturing the dye. You would also be covered if you were a textile manufacturer who imported a dye on the list for purposes of applying it to fabric produced at your plant.
- ***Process*** - in general, includes making mixtures, repackaging, or using a chemical as a feed- stock, raw material, or starting material for making another chemical. Processing also includes incorporating a chemical into an article (e.g., using dyes to color fabric [the fabric is the article that the dye is being incorporated into]).

Examples of processing include:

- Adding a solvent as a diluent when making a paint, coating, or other mixture;
- Using a chemical as an intermediate in the manufacture of a pesticide (e.g., using chemical A to make chemical B).

- ***Otherwise Use*** - applies to any use of a toxic chemical at a covered facility that is not covered by the terms "manufacture" or "process" and includes use of a toxic chemical contained in a mixture or trade name product. A chemical that is *used* by a facility is not intentionally incorporated into a product distributed in commerce.

Examples include:

- Using a metal cutting fluid that contains diethanolamine;
- Using a heat transfer fluid containing biphenyl;
- Using trichloroethylene to degrease tools;
- Using chlorine in waste water treatment;
- Using Freon 113 as a refrigerant to cool process streams.

Section 313 defines a "facility" as all buildings, equipment, structures, and other stationary items which are located on a single site or on contiguous or adjacent sites and which are owned or operated by the same person. Warehouses on the same site as covered facilities are covered at the threshold levels given above. Stand-alone warehouses that do not support a manufacturing operation are not currently covered.

The reporting thresholds apply to toxic chemicals known by the owner or operator to be used in amounts above the thresholds. Beginning in 1989, Section 313 will require suppliers of mixtures and trade name products to notify customers of the presence of Section 313 listed chemicals in their products beyond certain *de minimis* concentrations (these cutoffs are discussed under "Exemptions").

EXEMPTIONS

Under certain circumstances, some or all of the reporting requirements under Section 313 may not apply to a facility. The following are the major exemptions:

De minimis concentrations of a toxic chemical in certain mixtures. In determining whether the amount of a toxic chemical used at your facility exceeds the reporting threshold listed on page 3, you are not required to count the amount of chemical present in a mixture ***if***

its concentration is less than 1 percent of the mixture, or

■

its concentration is less than 0.1 percent of the mixture when the chemical is defined by the Occupational Safety and Health Administration (OSHA) as carcinogenic; the chemical list beginning on page 15 identifies these chemicals.

■

▶ **Articles.** In considering whether a reporting threshold has been exceeded, you are not required to count toxic chemicals present in articles processed or used at your facility. "Article" means a manufactured item: (1) which is formed to a specific shape or design during manufacture; (2) which has end use functions dependent in whole or in part upon its shape or design during end use; and (3) which does not release a toxic chemical under normal conditions of processing or use of that item at the facility or establishments.

▶ **Specified Uses.** In considering whether a reporting threshold has been exceeded, you are not required to count toxic chemicals that are used at your facility for any of the following purposes:

As a structural component of the facility;

■

In routine janitorial or facility grounds maintenance;

■

In foods, drugs, cosmetics, or other items for personal use, including supplies of such items (for example, in a facility-operated cafeteria);

■

In motor vehicle maintenance (including motor fuel); or

■

In process water and non-contact cooling water as drawn from the environment or from municipal sources, or in air used either as compressed air or as part of combustion.

■

Laboratories. In considering whether a reporting threshold has been exceeded, you are not required to count toxic chemicals that are manufactured, processed, or used for research or quality control in a laboratory at a covered facility under the supervision of a technically qualified individual. This exemption does not apply to production, processing, or the use of toxic chemicals in pilot plant scale operations and laboratories for distribution in commerce.

▶ **Owners of Leased Property.** The owner of a covered facility is not subject to reporting under Section 313 if the owner's only interest in the facility is ownership of the real estate upon which the facility is operated. However, the operator of the facility must report if the criteria are met.

HOW TO REPORT

The owner or operator of a covered facility must report annually. Each report must be submitted on or before July 1 for activities during the previous calendar year.

EPA will provide a reporting form (EPA Form R) with instructions and technical guidance on how to calculate chemical releases or emissions from your facility. To obtain the reporting form, instructions, and technical guidance, write a letter or check the boxes for those publications on the back cover, detach the cover, and mail it to: Emergency Planning and Community Right-to-Know Document Distribution Center, P.O. Box 12505, Cincinnati, OH 45212, or any of the EPA regional offices listed on pages 13-14.

You are not required to measure or monitor releases for purposes of Section 313 reporting. You may use readily available data to report the quantities of chemicals that you use and the amounts released into the environment. If you have no data available, the law permits you to report reasonable estimates. EPA's technical guidance on calculating releases can help you in making estimates.

STANDARD INDUSTRIAL CLASSIFICATION (SIC) GROUPS SUBJECT TO SECTION 313

SIC	INDUSTRY GROUP
20	Food
21	Tobacco
22	Textiles
23	Apparel
24	Lumber and Wood
25	Furniture
26	Paper
27	Printing and Publishing
28	Chemicals
29	Petroleum and Coal
30	Rubber and Plastics
31	Leather
32	Stone, Clay, and Glass
33	Primary Metals
34	Fabricated Metals
35	Machinery (excluding electrical)
36	Electrical and Electronic Equipment
37	Transportation Equipment
38	Instruments
39	Miscellaneous Manufacturing

If you do not know your SIC code, check with your financial office or contact your local Chamber of Commerce or State Department of Labor.

For more information on SIC codes, please consult "Standard Industrial Classification Manual 1987," available from:

National Technical Information Service
5285 Port Royal Road
Springfield, VA 22161
Phone: (703) 487-4650
Document Number: PB 87-100012
$30.00

WHAT YOU MUST REPORT

You must report on EPA Form R the following information **for each listed chemical** manufactured, imported, processed, or used at your facility in yearly amounts which exceed the threshold:

- **The name and location of your facility;**
- **The identity of the listed toxic chemical (unless you claim its identity to be a trade secret):**
- **Whether you manufacture, import, or process the chemical, or use it in any other way;**
- **The maximum quantity of the chemical on-site at any time during the year;**
- **The total quantity of the chemical released during the year, including both accidental spills and routine emissions - separate estimates must be provided for releases to air, water, and land (e.g., deep well injection, permitted landfill);**
- **Off-site locations to which you shipped wastes containing the chemical and the quantities of that chemical sent to those locations, and**
- **Treatment or disposal methods used for wastes containing the chemical and estimates of their efficiency for each chemical (efficiency of treatment methods used on-site).**

For purposes of Section 313, **a release is defined** as any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment (including the abandonment or discarding of barrels, containers, and other closed receptacles) of any "toxic chemical" (i.e., any of the chemicals on pages 15-22).

PUBLIC ACCESS TO REPORTS

The law requires facilities covered by Section 313 to send toxic chemical release reports both to EPA and to the state in which the facility is located. At EPA, the Office of Toxic Substances will be responsible for receiving and processing the data. The agency designated to receive reports in your state is listed in the instructions for Form R.

EPA is required by law to make the data in the reports available to the public through a computer database. (You can claim the chemical identity to be a trade secret, but you must justify the claim to EPA. The final Trade Secret rule was published in the *Federal Register* on July 29, 1988.) The database is intended to help answer citizens' questions about chemical releases in their community. The users of the data are also likely to include researchers from government or universities conducting environmental analyses. EPA expects to use the data in a variety of ways, including targeting problem pollution areas and as a screening tool for developing standards and regulations.

WHAT YOU CAN DO NOW

You can begin planning now to make compliance with Section 313 as easy and inexpensive as possible. The steps are as follows:

1. If you have 10 or more full-time employees (that is, if the total annual hours worked by all employees is at least 20,000 hours), check the SIC code list on page 9 to determine whether your facility is covered.

2. Check the list of toxic chemicals covered by Section 313 (pages 15–22) to see if any are manufactured, imported, processed, or in any other way used by your facility. For reporting year 1988 you must report based on data available to you. For reporting year 1989 and subsequent years, your chemical supplier is required to inform you if any of the Section 313 chemicals is contained in mixtures sold to you.
3. Determine whether you handle any chemical on the list in an amount greater than the thresholds on page 3.
4. If you meet the criteria, request copies of the reporting form, instructions, and any of the appropriate guidance documents listed at the back of this brochure.
5. Begin to develop the appropriate information to report your releases.
6. Maintain a recordkeeping system that will help you estimate releases for future years.

You should designate someone at your facility to be responsible for reporting under Section 313. That person should obtain reporting forms and instructions and should be aware of the reporting deadline: July 1 of each year.

The reporting forms and instructions can be obtained by mailing in the order form on the inside back cover or by calling one of the EPA regional offices listed on pages 13–14.

SECTION 313
EPA REGIONAL
CONTACTS

Region 1
Pesticides & Toxics Branch
USEPA Region 1 (APT2311)
JFK Federal Building
Boston, MA 02203
(617) 565-3273
Connecticut, Massachusetts, Maine, New Hampshire, Rhode Island, Vermont

Region 2
Pesticides & Toxics Branch
USEPA Region 2 (MS240)
Woodbridge Avenue, Building 209
Edison, NJ 08837
(201) 906-6890
New Jersey, New York, Puerto Rico, Virgin Islands

Region 3
Toxics & Pesticides Branch
USEPA Region 3 (3HW42)
841 Chestnut Street
Philadelphia, PA 19107
(215) 597-1260
Delaware, Maryland, Pennsylvania, Virginia, West Virginia, District of Columbia

Region 4
Pesticides & Toxics Substances Branch
USEPA Region 4
345 Courtland Street
Atlanta, GA 30365
(404) 347-5053
Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee

Region 5
Pesticides & Toxic Substances Branch
USEPA Region 5 (5SPT-7)
230 South Dearborn Street
Chicago, IL 60604
(312) 353-5867
Illinios, Indiana, Michigan, Minnesota, Ohio, Wisconsin

SECTION 313 EPA REGIONAL CONTACTS

Region 6
Pesticides & Toxic Substances Branch
USEPA Region 6 (6TPT)
1445 Ross Avenue
Dallas, TX 75202-2733
(214) 655-7244
Arkansas, Louisiana, New Mexico, Oklahoma, Texas

Region 7
Office of Congressional and Intergovernmental Liaison
USEPA Region 7 (CIGL)
726 Minnesota Avenue
Kansas City, KS 66101
(913) 236-2806
Iowa, Kansas, Missouri, Nebraska

Region 8
Toxic Substances Branch
USEPA Region 8 (8AT-TS)
999 18th Street
Denver, CO 80202-2405
(303) 293-1730
Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming

Region 9
Pesticides & Toxics Branch
USEPA Region 9 (T-5-3)
215 Fremont Street
San Francisco, CA 94105
(415) 974-7054
Arizona, California, Hawaii, Nevada, American Samoa, Guam, Commonwealth of the Northern Mariana Islands

Region 10
Pesticides & Toxic Substances Branch
USEPA Region 10 (AT083)
1200 Sixth Avenue
Seattle, WA 98101
(206) 442-1091
Alaska, Idaho, Oregon, Washington

ALPHABETICAL LIST OF SECTION 313 CHEMICALS

CAS Number	Chemical Name	De Minimis Concentration (percent)
75-07-0	Acetaldehyde	0.1
60-35-5	Acetamide	0.1
67-64-1	Acetone	1.0
75-05-8	Acetonitrile	1.0
53-96-3	2-Acetylaminofluorene	0.1
107-02-8	Acrolein	1.0
79-06-1	Acrylamide	0.1
79-10-7	Acrylic acid	1.0
107-13-1	Acrylonitrile	0.1
309-00-2	Aldrin [1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a-hexahydro-(1.alpha.,4.alpha.,4a.beta., 5.alpha.,8.alpha.,8a.beta.)-]	1.0
107-05-1	Allyl chloride	1.0
7429-90-5	Aluminum (fume or dust)	1.0
1344-28-1	Aluminum oxide	1.0
117-79-3	2-Aminoanthraquinone	0.1
60-09-3	4-Aminoazobenzene	0.1
92-67-1	4-Aminobiphenyl	0.1
82-28-0	1-Amino-2-methylanthraquinone	0.1
7664-41-7	Ammonia	1.0
6484-52-2	Ammonium nitrate (solution)	1.0
7783-20-2	Ammonium sulfate (solution)	1.0
62-53-3	Aniline	1.0
90-04-0	o-Anisidine	0.1
104-94-9	p-Anisidine	1.0
134-29-2	o-Anisidine hydrochloride	0.1
120-12-7	Anthracene	1.0
7440-36-0	Antimony	1.0
7440-38-2	Arsenic	0.1
1332-21-4	Asbestos (friable)	0.1
7440-39-3	Barium	1.0
98-87-3	Benzal chloride	1.0
55-21-0	Benzamide	1.0
71-43-2	Benzene	0.1
92-87-5	Benzidine	0.1
98-07-7	Benzoic trichloride (Benzotrichloride)	0.1
98-88-4	Benzoyl chloride	1.0
94-36-0	Benzoyl peroxide	1.0
100-44-7	Benzyl chloride	1.0
7440-41-7	Beryllium	0.1

CAS Number	Chemical Name	De Minimis Concentration (perce
92-52-4	Biphenyl	1.0
111-44-4	Bis(2-chloroethyl) ether	1.0
542-88-1	Bis(chloromethyl) ether	0.1
108-60-1	Bis(2-chloro-1-methylethyl) ether	1.0
103-23-1	Bis(2-ethylhexyl) adipate	0.1
75-25-2	Bromoform (Tribromomethane)	1.0
74-83-9	Bromomethane (Methyl bromide)	1.0
106-99-0	1,3-Butadiene	0.1
141-32-2	Butyl acrylate	1.0
71-36-3	n-Butyl alcohol	1.0
78-92-2	sec-Butyl alcohol	1.0
75-65-0	tert-Butyl alcohol	1.0
85-68-7	Butyl benzyl phthalate	1.0
106-88-7	1,2-Butylene oxide	1.0
123-72-8	Butyraldehyde	1.0
4680-78-8	C.I. Acid Green 3	1.0
569-64-2	C.I. Basic Green 4	1.0
989-38-8	C.I. Basic Red 1	0.1
1937-37-7	C.I. Direct Black 38	0.1
2602-46-2	C.I. Direct Blue 6	0.1
16071-86-6	C.I. Direct Brown 95	0.1
2832-40-8	C.I. Disperse Yellow 3	1.0
3761-53-3	C.I. Food Red 5	0.1
81-88-9	C.I. Food Red 15	0.1
3118-97-6	C.I. Solvent Orange 7	1.0
97-56-3	C.I. Solvent Yellow 3	0.1
842-07-9	C.I. Solvent Yellow 14	0.1
492-80-8	C.I. Solvent Yellow 34 (Auramine)	[illegible]
128-66-5	C.I. Vat Yellow 4	[illegible]
7440-43-9	Cadmium	0.1
156-62-7	Calcium cyanamide	1.0
133-06-2	Captan [1H-Isoindole-1,3(2H)-dione, 3a,4,7,7a-tetrahydro-2-[(trichloromethyl)thio]-]	1.0
63-25-2	Carbaryl [1-Naphthalenol, methylcarbamate]	1.0
75-15-0	Carbon disulfide	1.0
56-23-5	Carbon tetrachloride	0.1
463-58-1	Carbonyl sulfide	1.0
120-80-9	Catechol	1.0
133-90-4	Chloramben [Benzoic acid, 3-amino-2,5-dichloro-]	1.0
57-74-9	Chlordane [4,7-Methanoindan, 1,2,4,5,6,7,8,8- octachloro-2,3,3a,4,7,7a-hexahydro-]	1.0

CAS Number	Chemical Name	De Minimis Concentration (percent)
7782-50-5	Chlorine	1.0
10049-04-4	Chlorine dioxide	1.0
79-11-8	Chloroacetic acid	1.0
532-27-4	2-Chloroacetophenone	1.0
108-90-7	Chlorobenzene	1.0
510-15-6	Chlorobenzilate [Benzeneacetic acid, 4-chloro-.alpha.-(4- chlorophenyl)-.alpha. -hydroxy -, ethyl ester]	1.0
75-00-3	Chloroethane (Ethyl chloride)	1.0
67-66-3	Chloroform	0.1
74-87-3	Chloromethane (Methyl chloride)	1.0
107-30-2	Chloromethyl methyl ether	0.1
126-99-8	Chloroprene	1.0
1897-45-6	Chlorothalonil [1,3- Benzenedicarbonitrile, 2,4,5,6-tetrachloro-]	1.0
7440-47-3	Chromium	0.1
7440-48-4	Cobalt	1.0
7440-50-8	Copper	1.0
120-71-8	p-Cresidine	0.1
1319-77-3	Cresol (mixed isomers)	1.0
108-39-4	m-Cresol	1.0
95-48-7	o-Cresol	1.0
106-44-5	p-Cresol	1.0
98-82-8	Cumene	1.0
80-15-9	Cumene hydroperoxide	1.0
135-20-6	Cupferron [Benzeneamine, N-hydroxy-N-nitroso, ammonium salt]	0.1
110-82-7	Cyclohexane	1.0
94-75-7	2,4-D [Acetic acid, (2,4-dichloro-phenoxy)-]	1.0
1163-19-5	Decabromodiphenyl oxide	1.0
2303-16-4	Diallate [Carbamothioic acid,bis (1-methylethyl)-, S-(2,3-dichloro-2-propenyl) ester]	1.0
615-05-4	2,4-Diaminoanisole	0.1
39156-41-7	2,4-Diaminoanisole sulfate	0.1
101-80-4	4,4'-Diaminodiphenyl ether	0.1
25376-45-8	Diaminotoluene (mixed isomers)	0.1
95-80-7	2,4-Diaminotoluene	0.1
334-88-3	Diazomethane	1.0
132-64-9	Dibenzofuran	1.0
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	0.1
106-93-4	1,2-Dibromoethane (Ethylene dibromide)	0.1

CAS Number	Chemical Name	De Minimis Concentration (percent)
84-74-2	Dibutyl phthalate	1.0
25321-22-6	Dichlorobenzene (mixed isomers)	0.1
95-50-1	1,2-Dichlorobenzene	1.0
541-73-1	1,3-Dichlorobenzene	1.0
106-46-7	1,4-Dichlorobenzene	0.1
91-94-1	3,3'-Dichlorobenzidine	0.1
75-27-4	Dichlorobromomethane	1.0
107-06-2	1,2-Dichloroethane (Ethylene dichloride)	0.1
540-59-0	1,2-Dichloroethylene	1.0
75-09-2	Dichloromethane (Methylene chloride)	0.1
120-83-2	2,4-Dichlorophenol	1.0
78-87-5	1,2-Dichloropropane	1.0
542-75-6	1,3-Dichloropropylene	0.1
62-73-7	Dichlorvos [Phosphoric acid, 2 dichloroethenyl dimethyl ester]	1.0
115-32-2	Dicofol [Benzenemethanol, 4-chloro- .alpha.- 4-chlorophenyl)- .alpha.- (trichloromethyl)-]	1.0
1464-53-5	Diepoxybutane	0.1
111-42-2	Diethanolamine	1.0
117-81-7	Di-(2-ethylhexyl) phthalate (DEHP)	0.1
84-66-2	Diethyl phthalate	1.0
64-67-5	Diethyl sulfate	0.1
119-90-4	3,3'-Dimethoxybenzidine	0.1
60-11-7	4-Dimethylaminoazobenzene	0.1
119-93-7	3,3'-Dimethylbenzidine (o-Tolidine)	0.1
79-44-7	Dimethylcarbamyl chloride	0.1
57-14-7	1,1-Dimethyl hydrazine	[illegible]
105-67-9	2,4-Dimethylphenol	[illegible]
131-11-3	Dimethyl phthalate	1.0
77-78-1	Dimethyl sulfate	0.1
534-52-1	4,6-Dinitro-o-cresol	1.0
51-28-5	2,4-Dinitrophenol	1.0
121-14-2	2,4-Dinitrotoluene	1.0
606-20-2	2,6-Dinitrotoluene	1.0
117-84-0	n-Dioctyl phthalate	1.0
123-91-1	1,4-Dioxane	0.1
122-66-7	1,2-Diphenylhydrazine (Hydrazobenzene)	0.1
106-89-8	Epichlorohydrin	0.1
110-80-5	2-Ethoxyethanol	1.0
140-88-5	Ethyl acrylate	0.1
100-41-4	Ethylbenzene	1.0
541-41-3	Ethyl chloroformate	1.0

CAS Number	Chemical Name	De Minimis Concentration (percent)
74-85-1	Ethylene	1.0
107-21-1	Ethylene glycol	1.0
151-56-4	Ethyleneimine (Aziridine)	0.1
75-21-8	Ethylene oxide	0.1
96-45-7	Ethylene thiourea	0.1
2164-17-2	Fluometuron [Urea, N,N-dimethyl-N'-[3-(trifluoromethyl)phenyl]-]	1.0
50-00-0	Formaldehyde	0.1
76-13-1	Freon 113 [Ethane, 1,1,2-trichloro-1,2,2-trifluoro-]	1.0
76-44-8	Heptachlor [1,4,5,6,7,8,8-Heptachloro-3a,4,7,7a-tetrahydro-4,7-methano-1H-indene]	1.0
118-74-1	Hexachlorobenzene	0.1
87-68-3	Hexachloro-1,3-butadiene	1.0
77-47-4	Hexachlorocyclopentadiene	1.0
67-72-1	Hexachloroethane	1.0
1335-87-1	Hexachloronaphthalene	1.0
680-31-9	Hexamethylphosphoramide	0.1
302-01-2	Hydrazine	0.1
10034-93-2	Hydrazine sulfate	0.1
7647-01-0	Hydrochloric acid	1.0
74-90-8	Hydrogen cyanide	1.0
7664-39-3	Hydrogen fluoride	1.0
123-31-9	Hydroquinone	1.0
78-84-2	Isobutyraldehyde	1.0
67-63-0	Isopropyl alcohol **(manufacturing-strong acid process, no supplier notification)**	0.1
80-05-7	4,4'-Isopropylidenediphenol	1.0
7439-92-1	Lead	0.1
58-89-9	Lindane [Cyclohexane, 1,2,3,4,5,6-hexachloro-,(1.alpha.,2.alpha.,3.beta.,4.alpha.,5.alpha.,6.beta.)-]	0.1
108-31-6	Maleic anhydride	1.0
12427-38-2	Maneb [Carbamodithioic acid, 1,2-ethanediylbis-, manganese complex]	1.0
7439-96-5	Manganese	1.0
108-78-1	Melamine	1.0
7439-97-6	Mercury	1.0
67-56-1	Methanol	1.0
72-43-5	Methoxychlor [Benzene, 1,1'-(2,2,2-trichloroethylidene)bis [4-methoxy-]	1.0
109-86-4	2-Methoxyethanol	1.0
96-33-3	Methyl acrylate	1.0

CAS Number	Chemical Name	De Minimis Concentration (percent)
1634-04-4	Methyl tert-butyl ether	1.0
101-14-4	4,4'-Methylenebis(2-chloro aniline) (MBOCA)	0.1
101-61-1	4,4'-Methylenebis (N,N-dimethyl) benzenamine	0.1
101-68-8	Methylenebis(phenylisocyanate) (MBI)	1.0
74-95-3	Methylene bromide	1.0
101-77-9	4,4'-Methylenedianiline	0.1
78-93-3	Methyl ethyl ketone	1.0
60-34-4	Methyl hydrazine	1.0
74-88-4	Methyl iodide	0.1
108-10-1	Methyl isobutyl ketone	1.0
624-83-9	Methyl isocyanate	1.0
80-62-6	Methyl methacrylate	1.0
90-94-8	Michler's ketone	0.1
1313-27-5	Molybdenum trioxide	1.0
505-60-2	Mustard gas [Ethane, 1,1'-thiobis [2-chloro-]	0.1
91-20-3	Naphthalene	1.0
134-32-7	alpha-Naphthylamine	0.1
91-59-8	beta-Naphthylamine	0.1
7440-02-0	Nickel	0.1
7697-37-2	Nitric acid	1.0
139-13-9	Nitrilotriacetic acid	0.1
99-59-2	5-Nitro-o-anisidine	0.1
98-95-3	Nitrobenzene	1.0
92-93-3	4-Nitrobiphenyl	0.1
1836-75-5	Nitrofen [Benzene, 2,4-dichloro- 1-(4-nitrophenoxy)-]	0.1
51-75-2	Nitrogen mustard [2-Chloro-N-(2-chloroethyl) -N- methylethanamine]	0.1
55-63-0	Nitroglycerin	1.0
88-75-5	2-Nitrophenol	1.0
100-02-7	4-Nitrophenol	1.0
79-46-9	2-Nitropropane	0.1
156-10-5	p-Nitrosodiphenylamine	0.1
121-69-7	N,N-Dimethylaniline	1.0
924-16-3	N-Nitrosodi-n-butylamine	0.1
55-18-5	N-Nitrosodiethylamine	0.1
62-75-9	N-Nitrosodimethylamine	0.1
86-30-6	N-Nitrosodiphenylamine	1.0
621-64-7	N-Nitrosodi-n-propylamine	0.1
4549-40-0	N-Nitrosomethylvinylamine	0.1
59-89-2	N-Nitrosomorpholine	0.1
759-73-9	N-Nitroso-N-ethylurea	0.1

CAS Number	Chemical Name	De Minimis Concentration (percent)
684-93-5	N-Nitroso-N-methylurea	0.1
16543-55-8	N-Nitrosonornicotine	0.1
100-75-4	N-Nitrosopiperidine	0.1
2234-13-1	Octachloronaphthalene	1.0
20816-12-0	Osmium tetroxide	1.0
56-38-2	Parathion [Phosphorothioic acid, o, o-diethyl-o-(4-nitrophenyl) ester]	1.0
87-86-5	Pentachlorophenol (PCP)	1.0
79-21-0	Peracetic acid	1.0
108-95-2	Phenol	1.0
106-50-3	p-Phenylenediamine	1.0
90-43-7	2-Phenylphenol	1.0
75-44-5	Phosgene	1.0
7664-38-2	Phosphoric acid	1.0
7723-14-0	Phosphorus (yellow or white)	1.0
85-44-9	Phthalic anhydride	1.0
88-89-1	Picric acid	1.0
1336-36-3	Polychlorinated biphenyls (PCBs)	0.1
1120-71-4	Propane sultone	0.1
57-57-8	beta-Propiolactone	0.1
123-38-6	Propionaldehyde	1.0
114-26-1	Propoxur [Phenol, 2-(1-methylethoxy)-, methylcarbamate]	1.0
115-07-1	Propylene (Propene)	1.0
75-55-8	Propyleneimine	0.1
75-56-9	Propylene oxide	0.1
110-86-1	Pyridine	1.0
91-22-5	Quinoline	1.0
106-51-4	Quinone	1.0
82-68-8	Quintozene [Pentachloronitrobenzene]	1.0
81-07-2	Saccharin (manufacturing, no supplier notification) [1,2- Benzisothiazol -3(2H)-one,1,1-dioxide]	0.1
94-59-7	Safrole	0.1
7782-49-2	Selenium	1.0
7440-22-4	Silver	1.0
1310-73-2	Sodium hydroxide (solution)	1.0
7757-82-6	Sodium sulfate (solution)	1.0
100-42-5	Styrene	0.1
96-09-3	Styrene oxide	0.1
7664-93-9	Sulfuric acid	1.0
100-21-0	Terephthalic acid	1.0
79-34-5	1,1,2,2-Tetrachloroethane	0.1
127-18-4	Tetrachloroethylene (Perchloroethylene)	0.1

CAS Number	Chemical Name	De Minimis Concentration (perc[redacted]
961-11-5	Tetrachlorvinphos [Phosphoric acid, 2-chloro-1- (2,3,5-trichlorophenyl) ethenyl dimethyl ester]	
961-11-5	Tetrachlorvinphos [Phosphoric acid, 2-chloro-1- (2,3,5-trichlorophenyl) ethenyl dimethyl ester]	1.0
7440-28-0	Thallium	1.0
62-55-5	Thioacetamide	0.1
139-65-1	4,4'-Thiodianiline	0.1
62-56-6	Thiourea	0.1
7550-45-0	Titanium tetrachloride	1.0
1314-20-1	Thorium dioxide	1.0
108-88-3	Toluene	1.0
584-84-9	Toluene-2,4-diisocyanate	0.1
91-08-7	Toluene-2,6-diisocyanate	0.1
95-53-4	o-Toluidine	0.1
636-21-5	o-Toluidine hydrochloride	0.1
8001-35-2	Toxaphene	0.1
68-76-8	Triaziquone [2,5-Cyclohexadiene-1,4-dione, 2,3,5-tris(1-aziridinyl)-]	0.1
52-68-6	Trichlorfon [Phosphonic acid, (2,2,2-trichloro-1-hydroxyethyl)-, dimethyl ester]	1.0
120-82-1	1,2,4-Trichlorobenzene	1.0
71-55-6	1,1,1-Trichloroethane (Methyl chloroform)	1.0
79-00-5	1,1,2-Trichloroethane	1.0
79-01-6	Trichloroethylene	1.0
95-95-4	2,4,5-Trichlorophenol	1.0
88-06-2	2,4,6-Trichlorophenol	[redacted]
1582-09-8	Trifluralin [Benzeneamine, 2,6-dinitro-N,N-dipropyl-4-(trifluoromethyl)-]	[redacted]
95-63-6	1,2,4-Trimethylbenzene	1.0
126-72-7	Tris(2,3-dibromopropyl) phosphate	0.1
51-79-6	Urethane (Ethyl carbamate)	0.1
7440-62-2	Vanadium (fume or dust)	1.0
108-05-4	Vinyl acetate	1.0
593-60-2	Vinyl bromide	0.1
75-01-4	Vinyl chloride	0.1
75-35-4	Vinylidene chloride	1.0
1330-20-7	Xylene (mixed isomers)	1.0
108-38-3	m-Xylene	1.0
95-47-6	o-Xylene	1.0
106-42-3	p-Xylene	1.0
87-62-7	2,6-Xylidine	1.0
7440-66-6	Zinc (fume or dust)	1.0
12122-67-7	Zineb [Carbamodithioic acid, 1,2-ethanediylbis-, zinc complex]	1.0

[redacted]

CHEMICAL CATEGORIES

Section 313 requires emissions reporting on the chemical categories listed below, in addition to the specific chemicals listed above.

The metal compounds listed below, unless otherwise specified, are defined as including any unique chemical substance that contains the named metal (i.e., antimony, copper, etc.) as part of that chemical's structure.

Chemical categories are subject to the 1 percent *de minimis* concentration unless the substance involved meets the definition of an OSHA carcinogen.

- Antimony Compounds
- Arsenic Compounds
- Barium Compounds
- Beryllium Compounds
- Cadmium Compounds
- Chlorophenols
- Chromium Compounds
- Cobalt Compounds
- Copper Compounds
- Cyanide Compounds - X^+CN^- where $X = H^+$ or any other group where a formal dissociation may occur. For example KCN or $Ca(CN)_2$
  Glycol Ethers - includes mono- and di-ethers of ethylene glycol, diethylene glycol, and triethylene glycol. Polymers are excluded from the glycol ether category.
- Lead Compounds
- Manganese Compounds
- Mercury Compounds
- Nickel Compounds
- Polybrominated Biphenyls (PBBs)
- Selenium Compounds
- Silver Compounds
- Thallium Compounds
- Zinc Compounds

FOR MORE INFORMATION

Write to:

Emergency Planning and Community Right-to-Know
Information Hotline,
401 M St., SW (OS-120)
Washington, D.C. 20460

Or for regulatory and technical assistance, call:

Emergency Planning and Community Right-to-Know Information Hotline, 8:30-7:30 Eastern Time	(800) 535-0202 or (202) 479-2449 (in Washington, D.C. and Alaska)
Asbestos and Small Business Ombudsman Hotline	(800) 368-5888 or (703) 557-1938 (in Washington, D.C. and Virginia)

Other Information:

- EPA is developing a series of videotapes to help plain the Emergency Planning and Community Right-to-Know Act. For more information on the video tapes, call the Emergency Planning and Community Right-to-Know Information Hotline.
- EPA's technical guidance on Estimating Releases (EPA 560/4-88-002) is available from: Superintendent of Documents, Government Printing Office, Washington, DC 20402-9325, (202) 783-3238, Stock Number: 055-000-00270-3, $11.00.
- EPA's Comprehensive List of Chemicals Subject to Reporting under the Act (Title III List of Lists) is available as an IBM compatible disk from: The National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161, (703) 487-4650. Document Number:
  PB 88-193255, $50.00.

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AVAILABLE FROM EPA

Check the boxes below to receive reporting forms and publications about Section 313. Remove this page, put it in an envelope, and mail it to: **Emergency Planning and Community Right-to-Know Document Distribution Center, P.O. Box 12505, Cincinnati, OH 45212.** (Please correct your mailing label if necessary.)

- ☐ Title III Section 313 Reporting Form R and Instructions (EPA 560/4-88-005)
- ☐ TRI Magnetic Media Submission Guidance Package (EPA 560/7-88-003)
- ☐ Toxic Chemical Release Inventory Questions and Answers Document (EPA 560/4-89-002)
- ☐ Section 313 Technical Questions and Answers Document
- ☐ Common Synonyms for Section 313 Chemicals (OTS-ETD-001)
- ☐ Comprehensive List of Chemicals Subject to Reporting under the Act (Title III List Of Lists) (EPA 560/4-88-003)
- ☐ Supplier Notification Requirements Brochure (EPA 560/4-88-006)

Industry Specific Technical Guidance Documents for estimating releases:

- ☐ Monofilament Fiber Manufacture (EPA 560/4-88-004a)
- ☐ Printing Operations (EPA 560/4-88-004b)
- ☐ Electrodeposition of Organic Coatings (EPA 560/4-88-004c)
- ☐ Spray Application of Organic Coatings (EPA 560/4-88-004d)
- ☐ Semiconductor Manufacture (EPA 560/4-88 -004e)
- ☐ Formulating Aqueous Solutions (EPA 560/4-88-004f)
- ☐ Electroplating Operations(EPA 560/4-88-004g)
- ☐ Textile Dyeing (EPA 560/4-88-004h)
- ☐ Pressewood and Laminated Wood Products Manufacturing (EPA 560/4-88-004i)
- ☐ Roller, Knife, and Gravure Coating Operations (EPA 560/4-88-004j)
- ☐ Paper and Paperboard Production (EPA 560/4-88-004k)
- ☐ Leather Tanning and Finishing Processes (EPA 560/4-88-004l)
- ☐ Wood Preserving (EPA 560/4-88-004p)
- ☐ Rubber Production and Compounding (EPA 560/4-88-004q)

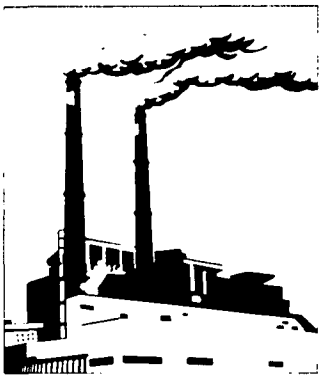
Office of Pesticides
and Toxic Substances

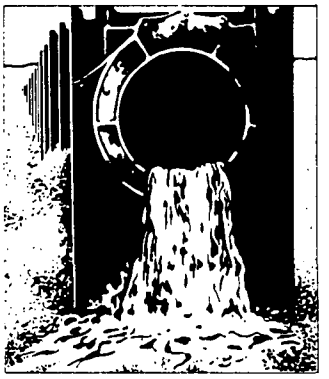
EPA 560/4-88-001
February 1988

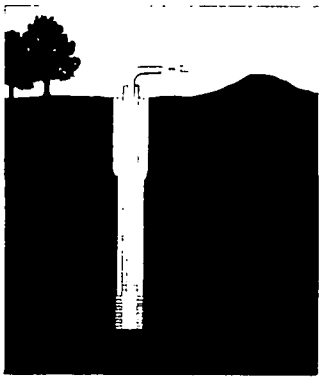
EPA

The Emergency Planning and Community Right-to-Know Act

Section 313 Release Reporting Requirements







This brochure contains information about a new federal law, the Emergency Planning and Community Right-to-Know Act. This law establishes a structure at the State and local levels to assist communities in planning for chemical emergencies and requires facilities to provide information on various chemicals present in the community. The act requires that this information be made available to the public. One of the requirements concerns the reporting of annual releases of toxic chemicals to the air, water, and land. These provisions are outlined in Section 313 which mandates release reporting for over 300 chemicals. Other reporting requirements are included elsewhere in the act. This booklet deals with Section 313.

It is important that you read this information to see if you are subject to Section 313 reporting requirements. The first reports under this section, covering the 1987 calendar year, are due by July 1, 1988. EPA is responsible for administering this section and for developing a database that will make information in the reports available to the public.

The Emergency Planning and Community Right-to-Know Act is important in providing to the public information about chemicals in the community. I look forward to working with you to make its implementation a success.

Lee M. Thomas
Administrator,
Environmental Protection Agency

The Emergency Planning and Community Right-to-Know Act

EPA has prepared this brochure to alert businesses to their reporting obligations under Section 313 of the Emergency Planning and Community Right-to-Know Act, and to help you determine whether your facility is covered under the new law. If you are covered, this brochure will also help you prepare to meet your reporting obligations. If you are uncertain whether you are covered, it will tell you how to get assistance.

This brochure deals with reporting requirements of only one section of the Emergency Planning and Community Right-to-Know Act: Section 313, which pertains to release reporting. Other planning and reporting requirements may also affect your business. The nearest EPA regional office can provide complete details, but the other basic requirements of the Act are as follows:

Facilities that have on their premises chemicals designated under the Act as "extremely hazardous substances" must cooperate with state and local planning officials in preparing comprehensive emergency plans (Sections 302 and 303);

■

Facilities must report accidental releases of "extremely hazardous substances" and CERCLA "hazardous substances" to state and local response officials (Section 304); and

■

Facilities must make Material Safety Data Sheets (MSDSs) available to local and state officials and must also report, to local and state officials, inventories (including locations) of chemicals on their premises for which MSDSs exist (Sections 311 and 312).

■

For more information on the Emergency Planning and Community Right-to-Know Act, ask your regional EPA office for the Title III Fact Sheet. Or call the Emergency Planning and Community Right-to-Know Information Hotline, 800-535-0202.

Report Toxic Chemical Releases

Under Section 313 of the Emergency Planning and Community Right-to-Know Act,* certain businesses are now required to submit reports each year on the amounts of chemicals their facilities release into the environment, either routinely or as a result of accidents. The purpose of this reporting requirement is to inform government officials and the public about releases of toxic chemicals into the environment. Section 313 requires facilities to report releases to air, water, and land. The reports must be sent to the United States Environmental Protection Agency (EPA) and to designated state agencies. The first annual report, for the 1987 calendar year, is due by July 1, 1988. Those who fail to report as required are subject to civil penalties of up to $25,000 a day.

The final Toxic Chemical Release Inventory rule under Section 313 was published in the *Federal Register* in February 1988.

*The Act is also known as Title III of SARA (the Superfund Amendments and Reauthorization Act).

Who Must Report

A plant, factory, or other facility comes under the provisions of Section 313:

If it conducts manufacturing operations (that is, if it is included in Standard Industrial Classification (SIC) codes 20 through 39, listed on page 8);

■

If, in addition, it has 10 or more full-time employees; and

■

If, in addition to the above, it manufactures, imports, processes, or in any other way uses any of the toxic chemicals listed on pages 16-23 in amounts greater than the "threshold" quantities specified below. At present, 308 individual chemicals and 20 categories of chemicals are covered. The list may be changed in future years.

■

Thresholds

Thresholds are volumes of chemicals that trigger reporting requirements.

If you *manufacture* or *process* any of the listed toxic chemicals, the threshold quantity will be:

- **75,000 pounds** during calendar year 1987;
- **50,000 pounds** in 1988; and
- **25,000 pounds** in 1989 and subsequent years.

If you *use* any listed chemical *in any other way* (without incorporating it into any product or

producing it at the facility), the threshold quantity is:

- **10,000 pounds** in calendar year 1987 and in subsequent years.

What is meant by the terms "manufacture," "process," or "otherwise use"?

- *Manufacture*—means to produce, prepare, import or compound one of the chemicals on the list. For example, if you make a dye for clothing by taking raw materials and reacting them, you are manufacturing the dye. You would also be covered if you were a textile manufacturer who imported a dye on the list for purposes of applying it to fabric produced at your plant.
- *Process*—in general, includes making mixtures, repackaging, or using a chemical as a feedstock, raw material, or starting material for making another chemical. Processing also includes incorporating a chemical into an article (e.g., using dyes to color fabric [the fabric is the article that the dye is being incorporated into]).

  Examples of processing include:

  - The use of a solvent as a diluent when making a paint or coating;
  - Using a chemical as an intermediate in the manufacture of a pesticide (e.g., using chemical A to make chemical B).

- *Otherwise Use*—applies to any use of a toxic chemical at a covered facility that is not covered by the terms "manufacture" or "process" and includes use of a toxic chemical contained in a mixture or trade name product.

Examples include:

- Using chlorine as a biocide in plant cooling water;
- Using trichloroethylene to degrease tools;
- Using chlorine in waste water treatment.

Section 313 defines a "facility" as all buildings, equipment, structures, and other stationary items which are located on a single site or on contiguous or adjacent sites and which are owned or operated by the same person. Warehouses on the same site as covered facilities are covered at the threshold levels given above. Stand-alone warehouses that do not support a manufacturing operation are not currently covered.

The reporting thresholds apply to toxic chemicals known by the owner or operator to be used in amounts above the thresholds. Beginning in 1989, Section 313 will require suppliers of mixtures and trade name products to notify customers of the presence of Section 313 listed chemicals in their products beyond certain *de minimis* concentrations (these cutoffs are discussed under "Exemptions").

Exemptions

Under certain circumstances, some or all of the reporting requirements under Section 313 may not apply to a facility. The following are the major exemptions:

▶ ***De minimis*** concentrations of toxic chemical in a mixture. In determining whether the amount of a toxic chemical used at your facility exceeds the reporting threshold listed on pages 3 and 4, you are not required to count the amount of chemical present in a mixture *if*

its concentration is less than 1 percent of the mixture, or

■

its concentration is less than 0.1 percent of any mixture when the chemical is defined by OSHA as carcinogenic.

■

▶ **Articles.** In considering whether a reporting threshold has been exceeded, you are not required to count toxic chemicals present in articles at your facility. An "article" is defined as a manufactured item that meets certain criteria, one of which is that it does not release a toxic chemical under normal conditions of processing or use.

▶ **Specified Uses.** In considering whether a reporting threshold has been exceeded, you are not required to count toxic chemicals that are used at your facility for any of the following purposes:

As a structural component of the facility;

■

In routine janitorial or facility grounds maintenance;

■

In foods, drugs, cosmetics, or other items for personal use, including supplies of such items (for example, in a facility-operated cafeteria);

■

In motor vehicle maintenance; or

■

In process water and non-contact cooling water as drawn from the environment or from municipal sources, or in air used either as compressed air or as part of combustion.

■

▶ **Laboratories.** In considering whether a reporting threshold has been exceeded, you are not required to count toxic chemicals that are manufactured, processed, or used in a laboratory at a covered facility under the supervision of a technically qualified individual. This exemption does not apply to specialty chemical production or to production, processing, or use of toxic chemicals in pilot plant scale operations.

▶ **Owners of Leased Property.** The owner of a covered facility is not subject to reporting under Section 313 if the owner's only interest in the facility is ownership of the real estate upon which the facility is operated.

If you need further clarification of exemptions, call the Emergency Planning and Community Right-to-Know Information Hotline, 800-535-0202.

How to Report

The owner or operator of a covered facility must report annually. Each report must be submitted on or before July 1 for activities during the previous calendar year.

EPA will provide a reporting form (EPA Form R) with instructions and technical guidance on how to calculate chemical releases or emissions from your facility. To obtain the reporting form, instructions, and technical guidance, check the boxes for those publications on the back cover, detach the cover, and mail it in. Or call the Emergency Planning and Community Right-to-Know Information Hotline (800-535-0202) or any of the EPA regional offices listed on pages 13-15.

You are not required to measure or monitor releases for purposes of Section 313 reporting. You may use readily available data to report the quantities of chemicals that you use and the amounts released into the environment. If you have no data available, the law permits you to report reasonable estimates. EPA's technical guidance on calculating releases can help you in making estimates. This guidance is available from the sources shown on pages 13-15.

SIC Groups Subject to Section 313

SIC	Industry Group
20	Food
21	Tobacco
22	Textiles
23	Apparel
24	Lumber and Wood
25	Furniture
26	Paper
27	Printing and Publishing
28	Chemicals
29	Petroleum and Coal
30	Rubber and Plastics
31	Leather
32	Stone, Clay, and Glass
33	Primary Metals
34	Fabricated Metals
35	Machinery (Excluding Electrical)
36	Electrical and Electronic Equipment
37	Transportation Equipment
38	Instruments
39	Miscellaneous Manufacturing

For more information on SIC (Standard Industrial Classification) codes, please consult "Standard Industrial Classification Manual 1987," available from:

National Technical Information Service
5285 Port Royal Road, Springfield, VA 22161
Phone: (703) 487-4650

What You Must Report

You must report the following information for **each listed chemical** manufactured, imported, processed, or used at your facility in yearly amounts which exceed the threshold:

- The name and location of your facility;
- The identity of the listed toxic chemical (unless you claim its identity to be a trade secret);
- Whether you manufacture, import, or process the chemical, or use it in any other way;
- The maximum quantity of the chemical on site at any time during the year;
- The total quantity of the chemical released during the year, including both accidental spills and routine emissions — separate estimates must be provided for releases to air, water, and land (e.g., deep well injection, permitted landfill);
- Off-site locations to which you shipped wastes containing the chemical and the quantities of that chemical sent to those locations; and
-

Treatment or disposal methods used for wastes containing the chemical and estimates of their efficiency for each chemical (efficiency of treatment methods used on site).

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For purposes of Section 313, **a release is defined** as any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping or disposing into the environment (including the abandonment or discarding of barrels, containers, and other closed receptacles) of any "toxic chemical" (i.e., any of the chemicals on pages 16-23).

Public Access to Reports

The law requires facilities covered by Section 313 to send toxic chemical release reports both to EPA and to the state in which the facility is located. At EPA, the Office of Toxic Substances will be responsible for receiving and processing the data. Your EPA regional office can tell you what agency has been designated to receive reports in your state.

EPA is required by law to make the data in the reports available to the public through a computer database. (You can claim the chemical identity to be a trade secret, but you must justify the claim to EPA.) The database is intended to help answer citizens' questions about chemical releases in their community. The users of the data are also likely to include researchers from government or universities conducting environmental analyses. EPA expects to use the data in a variety of ways, including targeting problem pollution areas and as a screening tool for developing standards and regulations.

What You Can Do Now

You can begin planning now to make compliance with Section 313 as easy and inexpensive as possible. The steps are as follows:

1. If you have 10 or more full-time employees, check the SIC code list on page 8 to determine whether your facility is covered.
2. Check the list of toxic chemicals covered by Section 313 (pages 16-23) to see if any are manufactured, imported, processed, or in any other way used by your facility. For reporting years 1987 and 1988 you must report based on data available to you. For reporting year 1989 and subsequent years, your chemical supplier is required to inform you if any of the 313 chemicals is contained in mixtures sold to you.
3. Determine whether you handle any chemical on the list in an amount greater than the thresholds on pages 3-4.
4. If you meet the criteria, request copies of the reporting form, instructions, and any of the appropriate guidance documents listed at the back of this brochure.
5. Begin to develop the appropriate information to report your 1987 releases.
6. Put in place a recordkeeping system that will help you estimate releases for 1988 and future years.

You should designate someone at your facility to be responsible for reporting under Section 313. That person should obtain reporting forms and instructions and should be aware of the first reporting deadline: July 1, 1988.

The reporting forms and instructions can be obtained by mailing in the order form on the inside back cover. Or call the Emergency Planning and Community Right-to-Know Information Hotline or one of the EPA regional offices listed on pages 13-15.

For More Information

Emergency Planning and Community Right-to-Know Information Hotline, 8:30-4:30 Eastern Standard Time.	800-535-0202 or 202-479-2449 (in Washington, D.C. and Alaska)
Small Business Ombudsman	800-368-5888 or 703-557-1938 (in Washington, D.C. and Virginia)

EPA is developing a series of videotapes to help explain the Emergency Planning and Community Right-to-Know Act. For more information on the videotapes, call the Emergency Planning and Community Right-to-Know Information Hotline.

Section 313 EPA Regional Contacts

Region 1

Pesticides & Toxic Substances Branch
USEPA Region 1
APT 2311
JFK Federal Building
Boston, MA 02203
(617) 565-3273

Connecticut, Massachusetts, Maine, New Hampshire, Rhode Island, Vermont

Region 2

Pesticides & Toxic Substances Branch
USEPA Region 2
Woodbridge Avenue, Building 209
Edison, NJ 08837
(201) 321-6765

New Jersey, New York, Puerto Rico, Virgin Islands

Region 3

Toxics & Pesticides Branch
USEPA Region 3
841 Chestnut Street
Philadelphia, PA 19107
(215) 597-1260

Delaware, Maryland, Pennsylvania, Virginia, West Virginia, District of Columbia

Region 4

Pesticides & Toxic Substances Branch
USEPA Region 4
345 Courtland Street, N.E.
Atlanta, GA 30365
(404) 347-3222

Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee

Region 5

Pesticides & Toxic Substances Branch
USEPA Region 5
5S PT-7
536 So. Clark Street
Chicago, IL 60605
(312) 886-6418

Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin

Region 6

Pesticides & Toxic Substances Branch
USEPA Region 6
Allied Bank Tower
1445 Ross Avenue
Dallas, TX 75202-2733
(214) 655-7244

Arkansas, Louisiana, New Mexico, Oklahoma, Texas

Region 7

Office of Congressional and Intergovernmental Liaison
USEPA Region 7
726 Minnesota Avenue
Kansas City, KS 66101
(913) 236-2806

Iowa, Kansas, Missouri, Nebraska

Region 8

Toxic Substances Branch
USEPA Region 8
999 18th Street, Suite 500
Denver, CO 80202-2413
(303) 293-1730

Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming

Region 9

Pesticides & Toxic Substances Branch
USEPA Region 9
P-5-1
215 Fremont Street
San Francisco, CA 94105
(415) 974-7054

Arizona, California, Hawaii, Nevada, American Samoa, Guam, Trust Territories of the Pacific

Region 10

Pesticides & Toxic Substances Branch
USEPA Region 10
1200 Sixth Avenue
Seattle, WA 98101
(206) 442-1270

Alaska, Idaho, Oregon, Washington

Chemicals Subject to Section 313 Reporting

Chemical abstract service (CAS) number	Chemical name
75-07-0	Acetaldehyde
60-35-5	Acetamide
67-64-1	Acetone
75-05-8	Acetonitrile
53-96-3	2-Acetylaminofluorene
107-02-8	Acrolein
79-06-1	Acrylamide
79-10-7	Acrylic acid
107-13-1	Acrylonitrile
309-00-2	Aldrin
107-05-1	Allyl chloride
7429-90-5	Aluminum (fume or dust)
1344-28-1	Aluminum oxide
117-79-3	2-Aminoanthraquinone
60-09-3	4-Aminoazobenzene
92-67-1	4-Aminobiphenyl
82-28-0	1-Amino-2-methylanthraquinone
7664-41-7	Ammonia
6484-52-2	Ammonium nitrate (solution)
7783-20-2	Ammonium sulfate (solution)
62-53-3	Aniline
90-04-0	o-Anisidine
104-94-9	p-Anisidine
134-29-2	o-Anisidine hydrochloride
120-12-7	Anthracene
7440-36-0	Antimony
*	Antimony Compounds
7440-38-2	Arsenic
*	Arsenic Compounds
1332-21-4	Asbestos (friable)
7440-39-3	Barium
*	Barium Compounds
98-87-3	Benzal chloride
55-21-0	Benzamide
71-43-2	Benzene
92-87-5	Benzidine
98-07-7	Benzoic trichloride (Benzotrichloride)

*See page 23.

Chemical abstract service (CAS) number	Chemical name
98-88-4	Benzoyl chloride
94-36-0	Benzoyl peroxide
100-44-7	Benzyl chloride
7440-41-7	Beryllium
*	Beryllium Compounds
92-52-4	Biphenyl
111-44-4	Bis(2-chloroethyl) ether
542-88-1	Bis(chloromethyl) ether
108-60-1	Bis(2-chloro-1-methylethyl) ether
103-23-1	Bis(2-ethylhexyl) adipate
75-25-2	Bromoform (Tribromomethane)
74-83-9	Bromomethane (Methyl bromide)
106-99-0	1,3-Butadiene
141-32-2	Butyl acrylate
71-36-3	n-Butyl alcohol
78-92-2	sec-Butyl alcohol
75-65-0	tert-Butyl alcohol
85-68-7	Butyl benzyl phthalate†
106-88-7	1,2-Butylene oxide
123-72-8	Butyraldehyde
2650-18-2	C.I. Acid Blue 9, diammonium salt†
3844-45-9	C.I. Acid Blue 9, disodium salt†
4680-78-8	C.I. Acid Green 3
569-64-2	C.I. Basic Green 4
989-38-8	C.I. Basic Red 1
1937-37-7	C.I. Direct Black 38
2602-46-2	C.I. Direct Blue 6
16071-86-6	C.I. Direct Brown 95
2832-40-8	C.I. Disperse Yellow 3
3761-53-3	C.I. Food Red 5
81-88-9	C.I. Food Red 15
3118-97-6	C.I. Solvent Orange 7
97-56-3	C.I. Solvent Yellow 3
842-07-9	C.I. Solvent Yellow 14
492-80-8	C.I. Solvent Yellow 34 (Aurimine)
128-66-5	C.I. Vat Yellow 4
7440-43-9	Cadmium
*	Cadmium Compounds
156-62-7	Calcium cyanamide
133-06-2	Captan
63-25-2	Carbaryl
75-15-0	Carbon disulfide

*See page 23.

†As of January, 1988, EPA has been petitioned to delete the following chemicals from the Section 313 list: Butyl benzyl phthalate; C.I. Acid Blue 9, diammonium salt; C.I. Acid Blue 9, disodium salt; titanium dioxide, and melamine. Current information about reporting requirements with respect to these chemicals can be obtained by calling the Emergency Planning and Community Right-to-Know Information Hotline, 800-535-0202.

Chemical abstract service (CAS) number	Chemical name
56-23-5	Carbon tetrachloride
463-58-1	Carbonyl sulfide
120-80-9	Catechol
133-90-4	Chloramben
57-74-9	Chlordane
76-13-1	Chlorinated fluorocarbon (Freon 113)
7782-50-5	Chlorine
10049-04-4	Chlorine dioxide
79-11-8	Chloroacetic acid
532-27-4	2-Chloroacetophenone
108-90-7	Chlorobenzene
510-15-6	Chlorobenzilate
75-00-3	Chloroethane (Ethyl chloride)
67-66-3	Chloroform
74-87-3	Chloromethane (Methyl chloride)
107-30-2	Chloromethyl methyl ether
*	Chlorophenols
126-99-8	Chloroprene
1897-45-6	Chlorothalonil
7440-47-3	Chromium
*	Chromium Compounds
7440-48-4	Cobalt
*	Cobalt Compounds
7440-50-8	Copper
*	Copper Compounds
120-71-8	p-Cresidine
1319-77-3	Cresol (mixed isomers)
108-39-4	m-Cresol
95-48-7	o-Cresol
106-44-5	p-Cresol
98-82-8	Cumene
80-15-9	Cumene hydroperoxide
135-20-6	Cupferron
*	Cyanide Compounds
110-82-7	Cyclohexane
94-75-7	2,4-D
1163-19-5	Decabromodiphenyl oxide
2303-16-4	Diallate
615-05-4	2,4-Diaminoanisole
39156-41-7	2,4-Diaminoanisole sulfate
101-80-4	4,4'-Diaminodiphenyl ether
25376-45-8	Diaminotoluene (mixed isomers)
95-80-7	2,4-Diaminotoluene
334-88-3	Diazomethane
132-64-9	Dibenzofuran
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)
106-93-4	1,2-Dibromoethane (Ethylene dibromide)
84-74-2	Dibutyl phthalate
25321-22-6	Dichlorobenzene (mixed isomers)
95-50-1	1,2-Dichlorobenzene

*See page 23.

Chemical abstract service (CAS) number	Chemical name
541-73-1	1,3-Dichlorobenzene
106-46-7	1,4-Dichlorobenzene
91-94-1	3,3'-Dichlorobenzidine
75-27-4	Dichlorobromomethane
107-06-2	1,2-Dichloroethane (Ethylene dichloride)
540-59-0	1,2-Dichloroethylene
75-09-2	Dichloromethane (Methylene chloride)
120-83-2	2,4-Dichlorophenol
78-87-5	1,2-Dichloropropane
542-75-6	1,3-Dichloropropylene
62-73-7	Dichlorvos
115-32-2	Dicofol
1464-53-5	Diepoxybutane
111-42-2	Diethanolamine
117-81-7	Di-(2-ethylhexyl) phthalate (DEHP)
84-66-2	Diethyl phthalate
64-67-5	Diethyl sulfate
119-90-4	3,3'-Dimethoxybenzidine
60-11-7	4-Dimethylaminoazobenzene
119-93-7	3,3'-Dimethylbenzidine (o-Tolidine)
79-44-7	Dimethylcarbamyl chloride
57-14-7	1,1-Dimethyl hydrazine
105-67-9	2,4-Dimethylphenol
131-11-3	Dimethyl phthalate
77-78-1	Dimethyl sulfate
534-52-1	4,6-Dinitro-o-cresol
51-28-5	2,4-Dinitrophenol
121-14-2	2,4-Dinitrotoluene
606-20-2	2,6-Dinitrotoluene
117-84-0	n-Dioctyl phthalate
123-91-1	1,4-Dioxane
122-66-7	1,2-Diphenyl hydrazine (Hydrazobenzene)
106-89-8	Epichlorohydrin
110-80-5	2-Ethoxyethanol
140-88-5	Ethyl acrylate
100-41-4	Ethyl benzene
541-41-3	Ethyl chloroformate
74-85-1	Ethylene
107-21-1	Ethylene glycol
151-56-4	Ethyleneimine (Aziridine)
75-21-8	Ethylene oxide
96-45-7	Ethylene thiourea
2164-17-2	Fluometuron
50-00-0	Formaldehyde
*	Glycol Ethers
76-44-8	Heptachlor
118-74-1	Hexachlorobenzene
87-68-3	Hexachloro-1,3-butadiene
77-47-4	Hexachlorocyclopentadiene
67-72-1	Hexachloroethane

*See page 23.

Chemical abstract service (CAS) number	Chemical name
1335-87-1	Hexachloronaphthalene
680-31-9	Hexamethylphosphoramide
302-01-2	Hydrazine
10034-93-2	Hydrazine sulfate
7647-01-0	Hydrochloric acid
74-90-8	Hydrogen cyanide
7664-39-3	Hydrogen fluoride
123-31-9	Hydroquinone
78-84-2	Isobutyraldehyde
67-63-0	Isopropyl alcohol (only persons who manufacture by the strong acid process—no supplier notification)
80-05-7	4,4′-Isopropylidenediphenol
7439-92-1	Lead
*	Lead Compounds
58-89-9	Lindane
108-31-6	Maleic anhydride
12427-38-2	Maneb
7439-96-5	Manganese
*	Manganese Compounds
108-78-1	Melamine
7439-97-6	Mercury
*	Mercury Compounds
67-56-1	Methanol
72-43-5	Methoxychlor
109-86-4	2-Methoxyethanol
96-33-3	Methyl acrylate
1634-04-4	Methyl tert-butyl ether
101-14-4	4,4′-Methylene bis(2-chloroaniline) (MBOCA)
101-61-1	4,4′-Methylene bis(N,N-dimethyl) benzenamine
101-68-8	Methylene bis(phenylisocyanate) (MBI)
74-95-3	Methylene bromide
101-77-9	4,4′-Methylene dianiline
78-93-3	Methyl ethyl ketone
60-34-4	Methyl hydrazine
74-88-4	Methyl iodide
108-10-1	Methyl isobutyl ketone
624-83-9	Methyl isocyanate
80-62-6	Methyl methacrylate
90-94-8	Michler's ketone
1313-27-5	Molybdenum trioxide
505-60-2	Mustard gas
91-20-3	Naphthalene
134-32-7	alpha-Naphthylamine
91-59-8	beta-Naphthylamine
7440-02-0	Nickel
*	Nickel Compounds
7697-37-2	Nitric acid
139-13-9	Nitrilotriacetic acid
99-59-2	5-Nitro-o-anisidine
98-95-3	Nitrobenzene

*See page 23.

Chemical abstract service (CAS) number	Chemical name
92-93-3	4-Nitrobiphenyl
1836-75-5	Nitrofen
51-75-2	Nitrogen mustard
55-63-0	Nitroglycerin
88-75-5	2-Nitrophenol
100-02-7	4-Nitrophenol
79-46-9	2-Nitropropane
156-10-5	p-Nitrosodiphenylamine
121-69-7	N,N-Dimethylaniline
924-16-3	N-Nitrosodi-n-butylamine
55-18-5	N-Nitrosodiethylamine
62-75-9	N-Nitrosodimethylamine
86-30-6	N-Nitrosodiphenylamine
621-64-7	N-Nitrosodi-n-propylamine
4549-40-0	N-Nitrosomethylvinylamine
59-89-2	N-Nitrosomorpholine
759-73-9	N-Nitroso-N-ethylurea
684-93-5	N-Nitroso-N-methylurea
16543-55-8	N-Nitrosonornicotine
100-75-4	N-Nitrosopiperidine
2234-13-1	Octachloronaphthalene
20816-12-0	Osmium tetroxide
56-38-2	Parathion
87-86-5	Pentachlorophenol (PCP)
79-21-0	Peracetic acid
108-95-2	Phenol
106-50-3	p-Phenylenediamine
90-43-7	2-Phenylphenol
75-44-5	Phosgene
7664-38-2	Phosphoric acid
7723-14-0	Phosphorus (yellow or white)
85-44-9	Phthalic anhydride
88-89-1	Picric acid
*	Polybrominated Biphenyls (PBB)
1336-36-3	Polychlorinated Biphenyls (PCB)
1120-71-4	Propane sultone
57-57-8	beta-Propiolactone
123-38-6	Propionaldehyde
114-26-1	Propoxur
115-07-1	Propylene (Propene)
75-55-8	Propyleneimine
75-56-9	Propylene oxide
110-86-1	Pyridine
91-22-5	Quinoline
106-51-4	Quinone
82-68-8	Quintozene (Pentachloronitrobenzene)
81-07-2	Saccharin (only persons who manufacture—no supplier notification)
94-59-7	Safrole
7782-49-2	Selenium
*	Selenium Compounds

*See page 23.

Chemical abstract service (CAS) number	Chemical name
7440-22-4	Silver
*	Silver Compounds
1310-73-2	Sodium hydroxide (solution)
7757-82-6	Sodium sulfate (solution)
100-42-5	Styrene (monomer)
96-09-3	Styrene oxide
7664-93-9	Sulfuric acid
100-21-0	Terephthalic acid
79-34-5	1,1,2,2-Tetrachloroethane
127-18-4	Tetrachloroethylene (Perchloroethylene)
961-11-5	Tetrachlorvinphos
7440-28-0	Thallium
*	Thallium Compounds
62-55-5	Thioacetamide
139-65-1	4,4'-Thiodianiline
62-56-6	Thiourea
1314-20-1	Thorium dioxide
13463-67-7	Titanium dioxide†
7550-45-0	Titanium tetrachloride
108-88-3	Toluene
584-84-9	Toluene-2,4-diisocyanate
91-08-7	Toluene-2,6-diisocyanate
95-53-4	o-Toluidine
636-21-5	o-Toluidine hydrochloride
8001-35-2	Toxaphene
68-76-8	Triaziquone
52-68-6	Trichlorfon
120-82-1	1,2,4-Trichlorobenzene
71-55-6	1,1,1-Trichloroethane (Methyl chloroform)
79-00-5	1,1,2-Trichloroethane
79-01-6	Trichloroethylene
95-95-4	2,4,5-Trichlorophenol
88-06-2	2,4,6-Trichlorophenol
1582-09-8	Trifluralin
95-63-6	1,2,4-Trimethyl benzene
126-72-7	Tris(2,3-dibromopropyl) phosphate
51-79-6	Urethane (Ethyl carbamate)
7440-62-2	Vanadium (fume or dust)
108-05-4	Vinyl acetate
593-60-2	Vinyl bromide
75-01-4	Vinyl chloride
75-35-4	Vinylidene chloride
1330-20-7	Xylene (mixed isomers)

*See page 23.

†As of January, 1988, EPA has been petitioned to delete the following chemicals from the Section 313 list: Butyl benzyl phthalate; C.I. Acid Blue 9, diammonium salt; C.I. Acid Blue 9, disodium salt; titanium dioxide, and melamine. Current information about reporting requirements with respect to these chemicals can be obtained by calling the Emergency Planning and Community Right-to-Know Information Hotline, 800-535-0202.

Chemical abstract service (CAS) number	Chemical name
108-38-3	m-Xylene
95-47-6	o-Xylene
106-42-3	p-Xylene
87-62-7	2,6-Xylidine
7440-66-6	Zinc (fume or dust)
*	Zinc Compounds
12122-67-7	Zineb

*See page 23.

Chemical Categories

Section 313 requires emissions reporting on the chemical categories listed below, in addition to specific chemicals listed above.

The compounds listed below, unless otherwise specified, are defined as including any unique chemical substance that contains the named chemical (i.e., antimony, arsenic, etc.) as part of that chemical's structure.

- Antimony Compounds
- Arsenic Compounds
- Barium Compounds
- Beryllium Compounds
- Cadmium Compounds
- Chlorophenols
- Chromium Compounds
- Cobalt Compounds
- Copper Compounds
- Cyanide Compounds—X⁺ CN⁻ where X = H⁺ or any other group where a formal dissociation may occur. For example KCN or Ca(CN)₂
- Glycol Ethers—includes mono- and di-ethers of ethylene glycol, diethylene glycol, and triethylene glycol

  $R—(OCH_2CH_2)_n—OR'$

  Where n = 1, 2, or 3

  R = alkyl or aryl groups

  R' = R, H, or groups which, when removed, yield glycol ethers with the structure:

  $R—(OCH_2CH)_n—OH$

  Polymers are excluded from the glycol ether category.
- Lead Compounds
- Manganese Compounds
- Mercury Compounds
- Nickel Compounds
- Polybrominated Biphenyls (PBBs)
- Selenium Compounds
- Silver Compounds
- Thallium Compounds
- Zinc Compounds

☆U.S. G.P.O. 1988-516-002:80029

Available from EPA

Check the boxes below for reporting forms and any additional publications about Section 313 that you wish to receive. Remove this page, put it in an envelope, and mail it to: Emergency Planning and Community Right-to-Know Information Hotline, 401 M St., SW (WH-562A), Washington, DC 20460. (Please correct your mailing label if necessary.)

- ☐ Title III Section 313 Reporting Form (EPA Form R)
- ☐ Instructions for Completing Form R
- ☐ Estimating Releases and Waste Treatment Efficiencies for the Toxic Chemical Release Inventory Form (Technical Guidance)
- ☐ Industry Specific Technical Guidance Documents for estimating releases:
  - ☐ Electroplating Operations
  - ☐ Primary Lead, Zinc, and Cadmium Smelting
  - ☐ Apparel Manufacturing
  - ☐ Presswood and Laminated Wood Products Manufacturing
  - ☐ Wood Preserving
  - ☐ Roller, Knife, and Gravure Coating Operations
  - ☐ Spray Application of Organic Coatings
  - ☐ Electrodeposition of Organic Coatings
  - ☐ Rubber Production and Compounding
  - ☐ Paper and Paperboard Production
  - ☐ Primary Aluminum Smelting
  - ☐ Primary Copper Smelting
  - ☐ Leather Tanning and Finishing Processes
  - ☐ Semiconductor Manufacture
  - ☐ Printing Operations
  - ☐ Monofilament Fiber Manufacture
  - ☐ Textile Dyeing
  - ☐ Formulating Aqueous Solutions
- ☐ Common Synonyms for Section 313 Chemicals
- ☐ Comprehensive List of Chemicals Subject to Reporting under the Act

Special: Publicly Available Title III Documents

LIST OF PUBLICLY AVAILABLE TITLE III DOCUMENTS AS OF AUGUST 27, 1988

The following documents are available by written request to:

Emergency Planning and Community Right to Know
Mailcode: OS-120
401 M Street SW
Washington, DC 20460

Title III Factsheet

(Being printed)

A 9-page summary of the Emergency Planning and Community Right to Know Act of 1986. This document includes the requirements of each section, the facilities covered by each section and a chart of key dates for Title III.

Extremely Hazardous Substances List and Threshold Planning Quantities; Emergency Planning and Release Notification Requirements; Final Rule

FR April 22, 1987.

This *Federal Register* contains the final rule on Sections 302 and 304 of Title III, the emergency planning and emergency notification sections. This document does not contain the extremely hazardous substance list; that list is an appendix to this *Federal Register* and is distributed separately.

Extremely Hazardous Substance List

March 1, 1988

The complete list of extremely hazardous substances as defined under Section 302 of Title III. This document lists the chemicals alphabetically and by CAS number. The reportable quantity and threshold planning quantity of each chemical is also listed.

Emergency and Hazardous Chemical Inventory Forms and Community Right-to-Know Reporting Requirements; Final Rule

FR October 15, 1987

The final rule on Sections 311 and 312 of Title III, the community right to know section. This *Federal Register* contains the MSDS and Inventory reporting requirements, the Tier I and Tier II forms, and instructions for these forms.

Toxic Chemical Release Reporting; Community Right-to-Know; Final Rule

FR February 16, 1988

The final rule on Section 313 of Title III, toxic chemical release reporting. This *Federal Register* contains the toxic chemical release inventory reporting form, Form R. It also contains a list of the Section 313 toxic chemicals. Copies available now.

Toxic Chemical Release Inventory Reporting Form R and Instructions

March 1988

Step by step expanded instructions for completing the toxic chemical release inventory reporting Form R. This document includes a sample completed Form R and a list of the state 313 contacts as well as a copy of Form R.

Trade Secrecy Claims for Emergency Planning and Community Right-to-Know Information; and Trade Secret Disclosures to Health Professionals; Final Rule

FR July 1988

The final rule containing the procedures for claims of trade secrecy, for EPA's handling of such claims, for submission and handling of petitions requesting reviews of trade secrecy claims, and for disclosure to health professionals of information claimed as trade secret. This *Federal Register* contains the substantiation form and instructions.

Trade Secret Substantiation Form

This form is for substantiation of trade secret claims under Section 322 of Title III and includes the instructions.

The Emergency Planning and Community Right-to-Know Act Section 313 Release Reporting Requirements

February 1988

This 23 page brochure alerts businesses to their reporting obligations under Section 313 and helps them determine whether their facility is required to report. The brochure contains the Section 313 EPA Regional contacts, the Section 313 toxic chemical list and a description of the Standard Industrial Classification, (SIC), Groups subject to Section 313. This brochure was originally distributed to every manufacturing facility in U.S. The brochure is currently being updated and translated into Spanish. The

[illegible] be available in both English and Spanish by November.

Technical Guidance for Hazards Analysis

December 1987

This document provides technical assistance to local emergency planning committees in assessing the lethal hazards related to releases of airborne extremely hazardous substances. This guide should be used with NRT-1, *Hazardous Materials Emergency Planning Guide.*

Title III List of Lists

January 1988

A consolidated list of chemicals subject to reporting under Title III of SARA. This document lists by CAS number the extremely hazardous substances with their threshold planning quantities, the CERCLA hazardous substances with their reportable quantities, the Section 313 toxic chemicals, and the RCRA Hazardous Wastes from the P and U lists. An updated version of the list will be available in November. A disk based version of this document is available from the National Technical Invformation Service (NTIS).

List of SERCs

January 19, 1988

The EPA's revised list of state emergency response commissions contacts. The name, title, address and phone number of the contacts for each state as well as some U.S. territories are listed.

Industry Specific Technical Guidance Documents for Estimating Releases

January - July 1988

These documents were developed to assist specific industries with completion of Part III (Chemical Specific Information) of the toxic chemical release inventory reporting form. The documents include general information on the toxic chemicals used and process wastes generated, along with examples of release estimate calculations.

Electroplating Operations January 1988

Presswood and Laminated Wood Products Manufacturing March 1988

Wood Preserving February 1988

Roller, Knife and Gravure Coating Operations February 1988

Spray Application of Organic Coatings January 1988

Electrodeposition of Organic Coatings January 1988

Rubber Production and Compounding March 1988

Paper and Paperboard Production February 1988

Leather Tanning and Finishing Processes February 1988

Semiconductor Manufacture January 1988

Printing Operations January 1988

Monofilament Fiber Manufacture January 1988

Textile Dyeing February 1988

Formulating Aqueous Solutions March 1988

Limited supplies of these documents are now available.

Toxic Chemical Release Inventory Questions and Answers

March 1988

This document has been developed to expedite [illegible]y reporting and to provide additional explanation of the reporting requirements under Section 313 of Title III. It supplements the instructions for completing Form R. The document number is EPA-560/4-88-006. Revised edition available 2/15/89.

Toxic Chemical Release Inventory Magnetic Media Submission Instructions

March 1988

This document provides specifications for the use of magnetic media to submit EPA Form R. The structural record specifications for each section of Form R are presented. These specifications must be followed exactly for the EPA to accept the magnetic media submission.

Review of Emergency Systems Final: Report to Congress

June 1988

This document details the approach, findings and recommendations of the EPA's Review of Emergency Systems. This report documents the surveys, evaluations, site visits and expert panels which contributed to the Review.

Common Synonyms for Chemicals Listed Under Section 313 of the Emergency Planning and Community Right-to-Know Act

January 1988

This glossary is divided into two parts. Part I is a listing by CAS number of each Section 313 toxic chemical followed by common synonyms for that chemical. Part 2 contains names and synonyms in an alphabetical listing. This glossary enables the trade and common names of a substance to be matched to that substance's CAS number or to other synonyms. 1988 supplies exhausted. Additional copies available by 9/15.

THE FOLLOWING DOCUMENTS ARE AVAILALBE FROM OTHER SOURCES:

Hazardous Materials Emergency Planning Guide (NRT-1)

March 1987

The purpose of this guide is to assist communities in planning for hazardous materials incidents. This guide outlines the development of planning teams and hazardous materials emergency plans. It also addresses approaches to plan appraisal and continuing planning.

This document is available through written request to:

Hazmat Planning Guide (NRT-1)
OS-120
401 M St. SW
Washington, DC 20460

Phase II Toxic Chemical Release Interpretive Documents

These documents provide assistance in interpreting and understanding the information collected under the toxic chemical release reporting requirements:

Toxic Chemical Releases and Your Right-to-Know (brochure)

Questions and Answers About the Emergency Planning and Community Right-to-Know Act and the Toxic Release Inventory for Use by State/Local Officials (24 page booklet)

Summary of Regulatory Levels, Standards and Threshold Limit Values on TRI Chemicals (IBM compatible floppy disk)

Hazardous Substance Fact Sheets

These documents are distributed through:

TSCA Assistance Office
US EPA (TS-799)
401 M Street SW
Washington, DC 20460
Attn: TSCA Hotline (TRI)

Estimating Releases and Waste Treatment Efficiencies for the Toxic Chemical Release Inventory Form

December 1987

This manual provides an overview of the general methods that may be used to estimate releases subject to the reporting requirements. Examples of the application of most of the methods discussed are included. Sources of additional information on release estimation are also provided. Limited numbers of copies will be distributed to each region for seminars and training sessions.

This document is available for $11 through the:

Superintendent of Documents
Government Printing Office
Washington DC 20402-9325
Telephone number (202) 783-3238

The GPO stock number is 055-000-00270-3.

1987 Emergency Response Guidebook

September 1987

This guidebook list over 1,000 hazardous materials by name and DOT number. General hazards and isolation distances for these materials are also discussed.

This document is available through:

Office of Hazardous Materials Transportation
Attn: DMH-50
Research and Special Projects Administration/DOT
400 7th Street, SW
Washington, DC 20590

THE FOLLOWING DOCUMENTS WILL BE AVAILABLE IN THE NEAR FUTURE.

Important Information for Chemical Suppliers, Supplier Notification Requirements

This pamphlet assists chemical suppliers who may be subject to the supplier notification requirements under Section 313 of Title III. The pamphlet explains the supplier notification requirements, gives examples of situations which require notification, describes the trade secret provision, lists the Regional Section 313 contacts, and contains a sample notification. This document is currently in print. Mass mailings to chemical suppliers will be conducted in September and October, additional copies will be sent to the Regions and relevant trade associations.

Community Right-to-Know and Small Business (Brochure)

This illustrated brochure is directed toward businesses which will be newly covered under Section 311 and 312 of Title III as a result of the OSHA expansion of the Hazard Communication Standard to include non-manufacturing businesses. The brochure provides background information on Title III and the community-right-to-know reporting requirements (Sections 311 and 312). It describes the reporting requirements for small businesses and helps them determine if they need to comply.

Chemicals in Your Community, A Citizen's Guide to the Emergency Planning and Community Right-to-Know Act.

This booklet is intended for all audiences to provide a general overview of the Title III requirements and benefits. Part I of the booklet describes the provisions of Title III and Part II describes more fully the authorities and responsibilities of the groups of people affected by this law. This document should be available by the end of October.

Title III and LEPCs: Implementing the Emergency Planning and Community Right-to-Know Act

The purpose of this pamphlet is to offer suggestions to LEPCs to help them implement Title III. The pamphlet describes the function of LEPCs and provides ideas and examples based on past LEPC, EPA and FEMA experiences.

Toxic Release Inventory- Technical Questions and Answers

This document is similar in style to the other TRI Q&A document. This document focuses on technical questions on release estimation and other chemical and engineering issues. Available March 1989.

3/15/89

ROSTER
EMERGENCY PLANNING/COMMUNITY RIGHT TO KNOW OUTREACH SUBCOMMITTEE
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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF
PESTICIDES AND TOXIC SUBSTANCES

DOCUMENTS AVAILABLE FROM EPA

Title III Section 313 Reporting Form (EPA Form R)

Instructions for completing Form R

Synonyms Document (synonyms for section 313 chemicals)

Title III List of Lists (chemicals subject to reporting under diffferent sections of Title III)

Estimating Releases and Waste Treatment Efficiencies for the Toxic Chemical Release Inventory Form (overall technical guidance document)

Industry-specific technical guidance documents:

- Electroplating Operations
- Primary, Lead, Zinc, and Cadmium Smelting
- Presswood and Laminated Wood Products Manufacturing
- Wood Preserving
- Roller, Knife, and Gravure Coating Operations
- Spray Application of Organic Coatings
- Electrodisposition of Organic Coatings
- Rubber Production and Compounding
- Paper and Paperboard Production
- Primary Aluminum Smelting
- Primary Copper Smelting
- Leather Tanning and Finishing Processes
- Semiconductor Manufacture
- Printing Operations
- Monofilament Fiber Manufacture
- Textile Dyeing
- Formulating Aqueous solutions

4/1/88

ROSTER
EMERGENCY PLANNING/COMMUNITY RIGHT TO KNOW OUTREACH SUBCOMMITTEE

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4/1/88

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REQUEST FOR TITLE III SPEAKER

Name of Organization/Requestor:

Telephone #: _____

Date of Request: _____

Date of Speaking Engagement: _____

Location of Speaking Engagement:

Audience and Size:

Topic/Theme (include level of detail-technical, general,etc):

Speaker Assigned (name, mail code, & telephone #)

Equipment Needed (slides, overhead, display, etc.)

Other Pertinent Information:

EPA Staff Contact/Phone: _____

Regional Contact/Phone: _____

Feedback:

Please return this form to Mike McDonell, TS-799. (475-8995)
Attach talking points, speech, etc.

cc: M. Oge
J. Makris
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C. Osolin
J. Bearden
M. McDonell

THE EMERGENCY PLANNING and COMMUNITY RIGHT-TO-KNOW ACT of 1986

QUESTIONS and ANSWERS

February 29, 1988

Prepared by
The Emergency Planning and Community Right-To-Know Information Hotline
For more information call
1-800-535-0202
(or (202) 479-2449 in the Washington, DC metro area)

The Emergency Planning and Right-To-Know Act of 1986 Questions and Answers

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TITLE III: GENERAL

What is the relationship between EPA's voluntary, non-regulatory Chemical Emergency Preparedness Program (CEPP) and Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA)?

In June 1985, the Administrator of EPA announced a comprehensive strategy for dealing with air toxics in the environment. As part of that strategy, EPA issued the CEPP interim guidance in December 1985. CEPP was developed to increase State and local community awareness of the possibility of accidental releases of extremely hazardous substances and to develop State and local emergency response plans and capabilities for dealing with chemical emergencies. A list of 366 extremely hazardous substances was included in the CEPP interim guidance as a focus for preparedness activities.

On October 17, 1986, the Superfund Amendments and Reauthorization Act (SARA) was signed into law. A major SARA provision is Title III: "Emergency Planning and Community Right-to-Know Act of 1986." Title III establishes requirements for federal, State, and local governments as well as industry regarding emergency planning and "community right-to-know" reporting on hazardous chemicals. The emergency planning provisions of Title III require each State to establish a State emergency response commission, emergency planning districts, and a local emergency planning committee for each district. The state commission and local committees are responsible for preparing and implementing emergency plans as well as receiving and disseminating copies of material safety data sheets (MSDS), chemical inventory/release forms, toxic chemical release forms, follow-up written notices (Section 304), and emergency response plans.

EPA views Title III as the legislative embodiment of CEPP with several key additions. Title III builds upon EPA's CEPP and numerous State and local programs aimed at helping communities to meet their responsibilities regarding potential chemical emergencies by adding new, federally mandated concepts: a planning structure for the public sector (state commissions, planning districts, local committees) and reporting requirements for the private sector to help keep the community informed of potential chemical hazards. Title III also has provisions for training grants, a study of emergency systems, an emissions inventory, enforcement, civil suits, and trade secrets.

The general planning portions of the CEPP interim guidance (chapters 1, 2, 4, 5) have been incorporated into the *Hazardous Materials Emergency Planning Guide* developed by the National Response Team (NRT). This guide, published in March 1987, met the Title III requirement for the NRT to publish guidance on the preparation of emergency plans by March 17, 1987. The specific technical aspects of the CEPP interim guidance (site specific information and criteria included in Chapters 3 and 6) were issued in December 1987 to supplement the NRT guide.

EMERGENCY PLANNING
(Sections 301-303, 305)

How are States expected to form their State emergency response commission (SERC) as required under Title III?

States are required to establish a State emergency response commission (SERC) under Title III. The SERC may consist of existing emergency response organizations or may be an entirely new mechanism to address this requirement. A SERC is responsible for designating emergency planning districts within the State and appointing, supervising, and coordinating a local emergency planning committee for each district. Where appropriate, existing political subdivisions or multi-jurisdictional planning organizations may be designated as the districts and committees.

EPA believes it is important that these SERCs include representation from more than one State agency. Many State commissions agree and have included agencies dealing with environmental protection, emergency management, public health, occupational safety and health, labor, transportation, the attorney general's office, and commerce department, as well as other appropriate public and private sector interests. Each of these agencies have expertise to bring to an emergency response commission. In addition, EPA's regional offices are available to assist States in establishing and implementing required planning structures.

Expertise in chemicals, process safety, and the hazards posed by chemicals make State environmental protection agencies vital to the SERCs. State emergency management agencies' knowledge of emergency planning and preparedness are also needed in order to make a State commission an effective tool for emergency planning at the local level. Public health agencies can provide the knowledge of potential consequences to human health, including worker safety, while the transportation agency should be involved due to the prevalence of transportation incidents involving hazardous materials. Working together, these agencies can help the State better meet its responsibilities under Title III. Of course, a governor may wish to choose one of these agencies to serve as the lead agency for the Commission. Some States have established such an organization; other States have enlisted the assistance of industry and transportation officials in such multi-agency/organization forums. The more expertise in a State commission, the better that commission will be able to meet the Title III

requirements and assist communities in meeting their responsibilities to their citizens.

A December 1986 letter from the National Governors' Association to all governors summarizes the Title III requirements and requests the designation of a contact person in each governor's office to receive further information on what other States and EPA are doing to implement Title III. The letter also mentions the existence of a State Chemical Emergency Preparedness Program contact and a State representative to the Regional Response Team. The need to coordinate with these individuals in the development of the State commission was strongly emphasized.

Must the States notify EPA when they have established the State Emergency Response Commissions and local emergency planning committees? Will EPA publish this information in the Federal Register or disseminate it in some way so that all affected parties may have access to it?

Although states are not required to notify EPA of the establishment of State emergency response commissions and local emergency planning committees, the Agency strongly encourages States to do so. In addition, EPA encourages States to notify the public, especially potentially affected facilities. Interested parties may contact their Governor's office for information on their state commission, or call the Emergency Planning and Community Right-To-Know Information Hotline at 1-800-535-0202. EPA Regional Administrators have written to the governors of each State and Territory to inform them of Title III requirements, to offer information and technical assistance in the development of State and local planning structures, and to request that they notify EPA of the establishment of the State emergency response commission.

Title III requires each local emergency planning committee to prepare an emergency plan by October 17, 1988. What federal resources will be available to State and local governments to prepare these plans?

Recognizing that emergency planning is primarily a State and local responsibility, Congress did not explicitly authorize federal funds for implementation of Title III requirements. However, Section 305 of Title III does authorize $5 million a year for four years for the Federal Emergency Management Agency (FEMA) to make grants to support State/local- and university-sponsored programs for training-related activities associated with hazardous chemicals. In the absence of explicit grantmaking authority for emergency planning activities, the federal government will continue to provide technical assistance and guidance as well as training to support state and local emergency planning.

EPA, along with other members of the National Response Team, has developed the *Hazardous Materials Emergency Planning Guide*, which was published in March 1987. This was supplemented in December of 1987 with a technical guidance document for the hazard analysis of extremely hazardous substances. In addition, chemical profiles on each extremely hazardous substance will be available in early 1988.

EPA will also continue to provide technical assistance and training to States and local communities through its regional offices and the Environmental Response Team (ERT) in Edison, New Jersey. ERT, in addition to its ongoing training courses, is developing two additional training modules focusing on extremely hazardous substances. EPA and FEMA have developed a hazardous materials contingency planning course with train-the-trainer delivery for states. EPA is developing a module on the National Contingency Plan, the hazardous materials response system, and extremely hazardous substances for incorporation into 17 currently identified FEMA emergency preparedness and response courses. Additionally, EPA regional offices, along with other federal agencies through the Regional Response Teams, are providing technical assistance through workshops and consultation with State and local officials upon request.

What will happen if a State refuses to comply with the emergency planning provisions?

A governor who does not designate a State emergency response commission becomes the commission by default. While the governor could choose not to fulfill any of the Title III provisions, the public could still request information that would be submitted by facilities as part of the reporting requirements of Title III. This information includes copies of the emergency plan, material safety data sheets (MSDS), inventory forms, toxic chemical release forms, and follow-up emergency notices. In addition, Title III provides for citizens to bring suits against the State to force it to comply with certain Title III provisions.

Section 305 of Title III authorizes the Federal Emergency Management Agency (FEMA) to make grants to support State and local government- and university-sponsored training programs. Specifically, what can these grants be used to fund?

The grants will be used to expand training activities beyond the existing training base of States. All training offered under Section 305 funding must be in addition to training activities already underway.

The National Response Team has identified training courses supporting Title III that warrant increased availability among State and local personnel. Each state emergency response commission will be responsible for channeling training to high hazard or priority areas and for approving training proposals within the state. EPA expects initial heavy emphasis on planning and awareness training consistent with Title III objectives.

FEMA and EPA have developed an addendum to the Comprehensive Cooperative Agreement (CCA) which will allow states to submit requests for these funds. This addendum was sent to all States on June 24, 1987.

Are emergency exercise design, development, and implementation activities eligible to be funded under Section 305?

Emergency exercises involving hazardous substances—such as tabletop, functional, and full-field exercise activities—are conducted routinely

throughout the United States. Exercises which are part of specific courses or workshops such as EPA's Hazardous Materials Incident Response Operations course are covered under Section 305 funding. Specific exercises are not included in Section 305 funding for 1988.

To what extent is a State required to plan if there are only a few (or no) facilities having extremely hazardous substances present in excess of threshold planning quantities but there is significant interstate transportation of these and other hazardous substances?

While Section 327 of Title III generally exempts transportation from coverage under most Title III reporting requirements, it does require comprehensive emergency plans that address all hazardous materials and the potential for both fixed facility and transportation incidents (Section 303). The list of extremely hazardous substances should provide a focus and a starting point for planning. Therefore, the transportation routes of all hazardous substances should be considered in any plan.

Section 301 includes transportation officials among those representatives who must participate in local emergency planning committees. The emergency release notification requirement under Section 304 requires immediate notification of releases of extremely hazardous substances in transportation incidents.

Title III states that the Regional Response Teams (RRTs) "may" review and comment upon an emergency plan. What criteria will the RRT use for reviewing these plans?

The National Response Team (NRT) recently published the *Hazardous Materials Emergency Planning Guide* in which Appendix D: Criteria for Assessing State and Local Preparedness contains an adaption of criteria developed by the NRT/Preparedness Committee in August 1985. These criteria may be used for assessing local emergency plans. In addition, the NRT will develop guidance for RRT use in the selection of local plans for which review is requested.

What is the primary purpose of Section 302 notification requirements?

Notifications indicating that a facility has one or more extremely hazardous substances in excess of the threshold planning quantity help to identify locations within the state where emergency planning activities can be focused. While the substances on the list do not represent the entire range of hazardous chemicals used in commerce, they have been designated as those substances which are most likely to inflict serious injury or death upon a single, short-term exposure. Therefore, Section 302 notifications should be useful in helping State and local governments identify those areas and facilities that represent a significant potential for experiencing a hazardous material incident.

What is the purpose of the list of extremely hazardous substances in regards to the emergency planning requirements of Title III?

The extremely hazardous substances list and its threshold planning quantities are intended to help communities focus on the substances and facilities of most immediate concern for emergency planning and response. However, while the list includes many of the chemicals which may pose an immediate hazard to a community upon release, it does not include all substances which are hazardous enough to require community emergency response planning. There are tens of thousands of compounds and mixtures in commerce in the United States, and in specific circumstances many of them could be considered toxic or otherwise dangerous. The list represents only a first step in developing effective emergency response planning efforts at the community level. Without a preliminary list of this kind, most communities would find it very difficult to identify potential chemical hazards among the many chemicals present in any community.

Similarly, threshold planning quantities are <u>not</u> absolute levels above which the extremely hazardous substances are dangerous and below which they pose no threat at all. Rather, the threshold planning quantities are intended to provide a "first cut" for emergency response planners in communities where these extremely hazardous substances are present. Identifying facilities where extremely hazardous substances are present in quantities greater than the threshold planning quantities will enable the community to assess the potential danger posed by these facilities.

Communities also will be able to identify other facilities posing potential chemical risks and to develop contingency plans to protect the public from releases of hazardous chemicals. Sections 311 and 312 of Title III provide a mechanism through which a community will receive material safety data sheets and other information on extremely hazardous substances, as well as many other chemicals, from many facilities which handle them. A community can then assess and initiate planning activities, if desirable, for quantities below the threshold planning quantity and for other substances of concern to them.

In addition to the assistance provided by the extremely hazardous substances list and the threshold planning quantities, community emergency response planners will be further aided by the National Response Team's *Hazardous Materials Emergency Planning Guide*. A separate notice of availability of this document was published in the Federal Register on March 17, 1987 (52 FR 8360, 61) as required under Section 303(f) of Title III. The planning guide was supplemented in December 1987 with Technical Guidance to assist local emergency planning committees in evaluating potential chemical hazards and setting priorities for sites. This technical document provides more detailed guidance on identifying and assessing the hazards associated with the accidental release of hazardous substances on a site-specific basis. It addresses considerations such as the conditions of storage or use of the substance (e.g., whether under temperature or pressure); its physical properties (e.g., physical state—solid, liquid, or gas); volatility; dispersibility; reactivity; location (e.g., distance to affected populations); and quantity.

How did EPA determine threshold planning quantities for extremely hazardous substances?

The Agency assigned chemicals to threshold planning quantity (TPQ) categories based on an index that accounts for the toxicity and the potential of each chemical, in an accidental release, to become airborne. This approach does not give a measure of absolute risk, but provides a basis for relative measures of concern.

Under this approach, the level of concern for each chemical is used as an index of toxicity, and physical state and volatility are used to assess its ability to become airborne. The two indices are combined to produce a ranking factor. Chemicals with a low ranking factor (highest concern), based on the

Agency's technical review, are assigned a quantity of one pound. It is believed that the one-pound quantity represents a reasonable lower limit for the most extremely hazardous substances on the list. Chemicals with the highest ranking factors, indicating lower concern, were assigned a threshold planning quantity of 10,000 pounds. This ensures that any facility handling bulk quantities of any extremely hazardous substances would be required to notify the State commission. Between the limits of one pound and 10,000 pounds, chemicals were assigned to intermediate categories of 10, 100, 500, or 1,000 pounds based on order of magnitude ranges in the ranking factors. The selection of the intermediate categories was based on standard industrial container sizes between one and 10,000 pounds.

The Agency believes that limited State and local resources should be focused on those substances that could cause the greatest harm in case of an accidental release. The TPQs developed in this approach meet the objective such that substances that are most likely to cause serious problems (extremely toxic gases, solids likely to be readily dispersed, or highly volatile liquids) have lower TPQs than those that might be toxic but are not likely to be released to the air (non-reactive, non-powdered solids).

How can a facility determine whether it has present an amount of an extremely hazardous substance (EHS) which equals or exceeds the threshold planning quantity (TPQ)?

To determine whether the facility has an amount of an extremely hazardous substance which equals or exceeds the TPQ, the owner or operator must determine the total amount of an extremely hazardous substance present at a facility on May 17, 1987 or any time after that date, regardless of location, number of containers, or method of storage. This calculation must also take into account the amount of an extremely hazardous substance present in mixtures or solutions in excess of one (1) percent and should include examination of such process components as reaction vessels, piping, etc., where formation of an EHS as a by-product may take place.

How are the threshold planning quantities (TPQs) for mixtures, solutions, or formulations determined?

The concentration of a chemical in a mixture that may present a potential hazard depends upon its toxicity. Public comment, for example, referred to

OSHA's use of a level of 0.1 percent as a concern cut-off level for a carcinogen in a mixture. EPA believes that the release of an amount equal to the threshold planning quantity of the substance at concentrations of less than one percent is not likely to produce a concentration equal to the level of concern off-site.

The issue of alloys, amalgams, or polymers as a mixture is currently under Agency review. However, in evaluating whether to notify for mixtures, facility owners or operators should compare the appropriate threshold planning quantity with the actual amount of the extremely hazardous substance present in the mixture. For example, if the TPQ for a given chemical on the list is 100 pounds and that chemical is 20 percent by weight of a mixture, notification would be necessary if 500 pounds or more of that mixture were present at a facility.

In considering potential hazards from airborne releases, EPA believes it unlikely, even assuming large releases of a mixture, that concentrations of less than one percent will lead to severe airborne exposure levels of the toxic component off-site. Nevertheless, the Agency has decided to retain the one percent minimum for the evaluation of all mixtures, solutions, or formulations containing extremely hazardous substances.

Will the local planning committees impose significant requirements on small businesses? Will EPA clarify the information requirements in the emergency planning guidance and in the rulemaking?

The Agency's small business analysis does not indicate that emergency planning requirements will cause a significant burden to small facilities. Small facilities are likely to use or store fewer extremely hazardous substances and handle smaller amounts, and their level of participation in the planning process will be smaller. In addition, small facilities will be represented on local emergency planning committees, and their concerns will be addressed there. Participation in the planning process provides an opportunity to present concerns regarding the burden of planning and to ensure that committee requests for information are necessary. In particular, small businesses may wish to encourage special small business representation on the local emergency planning committee and also make their concerns known through their facility coordinators.

In addition, the National Response Team's *Hazardous Materials Emergency Planning Guide* (notice of availability published on March 17, 1987, 52 FR 8360) describes the information requirements established under Title III and how this information will be useful in developing a local emergency plan.

What types of facilities are exempt from Section 302 notification requirements?

With the exceptions of vessels and Federal facilities, Section 302 notifications are required from owners or operators of any facility that has present at any time, starting May 17, 1987, a listed extremely hazardous substance (EHS) in any amount exceeding the Threshold Planning Quantity (TPQ) associated with that substance.

How do Section 302 notification requirements apply to transportation of an extremely hazardous substance (EHS)?

Although Section 302 requirements do not apply to the transportation of any EHS, including transportation by pipeline, transportation activities within a community should be addressed in local emergency plans. Furthermore, the Section 302 requirements do not apply to the storage of EHS incident to transportation if the EHS is under active shipping papers.

Are facilities exempt from Section 302 notification requirements if they, produce, use, or store mixtures whose extremely hazardous substance component information is not available on the MSDS provided by the manufacturer?

If the facility which produces, uses, or stores mixtures knows or reasonably should know the components of the mixture, the facility owner or operator must notify under Section 302 if the extremely hazardous substance component is more than one percent of the total weight of the mixture and more than the threshold planning quantity. The facility owner or operator is not under an obligation, however, to inquire of the manufacturer the components of the mixture.

Since certain chemicals at research laboratories are exempt from the definition of "hazardous chemicals" and thus possibly exempt from release notification requirements under Section 304, can this exclusion be extended to Section 302 planning requirements?

Title III defines "hazardous chemical" under Section 311. Under Section 311(e) "any substance to the extent it is used in a research laboratory or a hospital or other medical facility under the direct supervision of a technically qualified individual" is excluded from the definition of "hazardous chemical." Section 304 of Title III also states that releases of extremely hazardous substances and CERCLA substances are reportable under Section 304 only when they are released from a facility where "hazardous chemicals" are produced, used, or stored. However, because the planning requirements are not tied in any way to "hazardous chemicals," the "hazardous chemical" exclusion of Section 304 does not extend to Section 302.

In addition, for emergency release notification purposes under Section 304, if a release of an extremely hazardous substance or CERCLA substance exceeds the reportable quantity and occurs on a facility that produces, uses, or stores a "hazardous chemical," the facility owner or operator must notify the required parties. Accordingly, the research laboratory is exempt from Section 304 emergency notification only if no hazardous chemicals are produced, used or stored at the facility, other than those used at the laboratory under the direct supervision of a technically qualified individual.

If an extremely hazardous substance is not stored on-site but is produced in a process such as incineration, is it exempt from both threshold planning quantity calculation and release reporting if the release is covered by a Clean Air Act permit?

If the extremely hazardous substance is produced on-site in a process such as incineration, it is considered present at the facility and subject to Section 302 reporting requirements. However, if a threshold planning quantity is not exceeded at any one time (starting May 17, 1987 and continuing up to the present date), then the extremely hazardous substance need not be reported to the local emergency planning committee. Further, if the release is federally permitted under Section 101(10) of CERCLA, which includes permitted emissions into the air, then the release need not be reported under Section 304 of Title III.

Can existing State and local laws that provide substantially similar emergency planning supercede the specific provisions of Section 302 Federal law?

Title III (Section 321) generally provides that nothing in Title III shall preempt or affect any State or local law. However, material safety data sheets, if required under a State or local law passed after August 1, 1985, must be identical in content and form to that required under Section 311. Accordingly, while Title III does not supercede State or local laws, EPA has no authority to waive the requirements imposed under Title III. These requirements, including the threshold planning quantities, are intended to be minimum standards.

EPA is working with States that have developed reporting forms and planning structures to determine the most efficient approaches to avoid duplication of effort with existing State or local structures, forms, and requirements.

EMERGENCY RELEASE NOTIFICATION
(Section 304)

Who must be notified when a release occurs?

In the event that a listed CERCLA hazardous substance or extremely hazardous substance is released in an amount equal to, or exceeding the reportable quantity (RQ) for that substance, the following parties must be notified:

- State Emergency Response Commission (effective May 23, 1987)
- Community Emergency Coordinator for the local emergency planning committee (effective August 17, 1987, or as soon the committee is established).

These new notification procedures are designed to provide for more timely notification to State and local authorities. In addition, the owner/operator of a facility is still required to notify the National Response Center(800/424-8802) when a release of a CERCLA hazardous substance (in excess of an RQ) takes place.

What chemicals are subject to reporting?

Chemicals subject to Section 304 notification requirements are CERCLA hazardous substances and the extremely hazardous substances listed under Section 302 of Title III. At present, the CERCLA list contains 721 chemicals, 134 of which are also extremely hazardous substances. For the remaining 232 extremely hazardous substances not currently on the CERCLA list, their reportable quantity (RQ) is tentatively set at one pound until they are proposed for listing as a CERCLA hazardous substance.

For a reportable quantity (RQ) release of one of the 232 extremely hazardous substances, the appropriate State and local agencies must be notified. EPA is in the process of adding these 232 chemicals to the CERCLA hazardous substance list. When they become CERCLA hazardous substances, notification of the NRC will also be necessary.

What if the State commission and/or local committees must be notified of a release but have not yet been established?

States were required to establish their commissions by April 17, 1987, and those commissions were to establish local committees not later than 30 days after the designation of emergency planning districts or by August 17, 1987, whichever is earlier.

Section 301 of Title III provides that if the State commission is not set up by April 17, 1987, the Governor must operate as the State commission, and thus notification must be made even if no commission is established. However, EPA has been informed that all States have established an Emergency Response Commission. Local committees are required to be established not later than 30 days after the designation of emergency planning districts or by August 17, 1987, whichever is earlier. If local committees are not set up by August 17, notifications must still be made, but they should be provided to local emergency personnel such as local emergency management offices or fire departments. As indicated by the legislative history of this provision, Congress intended that the emergency release notification requirements become effective as of the dates when the commissions and committees are to be established. Local and State governments may make any arrangements necessary for the receipt of the release information when commissions and committees are not yet established.

How is an off-site release determined to be subject to Section 304 notification requirements?

Releases need not result in actual exposure to persons off-site in order to be subject to release reporting requirements; potential exposure is sufficient. Any release into the environment above the reportable quantity may have the potential to result in exposure to persons off-site and therefore should be reported under Section 304 notification.

Do the CERCLA and Title III telephone notifications include the same basic information, such as whether the incident is still ongoing, abatement actions by whatever entities, cause of the accident, injuries caused by the incident if known, amount spilled, etc.?

The agency does not believe that the notification specified in Section 304 should vary from the CERCLA notification in any significant way.

Should the written follow-up information go not only to the local planning committee and the State commission but also to the State environmental agency?

Section 304(c) of Title III mandates that written follow-up notification go to the same entities that received the initial oral notification, i.e., the State commission and the local emergency coordinator of the local emergency planning committee. Title III does not require that written follow-up information be given to the State environmental agency. State environmental agencies may, however, request information through the State commission or local committee. In most cases, environmental agencies are represented on the commission and the information will be available to them.

Should the location and cause of an incident be included in the written follow-up report?

To be consistent with CERCLA, EPA believes that the location of the release is always essential for both emergency response and follow-up actions and should be identified in any release notification under Section 304. The cause of the accident should always be included in the follow-up report to provide information for local, State, and Federal officials for preparedness and prevention purposes.

Should the written notification also include results of a facility's inspection? An inspection may specify measures to be applied to prevent future releases.

While this information is certainly useful in terms of preventing similar releases, it is not required. However, State and local governments may wish

to require such information as part of their notification programs. EPA is beginning an initiative to focus corporate attention on releases. It is called the Accidental Release Information Program. Under this program, a releaser who has more than a specified number of releases of a certain hazardous substance, or releases in certain quantities above the reportable quantity, must report in writing to EPA the causes of the accident, prevention practices in place, and the specific steps that are being taken to prevent re-ocurrence of the release.

The follow-up emergency notice requires the owner or operator of a facility that has released a reportable quanitity of a substance requiring Section 304 notification to relate, in a follow-up notice, "any known or anticipated acute or chronic health risks associated with the release." Since general health information is already given on a "material safety data sheet" (MSDS) for the chemical, will an indication that "severe adverse health effects may be expected" suffice for this requirement?

No. The health information contained in an MSDS is not specific enough to be of use to health professionals, especially if the chemical name is confidential on the MSDS.

What facilities are exempt from Section 304 notification requirements?

A facility itself can only be exempted if there are no hazardous chemicals present at the facility. The term "hazardous chemical," as defined under Section 311 of Title III, includes any substance which constitutes a physical or health hazard. This broad definition is borrowed from the Occupational Safety and Health Act (OSHA) Hazard Communication Standard, but there are certain exemptions specified in Section 311. However, there is no single classification or type of business (e.g. manufacturers) that is subject to Section 304 reporting requirements. Therefore, it is probable that only very few facilities will actually have no hazardous chemicals and thus be exempt from Section 304 notification requirements.

Are there exemptions to Section 304 reporting requirements?

The statute provides several exemptions from notification. These are:

(a) "federally permitted releases" as determined under the Comprehensive Environmental Response, Compensation and Liability Act of 1980 Section 101(10);

(b) releases which result in exposure only to persons solely within the facility boundaries;

(c) releases from a facility which produces, uses, or stores no hazardous chemicals;

(d) "continuous releases" as defined under CERCLA Section 103(e) except for statistically significant releases;

(e) application of a Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) registered pesticide, as defined under CERCLA Section 103(e) in accordance with its intended purpose;

(f) emissions from engine exhaust of a motor vehicle, rolling stock, aircraft, or pipeline pumping station;

(g) normal application of fertilizer; and

(h) release of source, byproduct, or special nuclear material from a nuclear incident at a facility subject to requirements of the Price-Anderson Act (i.e., nuclear power plants).

It should be noted, however, that some releases occurring at a facility which are not reportable under Section 304 may still be reportable releases under CERCLA Section 103 and, if so, must be reported to the National Response Center. Release reporting under Section 304 is in addition to release notification under CERCLA Section 103. Thus, notice to the National Response Center may be required even if no local or State reporting is required.

How are "continuous" and "federally permitted" releases interpreted under Section 304?

Certain conditions must be examined in order to determine whether they meet the definition of "federally permitted" or "continuous" releases. The exemption for "federally permitted releases" is identical to that under Section 103 of CERCLA. Section 101(10) of CERCLA defines "federally permitted releases" for purposes of Section 103 of CERCLA and release notification under Title III and includes 11 types of specific releases permitted under certain State and federal programs. As EPA issues clarifications of "federally permitted release" under Section 103 of CERCLA, these clarifications will apply equally to release notifications under Section 304 of Title III. Clarification of the definition of "federally permitted release" will be the subject of later rulemaking.

Under the "continuous release" provision of Section 103 of CERCLA, the release must be continuous and predictable with respect to quantity and time in order to be exempt from Section 304 reporting requirements. Both federally permitted and continuous releases will be the subject of rulemaking later this summer. In the interim, EPA is available to help clarify these definitions as they apply to specific circumstances in order to ensure compliance with the intent of these reporting requirements. "Continuous" releases must be reported annually under CERCLA Section 103, but do not have to be reported under Section 304 of Title III.

Does the "federally permitted release" exemption apply fully to State-permitted releases?

State permitted releases are exempted only to the extent that the releases are considered "federally permitted" under Section 101(10) of CERCLA.

Are releases above the amount permitted under "continuous releases" exempt from Section 304 notification requirements?

Because "statistically significant increases" from a "continuous release" must be reported as an episodic release under CERCLA Section 103(a), such releases must also be reported under Section 304 of Title III. Any clarifications or regulations interpreting "continuous releases" or

"statistically significant increases" under CERCLA Section 103(f) will also apply to Section 304 of Title III.

If disposal of hazardous waste or solid waste is performed according to the permitting and other relevant requirements of the Resource Conservation and Recovery Act (RCRA), the Toxic Substances Control Act (TSCA), or other applicable federal or State laws, is it subject to emergency release notification?

EPA is currently considering whether TSCA-regulated disposal sites should be subject to CERCLA notification. Regardless of the outcome of that decision, it is important to note that spills and accidents occurring during disposal *and outside of the approved operation,* and resulting in reportable releases of extremely hazardous substances or CERCLA hazardous substances, must be reported to the State emergency response commission and local emergency planning committee as well as to the National Response Center. In addition, PCB releases of a reportable quantity or more from a TSCA-approved facility (as opposed to disposal into such a facility), must be reported under Section 304 and to the National Response Center.

The RCRA disposal issue is similar to PCB disposal under TSCA. In a final rule issued in April 1985, EPA determined that where the disposal of wastes into permitted or interim status facilities is properly documented through the RCRA manifest system and RCRA regulations are followed, notification under CERCLA does not provide a significant additional benefit as long as the facility is in substantial compliance with all applicable regulations and permit conditions. However, spills and accidents occurring during disposal that result in releases of reportable quantities of hazardous substances must be reported to the National Response Center under CERCLA Section 103. (50 FR 13461; April 4, 1985). EPA believes that the same rationale applies to Section 304. However, no notification of proper disposal into RCRA facilities is required.

Are mining and mineral extraction wastes exempt under Section 304?

No. The release notification requirements apply if the wastes are CERCLA hazardous substances or extremely hazardous substances.

Does the CERCLA "petroleum exclusion" apply to release reporting under Section 304 of Title III, since "petroleum, including crude oil or any fraction thereof" is exempt from reporting under Section 103 of CERCLA?

"Petroleum" is exempted generally from CERCLA responsibilities since it is excluded from the definition of a "hazardous substance" under Section 101(14) and "pollutant or contaminant" under Section 101(33) of CERCLA. Because no such exclusion exists under Title III, if extremely hazardous substances are present in petroleum, those substances are subject to applicable emergency planning and release notification requirements under Title III.

Can the "de minimis" concept used in determining the threshold planning quantities in mixtures be applied in the determination of the reportable quantity for emergency release notification?

No. The "de minimis" quantity was set in place for threshold planning quantities simply to make the calculation of the total amount of extremely hazardous substances on a facility more straightforward for planning purposes. The more dilute an extremely hazardous substance is, the more difficult it is to identify the substance in a mixture and the less likely it is to be released in a large quantity. For Section 304 release reporting, however, the "de minimis" is the reportable quantity (RQ) because the extremely hazardous substance is already in the environment potentially doing harm. But whether the RQ is exceeded depends on the amount of the substance in the mixture, if known. This is the CERCLA "mixture" rule. See the April 4, 1985 RQ rule (50 FR 13463).

How are transportation-related releases covered under Section 304?

Section 304 covers all releases of listed hazardous or extremely hazardous substances, including those involved in transportation in excess of the reportable quantity (RQ). Owners or operators of transportation facilities may call 911 or the local telephone operator, in order to satisfy Section 304 notification requirements when a transportation-related release occurs. Local emergency planning committees should work with the local 911 system

and telephone operators to ensure such transportation release notifications are immediately relayed to the community emergency coordinator.

What is the responsibility of transportation owners or operators in the event of a spill or release of extremely hazardous substances or CERCLA substances?

Although owners or operators of transportation facilities are not required to notify State and local authorities with regard to Section 302 emergency planning, they are required to report releases under Section 304.

With regard to stationary facilities, Section 304 requires owners and operators to report releases to the local emergency planning committee and to the State emergency response commission. Owners and operators of transportation facilities under Section 304 are allowed to call the 911 emergency number or in the absence of a 911 number, the operator, in lieu of calling the State commission and local committee. The rationale for this separate reporting is that transportation operators on the road most likely will not know the telephone numbers of all relevant State and local entities on their routes. If the transportation operator is in a community which has a generic emergency number rather than 911, the generic number should be used. If the release is of a CERCLA hazardous substance, a call to the National Response Center is also required. Local committees should consider training all personnel responsible for receiving telephone notice of such a release, so that proper notification procedures will be maintained.

How does EPA define a "transportation-related release?"

EPA defines a "transportation-related release" to mean a release during transportation, or storage incident to transportation if the stored substance is moving under active shipping papers and has not reached the ultimate consignee.

In the case of transportation-related releases, should the emergency release notification requirements apply to the owner or the operator of the facility?

Either the owner or operator may give notice after a release. Owners and operators may make private arrangements concerning which party is to provide release notification. However, under Section 304 both owner and operator are responsible if no notification is provided.

Do the Section 304 release notification requirements apply to pipelines, barges, and other vessels as well as to other transportation facilities?

Title III (Section 327) does not apply to the transportation of any substance or chemical, including transportation by pipeline, except as provided in Section 304. Section 304 requires notification from facilities of releases of extremely hazardous substances and CERCLA hazardous substances. The word "facility" is defined in Section 329 to mean stationary items, which would include pipelines. The definition also includes, for purposes of Section 304, motor vehicles, rolling stock, and aircraft. Because barges and other vessels are not included in the definition of "facility," they are not subject to Section 304 reporting requirements.

When and where should an air carrier report a release? For instance, should the release be reported to the State where the release occurred or the airport of destination?

Since aircraft should always have radio communication capabilities, the report should be given to the State(s) likely to be affected by the release as soon as possible after the release. Reporting at the destination will not necessarily enable the provision of timely response to the affected areas.

What are the differences in the various requirements for release notification under Section 103 of CERCLA and Section 304 of Title III?

Under Section 103 of CERCLA, a release of a hazardous substance in an amount equal to or in excess of its reportable quantity (RQ) which is not otherwise exempted under CERCLA must be reported to the National Response Center. Section 304 of Title III provides a similar reporting requirement for releases of extremely hazardous substances, as defined under Section 302, as well as releases which require notification under

CERCLA Section 103. However, reporting under Section 304 must be given by the owner or operator of a facility to the community emergency coordinator for the local emergency planning committee and to the State emergency response commission, as well as to the National Response Center for CERCLA hazardous substances. Releases from transportation incidents are also subject to the Section 304 reporting requirements.

Further, EPA intends to designate under Section 102 of CERCLA all extremely hazardous substances which are not already defined as "hazardous substances" under Section 101(14) of CERCLA. The designation will include all 256 extremely hazardous substances that are not presently "hazardous substances" under CERCLA. At that time, any substance requiring local and State release reporting under Section 304 of Title III will also require reporting to the National Response Center under CERCLA Section 103. In addition, the extremely hazardous substances will continue to trigger contingency planning requirements in addition to release reporting.

With regard to the contents of the required notification under SARA Section 304 and CERCLA Section 103, the required contents of Section 304 emergency notification are set out in Section 355.40 (formerly Section 300.94). Although Section 103(a) of CERCLA does not specify the contents of release notification, the information necessary under Section 103(a) for potential federal response (e.g., type of substance and nature, location, and effects of the release) should not differ for any practical purpose from the content of the notice specified under Section 304.

Section 304 also requires follow-up written emergency notice to the State emergency response commission and the local emergency planning committee. This reporting is not required to be sent to the NRC.

What is the relationship between RQs and TPQs?

The reportable quantity that triggers emergency release notification (Section 304) was developed as a quantity that when released poses potential harm to human health and the environment. The threshold planning quantities for emergency planning provisions (Section 302) were designed to help States and local communities focus their planning efforts. The TPQ is based on those quantities of substances that potentially will cause the *greatest* harm should an accidental release occur. The Agency has taken several steps to make the TPQs and the RQs consistent.

First, in a separate rulemaking under CERCLA Section 102, the Agency has already proposed lowering the RQ values of seven of these chemicals.

Second, as discussed elsewhere in this rule, changes in the TPQ quantitative categories and the reassignment of the TPQ values based on reevaluation of the toxicity data has resulted in elimination of inconsistencies for seven other chemicals.

Third, seven of the substances are solids which have been assigned TPQ values of 10,000 pounds unless they meet special conditions regarding physical form or chemical properties. Solids in solution, in molten form, of a particle the size of 100 microns or less, or of a highly reactive nature revert to the lower TPQ values. Fourth, the Agency is currently reviewing additional information on five other chemicals and plans to propose revisions of their RQ values based on this new information. Finally, EPA intends to resolve the remaining inconsistencies by adjusting the RQs of the substances as part of a proposed rule later this year. In that rulemaking, EPA will designate the remaining extremely hazardous substances as CERCLA hazardous substances under CERCLA Section 102 and revise the one pound statutory RQs for the extremely hazardous substances.

LIABILITY UNDER TITLE III

Can individuals, as members of a State emergency response commission or a local emergency planning committee, be sued and/or be liable for their commission's or committee's failure to fulfill its Title III requirements?

Under Section 326, an individual may assert a federal cause of action against a State emergency response commission in Federal court for the commission's failure to fulfill certain obligations under the Act. Section 326 authorizes only injunctive relief against a State commission, i.e., if successful, the citizen may compel the State commission to fulfill the Title III obligations listed under Section 326, but may not receive money damages for the State's failure to do so. The Act does not create a federal cause of action for citizens who wish to sue individuals as members of these State commissions. Thus, whether an individual can be liable as a member of a State commission is a question of the law of each particular State.

Unless the individual is guilty of gross negligence (the standard in most states as discussed below), only the state commission/committee and not the individual is potentially liable. Furthermore, unless there exists a citizen suit provision, liability against the commission or committee propably will not exist under State law.

What are the liabilities of members of a State emergency response commission and a local emergency planning committee, if an incident is not handled properly despite following procedures developed and reviewed by those commission and committee members? Can the individual members be sued and held liable?

The general rule is that persons who serve on government committees have no liability for their actions except for gross negligence. According to EPA's Office of General Counsel, however, this issue varies from State to State. Those who wish to know the answer to this question must check with their individual State Attorney General's offices with regard to liability when serving on State emergency response commissions and with their City Council's office with regard to serving on local emergency planning committees.

MSDS REQUIREMENTS
(SECTION 311)

What are the requirements of Section 311 and what facilities are covered? Are there thresholds for reporting?

Section 311 requires that the owner or operator of a facility must submit a Material Safety Data Sheet (MSDS) for each hazardous chemical which meets or exceeds a specified threshold at the facility, to the state emergency response commission, the local emergency planning committee, and the local fire department with jurisdiction over the facility. A list of MSDS chemicals may be submitted instead of an MSDS for each chemical.

Section 311 applies to any facility required under the Occupational Safety and Health Act to prepare or have available an MSDS for a hazardous chemical. At present, this requirement to prepare or have available MSDSs applies only to manufacturing facilities falling under Standard Industrial Classification (SIC) codes 20-39. By August 23, 1988, however, non-manufacturing facilities also must comply with the requirement.

In a regulation published on October 15, 1987, EPA established a threshold below which facilities do not need to report. By October 17, 1987, MSDSs or a list of MSDS chemicals must be submitted on all hazardous chemicals present at a covered manufacturing facility in quantities that equal or exceed 10,000 pounds. EPA has designated a different and lower reporting threshold for extremely hazardous substances. The reporting threshold is 500 pounds or the threshold planning quantity, whichever is less.

Because EPA has yet to establish a permanent threshold level effective the third year of reporting, MSDSs or a list of MSDS chemicals must be submitted by October 17, 1989 (or two years and three months after the manufacturing facility first becomes subject to these requirements), for all hazardous chemicals present in quantities between zero and 10,000 pounds for which an MSDS has not been submitted. However, EPA intends to revise the permanent threshold (effective the third year) such that the threshold will not be as low as zero pounds. That threshold will be established based on a study of first year reporting and public comments. Revised MSDSs will be provided to the local emergency planning committee, the state emergency response commission, and the local fire department within three months after discovery of significant new information concerning the hazardous chemical.

How does the Occupational Safety and Health Administration (OSHA) expansion of the Hazard Communication Standard affect Section 311?

Section 311 of Title III applies to any facility covered by the OSHA Hazard Communication Standard (HCS). On August 24, 1987, OSHA published a rule expanding the coverage of HCS, which had previously been limited to the manufacturing sector, to non-manufacturing facilities. The effective date of this expansion is May 23, 1988. Three months after this effective date (August 23, 1988), these facilities are required to comply with Section 311. The phase-in rule for the non-manufacturing facilities would follow this schedule:

- August 23, 1988 — for facilities having any quantity at or above 10,000 pounds for hazardous chemicals and 500 pounds or the threshold planning quantity, whichever is lower, for extremely hazardous substances;

- August 23, 1990 —for facilities having any quantity above zero pounds for both hazardous chemical and extremely hazardous substances, threshold level to be published by EPA.

The thresholds for the non-manufacturing sector are under review to determine the appropriate amounts.

Is the Section 311 requirement an annual or a one-time reporting requirement?

Section 311 is not an annual reporting requirement. EPA has designed a three year "phase-in" schedule to balance the public's right to know with the potentially overwhelming flood of information to state and local governments. All hazardous chemicals present in quantities above the established threshold must have been submitted on or before October 17, 1987. EPA will also establish a third year threshold reporting on or before October 17, 1989.

Updates are due within three months after the discovery of significant new information or when a new hazardous chemical becomes present at the

facility above established levels. Following this system, each hazardous chemical is only reported once, but the reporting of the chemicals could fall at two different times.

Will the reporting thresholds for those facilities covered by the OSHA expansion (those facilities required to comply with Section 311 in August 1988) be the same as those for the October 17, 1987, requirement?

Yes, unless EPA revises the regulations. Based on information currently available, EPA believes that the threshold that applies to the manufacturing sector currently subject to Sections 311 and 312 would also apply to the non-manufacturing facilities that will soon be subject to the MSDS requirements. However, concerns have been raised over the need to provide separate thresholds for the facilities subject to these requirements as a result of OSHA's expanded MSDS requirements. As a result, EPA is undertaking a more detailed analysis of the universe newly covered by the OSHA MSDS requirements, including a more detailed analysis of small business impacts and the need for separate thresholds for such facilities. EPA will revise those thresholds, if necessary, based on that analysis.

How would a facility report a hazardous chemical that they acquired above the reporting threshold after the October 17, 1987, deadline for Section 311?

An update must be submitted within three months anytime there is discovery of significant new information, or if an unreported hazardous chemical is present in a quantity exceeding the reporting threshold. This update can be the MSDS for the new hazardous chemical, an updated list of hazardous chemicals or an addendum to the original MSDS list submitted.

What is required if a list is submitted instead of the actual Material Safety Data Sheets (MSDS) under Section 311?

Instead of submitting an MSDS for each hazardous chemical, the owner or operator may submit a list of the hazardous chemicals for which the MSDS is required. This list must be grouped by hazard category (acute health hazard, fire hazard, reactive hazard, chronic health hazard, and sudden release of

pressure hazard) and must include the chemical or common name of each hazardous chemical as provided on the MSDS.

Why does EPA recommend submitting a list rather than Material Safety Data Sheets (MSDS) to meet the requirements of Section 311?

Lists will minimize the paperwork burden for State and local governments and local fire departments. In addition, the list can be used as an index to inventory forms required under Section 312, since the information on both forms is grouped in terms of hazard categories. Local government officials and fire departments can request individual MSDSs for hazardous chemicals if it is a priority for their community.

If a facility submits a list to comply with Section 311, does the facility have to supply a revised MSDS with significant new information or a new MSDS for substances that become present on site after the initial reporting deadline and exceed the threshold within three months as required by Section 311(d)?

If a facility has submitted only a list of hazardous chemicals, rather than the actual MSDS, the facility does not need to file a revised MSDS for any hazardous chemical upon discovery of new information. However, a facility must submit a revised list or an addition to the list if the new information about that chemical changes the hazardous category under which it falls or the facility acquires a new substance above the threshold level that was not included on the initial list.

Where should citizens go to request MSDSs on chemicals in a facility within their community?

Each submitted MSDS or list along with the community emergency response plan, and inventory form (described below) are to be made available to the public at a designated location during normal working hours. Each local emergency planning committee (LEPC) must publish annually a notice in local newspapers that the above forms have been submitted and are open to public viewing at the designated location. In addition, any person may obtain an MSDS by submitting a written request to the LEPC. If the committee does not have the MSDS, the local emergency planning committee is required to request it from the owner or operator of the facility. If requested through the LEPC, MSDSs can be obtained for hazardous chemicals present at a facility in amounts below the threshold.

TIER I/TIER II REPORTING
(Section 312)

The reporting under Section 312 is in two tiers, Tier I and Tier II. What are the general differences between the two forms?

Section 312 includes a two tier approach. Tier I requires information (such as maximum amount of hazardous chemicals at the facility during the preceding year, an estimate of the average daily amount of hazardous chemicals at the facility, and the general location) be aggregated and reported by hazard categories. Tier II requires information to be reported for each individual hazardous chemical. Tier II not only requires the information mentioned above, but also requests information on specific location and storage.

Finally, Tier I is required by law; Tier II is required only upon request by the local committee or State commission. However, a covered facility may submit Tier II forms instead of Tier I forms.

Who is required to submit a Section 312/Tier I Form?

The requirements of Section 312 (40 CFR 370) apply to the owner or operator of any facility that is required to prepare or have available a material safety data sheet for a hazardous chemical under the OSHA Hazard Communication Standard. Reporting thresholds have been established under this Section below which a facility does not need to report. These thresholds are:

For extremely hazardous substances:

- 500 lbs or the threshold planning quantity, whichever is lower, on March 1, 1988 and annually thereafter.

For hazardous chemicals which are not extremely hazardous substances:

- 10,000 lbs for March 1, 1988 (for calendar year 1987, or the first year reporting);
- 10,000 lbs for March 1, 1989(for calendar year 1988, or the second year reporting);
- for March 1, 1990 (for calendar year 1989, or the third year reporting) and annually thereafter EPA will publish threshold amount.

Where should the Tier I form be sent and what is the deadline?

The owner or operator subject to this reporting requirement must submit a Tier I inventory form (or the optional Tier II inventory form) for all hazardous chemicals present at the facility in excess of the established threshold to the State emergency response commission, the local emergency planning committee, and the local fire department with jurisdiction over the facility.

The deadline for submitting Tier I (or the optional Tier II) inventory forms is March 1, 1988, and annually thereafter by March 1.

How should locations be identified on Tier I/Tier II forms?

Tier I forms provide for listing the general location for all applicable chemicals in each hazard category, including the names and identifications of buildings, tank fields, lots, sheds, or other such areas.

Tier II forms provide for reporting buildings, at a minimum, and allow facilities to describe briefly the location of hazardous chemicals on the form itself or to submit site plans or site coordinates. Submitting additional information, such as site plans and site coordinate systems, may be useful on a site-by-site basis but is not necessary for every facility.

How will citizens have access to Tier I or Tier II inventory forms?

Tier I information may be obtained from State emergency response commissions or local emergency planning committees during normal working hours.

Tier II information for a specific chemical at a facility may be obtained by sending a written request to the State emergency response commission or the local emergency planning committee. If they do not have the requested Tier II information, they must obtain it from the facility. For chemicals present below 10,000 pounds, the response is discretionary and depends on the justification of need by the requestor. The facility must make the information available to the SERC or LEPC if they request it on behalf of the individual.

In complying with a public request for Tier II information under Section 312, how is "need" determined?

Guidelines for determining need to know are the responsibility of the local emergency planning committees and state emergency response commissions.

OSHA expanded its Hazard Communication Standard on August 24, 1987. Does this affect Section 312 of Title III?

Yes. OSHA has expanded the Hazard Communication Standard (HCS) to cover non-manufacturers as well as manufacturers in all Standard Industrial Classification (SIC) Codes. The effective date of the expansion of HCS for non-manufacturers is May 23, 1988. Therefore, facilities that are newly covered by this expansion will be subject to Section 312 reporting requirements on March 1, 1989 for reporting on calendar year 1988.

HAZARD CATAGORIES
(SECTIONS 311 AND 312)

Section 311 and Section 312 group chemicals according to hazard categories. What are these categories?

In the law, the reporting requirements for Section 311 and Section 312 are based on the 23 physical and health hazards identified under OSHA regulations. Under Sections 311 and 312, EPA was permitted to modify these categories of health and physical hazards. EPA recognized that a smaller number of reporting categories might make managing the information easier as well as increase its usefulness, particularly since information on chemicals that present more than one hazard must be provided in all applicable categories. Based on public comment, EPA modified OSHA's 23 hazard categories to the following five hazard categories:

Immediate (acute) health hazard, includes "highly toxic," "toxic," "irritant," "sensitizer," "corrosive," and other hazardous chemicals that cause an adverse effect to a target organ which usually occurs rapidly as a result of short term exposure.

Delayed (chronic) health hazard, includes "carcinogens" and other hazardous chemicals that cause an adverse effect to a target organ and the effect of which occurs as a result of long term exposure and is of long duration.

Fire hazard, includes "flammable," "combustible liquid," "pyrophoric," and "oxidizer."

Sudden release of pressure hazard, includes "explosive," and "compressed gas."

Reactive hazard, includes "unstable reactive," "organic peroxide," and "water reactive."

MIXTURES
(SECTIONS 311 AND 312)

How are mixtures handled for Sections 311 and 312 reporting?

The owner or operator of a facility may meet the requirements of Sections 311 and 312 by choosing one of two options:

- Providing the required information on each component that is a hazardous chemical within the mixture. In this case, the concentration of the hazardous chemical in weight and percent must be multiplied by the mass (in pounds) of the mixture to determine the quantity of the hazardous chemical in the mixture. No MSDS has to be submitted for hazardous components in a mixture with quantities under 0.1 percent for carcinogens and 1 percent for all other hazardous components of the total weight of the mixture.

- Providing the required information on the mixture as a whole, using the total quantity of the mixture.

When the composition of a mixture is unknown, facilities should report on the mixture as a whole, using the total quantity of the mixture.

For Section 311 reporting, how are mixtures identified if a list is submitted instead of the MSDSs?

An owner or operator can comply with the requirements of Section 311 for a mixture of hazardous chemicals by providing the common or trade name of the mixture listed by hazard category or by listing the hazardous components.

Under Sections 311 and 312, when extremely hazardous substances are contained within a mixture, does a facility still have the option to report the mixture as a whole or by its hazardous components?

Yes; the mixture may be reported as a whole or by its hazardous components.

With regard to thresholds in mixtures, how is reporting under Sections 311 and 312 handled if a facility has a number of different mixtures on-site and each is under 10,000 pounds but the mixtures contain an aggregated quantity of an extremely hazardous substance (EHS) that exceeds its reporting threshold?

Since the EHS that is a component in the mixture exceeds the reporting threshold for that EHS (in this case lower than the reporting threshold of 10,000 pounds for mixtures) the EHS—or the mixture—must be reported.

EXEMPTIONS
(SECTIONS 311 AND 312)

Are there any exemptions under Title III for Sections 311 and 312?

There are five exemptions under Sections 311 and 312. There are also a number of exemptions under the OSHA Hazard Communication Standard which affect the requirement for preparing or having available an MSDS. These are listed in the instructions for Tier I and Tier II forms.

Are research laboratories and medical facilities exempt from reporting under Sections 311 and 312?

Research laboratories and medical facilities are not exempt from reporting requirements under Sections 311 and 312, rather, Section 311(c) (4) of Title III excludes from the definition of *hazardous chemical:* "Any substance to the extent it is used in a research laboratory or a hospital or other medical facility under the direct supervision of a technically qualified individual." The exclusion applies to research laboratories as well as quality control laboratory operations located within manufacturing facilities. Laboratories that produce chemical specialty products or full-scale pilot plant operations are considered to be part of the manufacturing facility and therefore would not be a "research laboratory."

With respect to hospitals or medical facilities, the exemption applies only to hazardous chemicals that are used at the facility for medical purposes under the supervision of a "technically qualified individual." Veterinary facilities are included.

A pharmaceutical research lab contains a pilot plant as part of its overall operation. The products manufactured in the pilot plant are not sold, but are distributed to hospitals and other health care facilities for use in continued clinical testing. Is the pilot plant exempt or must it report its hazardous chemicals under Sections 311 and 312?

In this case, because the pilot plant operation does not manufacture products for sales, the hazardous chemicals would be exempt. The primary function of the plant is research and testing.

Is a facility that manufactures household products exempt from reporting under Sections 311 and 312 due to the household product exemption in Title III?

Section 311(e) exempts from the definition of "hazardous chemical" any substance to the extent it is <u>used</u> for personal, family, or household purposes, or is present in the same form and concentration as a product packaged for distribution and use by the general public. This exclusion applies to household or consumer products, either in use by the general public or in commercial or industrial use when the product has the same form and concentration as that intended for use by the public. It also applies to these products when they are in the same form and concentration prior to distribution to the consumer, even when the substance is not intended for use by the general public. The term "form" refers to the packaging, rather than the physical state of the substance. However, the manufacturer is exempt from reporting the manufactured product only when the product is in the final consumer form. The manufacturer is not exempt from reporting the raw or processing materials.

A facility purchases sheets of metal in order to manufacture its final product. A MSDS is received with this order. Must this be reported under Sections 311 or 312?

Steel and other non-reactive solids are generally exempt from MSDS requirements under OSHA (and thus from Sections 311 and 312) because OSHA exempts from the definition of "hazardous chemical" those substances:

- Formed to a specific shape or design during manufacturing,
- Which have an end use function dependent upon that shape or design,
- To the extent they do not release or otherwise result in exposure to a hazardous chemical under normal conditions of use (see 29 CFR 1910.1200(b)).

Therefore, the initial raw materials (i.e., sheets of metal) and the final product (i.e., manufactured item) are exempt from reporting to the extent they do not result in exposure to a hazardous chemical.

Pipelines and similar transport systems have been included in the recent OSHA expansion (FR August 24, 1987). Must the "storage" materials in these facilities be reported under Sections 311 or 312?

Materials in pipelines are included in the general exemption for transportation-related facilities from all requirements under Title III except Section 304 release reporting. Therefore, despite the new coverage of these facilities under OSHA, the materials in pipelines are not subject to Sections 311 and 312.

Under Sections 311 and 312, must a farmer report the fertilizers, pesticides, and other chemical substances he uses to protect his crops?

Because OSHA's Hazard Communication Standard curently applies only to manufacturing facilities, farming operations are not covered under Sections 311 and 312. However, farming operations that include a manufacturing facility (within Standard Industrial Classification (SIC) Codes 20-39) presently are subject to Sections 311 and 312. In additions, farming facilities not within these SIC codes but covered under the new OSHA expansion (FR August 24, 1987) generally will be covered by Sections 311 and 312 once this expansion becomes effective on May 23, 1988. As such, they must comply with Section 311 MSDS or list requirements by August 23, 1988, and with the Section 312 inventory reporting by March 1, 1989.

Even if a farming operation is covered under Sections 311 and 312, it may still be exempt from most reporting requirements. Under Section 311(e)(5), any substance—when used in routine agricultural operations—is exempt from reporting under Sections 311 and 312. This exemption is designed to eliminate the reporting of fertilizers, pesticides, and other chemicals substances when stored, applied, or otherwise used as part of routine agricultural activities. Thus, the storage and use of pesticide or fertilizer on a farm would be considered the use of a chemical in a routine agricultural operation and is therefore exempt under Sections 311 and 312.

Would a farm supplier or retail distributor be excluded from Sections 311 and 312 reporting based on the agricultural exemptions?

Under Section 311(e)(5), retailers are exempted from the reporting requirements for fertilizers only. Therefore, substances sold as fertilizers would not need to be reported under Section 311 and 312 by retail sellers. However, other agricultural chemicals, such as pesticides, would have to be reported by retailers and suppliers of such chemicals when retailers and suppliers become subject to the recently expanded OSHA Hazard Communication Standard.

How are the activities of "farm cooperatives" interpreted for reporting purposes?

Currently, farm cooperatives would be subject to Sections 311 and 312 reporting requirements only if their operations are in the Standard Industrial Classification (SIC) codes 20-39.

Tobacco and tobacco products are exempt from reporting under Sections 311 and 312. Does this mean that nicotine extracted from the tobacco is also exempt?

No. Current OSHA regulations exempt tobacco or tobacco products under the definition of a hazardous chemical. Since Sections 311 and 312 incorporate this definition of hazardous chemicals, this exemption applies only to the tobacco and tobacco products. However, nicotine, when extracted from the tobacco, is not exempt because it is not a tobacco product.

Are mining facilities required to notify under Sections 311 and 312?

Mining facilities regulated by the Mining Safety and Health Administration, (MSHA) are not subject to OSHA's Hazard Communication Standard (HCS) and, therefore, are not subject to the Sections 311 and 312 requirements. However, it should be noted that because MSHA covers only actual mining activities, all other operations, such as refining, are covered under OSHA's HCS and are thus subject to Sections 311 and 312.

Are petroleum products exempt from the reporting requirements of Sections 311 and 312?

Petroleum products are not specifically exempted from Sections 311 or 312 reporting. However, some products could fall under the exemptions listed in Section 311(e).

Is household heating fuel exempt from the Sections 311 and 312 requirements?

The household product exemption that appears in Section 311(e) applies to household products, even when in industrial, commercial, or other uses. A "household product" is a product intended for use by the general public, or by other persons or entities but *packaged* in the same manner and in the same concentration. Therefore, heating fuel contained in tanks similar in size to those used at a household would be exempt from the Sections 311 and 312 reporting requirements. Larger tanks held by the manufacturers or distributors of the heating fuel would not be exempt.

Considering the OSHA expansion to the non-manufacturing sector, are State facilities required to meet the notification requirements of Sections 311 and 312 of Title III?

No. Sections 311 and 312 apply to owners and operators of facilities who must prepare or make available an MSDS under the Occupational Health and Safety Act of 1970 (OSHA) and its implementing regulations. OSHA does not

apply to State governments. (OSHA applies to "employers" and States are specifically excluded from the definition of "employers.") Although States may choose to administer their own occupational safety program in lieu of the Federal government's OSHA program, such a program must be administered exclusively under State law. Furthermore, unlike State-administered programs under some environmental statutes (e.g., RCRA), the State standards do not become Federal standards once the State plan is approved by the Occupational Health and Safety Administration. Thus Sections 311 and 312 do not apply to State facilities because OSHA and its implementing regulations do not apply State facilities.

How are facilities whose activities fall under various different or multiple Standard Industrial Classification (SIC) codes affected by Sections 311 and 312 reporting requirements?

The facilities currently required to prepare Material Safety Data Sheets (MSDS) under OSHA's Hazard Communication Standard (HCS) are those in SIC codes 20-39. As Sections 311 and 312 requirements apply to those facilities covered by OSHA's HCS, these are the same facilities required to report under Sections 311 and 312. If a facility has any activity falling under SIC codes 20-39, the reporting requirements apply to the facility's entire operation. Most manufacturing facilities fall under SIC codes 20-39. Any facility affected by the expansion of OSHA's HCS (see FR August 24, 1987) requirements to prepare or have available MSDSs will be subject to Section 311 and 312 requirements as of August 23, 1988.

PREEMPTION
(SECTIONS 311 AND 312)

What effect will Sections 311 and 312 requirements have on existing State and local "Right-to-Know" programs?

Title III does not pre-empt existing State or local laws. Sections 311 and 312 requirements establish "ground rules" for submitting information about the presence of hazardous chemicals in the community. Where existing "Right-to-Know" laws are in place, officials should examine their programs to see if their requirements conform to those established under Title III. Some key factors to consider are:

- What kind of information is required?
- What chemicals are covered?
- What facilities are covered?
- Is information publicly available?
- What are the reporting periods and frequency of reports?
- Under what conditions can trade secret protection be granted?

Existing Right-to-Know programs that meet (or exceed) the basic requirements of Title III will satisfy Sections 311 and 312 reporting requirements. To avoid duplicate reporting forms, State and local governments may use their own forms, but such forms must, at a minimum, include the content of the published uniform federal format.

HOW THE EMERGENCY PLANNING AND COMMUNITY RIGHT-TO-KNOW ACT AFFECTS VARIOUS TYPES OF FACILITIES

Are farmers subject to Title III? If so, why? What exactly do farmers have to do?

There are four major reporting requirements under Title III: emergency planning notification (Section 302), emergency release notification (Section 304), community right -to-know (Section 311 material safety data sheets and Section 312 emergency and hazardous chemical inventory forms) and toxic chemical release forms (Section 313 "emissions inventory"). Each reporting provision has different requirements for chemicals and facilities covered. Due to this complexity in the statute itself, each Section must be read carefully to understand the chemicals covered and the facilities to which the Section applies. Farmers may be subject to several of the reporting requirements of Title III.

- **Emergency Planning Notification (Section 302)**

Farm owners and operators are most likely to be subject to the emergency planning requirements of Section 302. Farms were not exempted from this provision, since the law was designed to generally identify all facilities that have any of the listed 366 extremely hazardous substances present in excess of its threshold planning quantity (TPQ). The TPQ is based on the amount of any one of these substances which could, upon release, present human health hazards which warrant emergency planning. The TPQ emergency planning trigger is based on these public health concerns rather than the type of facility where the chemicals might be located. The type of facility and degree of hazard presented at any particular site, however, are relevant factors for consideration by the local emergency planning committees.

While many farms with chemicals in these quantities may not present a significant hazard to their communities due to their rural location or short holding times, other farms may well present a potentially significant hazard if the chemicals are located in a suburban, populated area or near a school, hospital, or nursing home. Even in a rural area, large volume storage could also be a concern. Although these substances may only be stored or used periodically, there is always the possibility of accidents which could present a hazard to the community. Finally, in the event of a fire or other emergency

on the farm, local responders should know what chemicals they might encounter in order to take appropriate precautionary measures. The hazard posed by an individual farm or ranch must be on a site-specific basis. Communities must know which facilities may present a potential for chemical releases so they can determine the nature of the risk to the public and to emergency responders in the event of a release. Title III established State and local planning organizations and notification requirements to meet these needs. Local emergency planning committees can best address these concerns by working with farm representatives.

To meet the emergency planning requirements of Title III, farm owners and operators must determine if they have any of the listed 366 substances in excess of the threshold planning quantity (TPQ) present on their farms at any one time in concentrations greater than one percent by weight. This requirement applies even if the chemicals are present for only a short period of time before use. There is no exemption to this requirement for farms or for substances used in routine agricultural operations.

If any of the 366 substances is present in excess of its TPQ, simply notify (preferably in writing) the State Emergency Response Commission (SERC) and the local emergency planning committee. The notification need not include the names and quantities of identified substances, but we encourage the inclusion of such information because it will be useful to the SERC and the local committees in organizing and setting priorities for emergency planning activities. This notification was required by May 17, 1987 or 60 days after the TPQ is exceeded for at least one extremely hazardous substance, whichever is later. If such notification has not been made, farm owners and operators should do so immediately.

This is a one-time notification. Once made, owners or operators are not required to notify the SERC further of other extremely hazardous substances that may become present on the farm; however, they may be required to inform the local emergency planning committee of such changes.

EPA may revise the list of extremely hazardous substances. A facility which has any substance added to the list but which was not previously required to notify must notify its SERC and local emergency planning committee within 60 days. EPA does not have immediate plans to add substances to this list.

Farmers required to notify under Section 302 must designate representatives to work with the local emergency planning committee to address any need

for emergency planning involving their farms. Local emergency planning committees were to be established by the SERC by August 17, 1987.

There is no requirement for farm owners or operators to develop a farm emergency plan. A comprehensive emergency response plan is to be developed by the local emergency planning committee for the local emergency planning district it covers. This plan should address, to the extent possible, all potential chemical release hazards in the district including, where appropriate, chemicals on farms.

- **Emergency Release Notification (Section 304)**

Farmers may also be subject to emergency release notification requirements (Section 304) if they release any of the 366 listed extremely hazardous substances or Superfund hazardous substances in excess of its reportable quantity (RQ). Reportable quantities are the amounts of these substances which, if released, must be reported. (RQs for Superfund hazardous substances are specified in EPA regulations found in 40 Code of Federal CFR Table 302.4. The CFR is available in public libraries and EPA Regional Offices or by contacting EPA's Emergency Planning and Community Right-to-Know Information Hotline at 1-800-535-0202). Section 304 requires reporting of such releases to SERC and local emergency planning committees. Reporting of releases of Superfund hazardous substances to the National Response Center (1-800-424-8802) has been required since 1980. Section 304 also requires a written follow-up emergency notice to the SERC and local emergency planning commitee.

Exempted from reporting are pesticides registered under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) when used generally in accordance with its intended purpose. Also, normal application of fertilizer would need not be reported. However, an accidental release of such substances (or other release not generally in accord with its intended purpose) in excess of the RQ must be reported.

Title III emergency release notification (Section 304) has two limitations which are not present in Superfund release reporting. First, Title III (Section 304) release reporting applies only to facilities which produce, use, or store a "hazardous chemical." Because the definition of "hazardous chemical" in Title III specifically excludes substances used in routine agricultural operations and household or consumer products, some farms or ranches will not be subject to Section 304. Secondly, releases reportable

under Section 304 will include only those releases which have potential for off-site exposure and which equal or exceed the applicable reportable quantity for that substance. Thus, spills of pesticides which would require release reporting to the National Response Center under Superfund, would not be subject to local and State reporting under Section 304 unless there were a potential for off-site exposure.

- **Community Right-to-Know (Sections 311 and 312)**

Community right-to-know reporting (Sections 311 and 312) is limited to those facilities required to prepare or have available MSDSs under the Occupational Safety and Health Administration's Hazard Communication Standard. While currently limited to Standard Industrial Classification (SIC) Codes 20-39 (mainly manufacturers and importers), some farms or ranches may be covered if they have manufacturing operations on-site (e.g., food processing—canning, wine-making).

Sections 311 and 312 become applicable beyond the manufacturing sector beginning August 23, 1988, as a result of the expansion of OSHA hazard communication standard, but chemicals used in routine agricultural operations and household products will not be subject to these reporting requirements. Chemicals used for such purposes are excluded from the Title III definition of "hazardous chemical" to which the reporting requirement applies.

- **Toxic Chemical Release Forms (Section 313)**

Toxic chemical release reporting (Section 313) is limited to facilities in SIC codes 20–39 with 10 or more full time employees, but may, as indicated above, apply to farms or ranches with on-site manufacturing operations.

- **Other Provisions**

Title III also includes various provisions for civil, administrative and criminal penalties and citizen suits for failure to comply with the requirements of the law.

For assistance in meeting these requirements, farmers may call on their State and county offices of the USDA Agricultural Stabilization and Conservation

Service, which have the list of 366 chemicals, their TPQs and RQs, and a list of SERCs. They may also call EPA's Emergency Planning and Community Right-to-Know Information Hotline at 1-800-535-0202.

Are Federal facilities subject to Title III?

Since Federal facilities were not included in the definition of person, EPA interprets Title III to exempt federal facilities from the Title III provisions. However, Federal facilities are being encouraged to comply with all Title III provisions. Through the National Response Team and contacts with other Federal agencies, federal facilities have indicated that they intend to comply with the Title III requirements except in cases of national security interests.

Does a contractor for a Federal government facility need to comply with the Title III requirements?

Yes. Federal government facilities are exempt from reporting due to omission of Federal facilities and employees from the definition of "person" in the Title III statute. Thus, the definition excludes any employee of the federal government from being covered by the Title III provisions. However, the definition does include any other individual or private firm even if he or she is working under a contract for a federal agency. Therefore, all government-owned, contractor-operated facilities are required to comply with any requirements that they may be subject to under Title III of SARA.

Are landfills covered under Title III of SARA since they are covered by Resource Conservation and Recovery Act (RCRA)?

Subtitle A of Title III is intended to identify facilities which present a potential hazard for a chemical emergency and to provide a process for local emergency planning committees to work with such facilities in determining the significance of the release hazard and developing response plans to facilitate timely and appropriate response in the event of a chemical spill.

While EPA agrees that conditions at some facilities (including landfills) may not pose significant chemical hazards even though extremely hazardous substances are present in excess of the threshold planning quantity, in other

such facilities conditions will exist which do present a significant hazard. Such assessments must be made on a site specific basis. EPA believes that leaving such decisions to the local planning committees is consistent with the purpose of Subtitle A. Communities must know which facilities may present a potential for chemical emergencies so they can determine the nature of the risk to the public and to emergency response personnel.

It is recognized that RCRA regulations already address many of the goals of Subtitle A of Title III. However, it is important that the facility contingency plan and local coordination required by RCRA be coordinated with any new State and local planning structure or community planning process established under Title III. Full compliance with the RCRA requirements should minimize additional planning activities with local committees under Title III. Therefore, these requirements are not duplicative.

It should be noted that landfills *may* not be covered under the other sections of Title III. The placing of a container of an extremely hazardous substance into a landfill which has a federal permit for this chemical is exempt from the Section 304 emergency release notification. Also under Subtitle B, Sections 311 and 312, most substances at landfills would be exempt due to the exemption for any hazardous waste such as defined by the Solid Waste Disposal Act under the OSHA Hazard Communication Standard (only hazardous chemicals for which a MSDS must be prepared or available under the OSHA Hazard Communication Standard must be reported under Sections 311 and 312). In addition, landfills generally do not fall into the SIC codes 20-39 covered by the Section 313 Toxic Chemical Release reporting requirements (however, they may be covered if they have manufacturing operations on-site).

How are the quantities of the extremely hazardous substances (EHS) to be calculated in determining whether landfills are subject to the Section 302 requirements?

EPA recognizes the practical problems presented for landfills in whether they contain any EHSs in excess of the threshold planning quantities (TPQ). However, owners and operators of landfills may base their calculations on the one percent exclusion rule (see 40 CFR 355.30 (a)(1)), which says that if the total weight of an extremely hazardous substance is greater than one percent of the total weight of the landfill waste and equals or exceeds the TPQ for that substance, the landfill would is subject to Section 302 notification

requirements. If no EHS exceeds this level, the landfill is not subject to the emergency planning requirements under Title III unless designated by the Governor or SERC under Section 302(b)(2). A local emergency planning committee may, depending on assessment of the hazards posed by a particular facility, request participation of the facility in the Title III planning process. Even though many landfills may not be required to provide planning notification, the landfill owner or operator and the local emergency planning committee should work in cooperation to ensure that potential chemical emergencies are addressed.

United States
Environmental Protection
Agency

Office of Solid Waste
and Emergency Response
Washington DC 20460

September 1988

EPA

Community Right-to-Know and Small Business

Understanding Sections 311 and 312 of the Emergency Planning and Community Right-to-Know Act of 1986

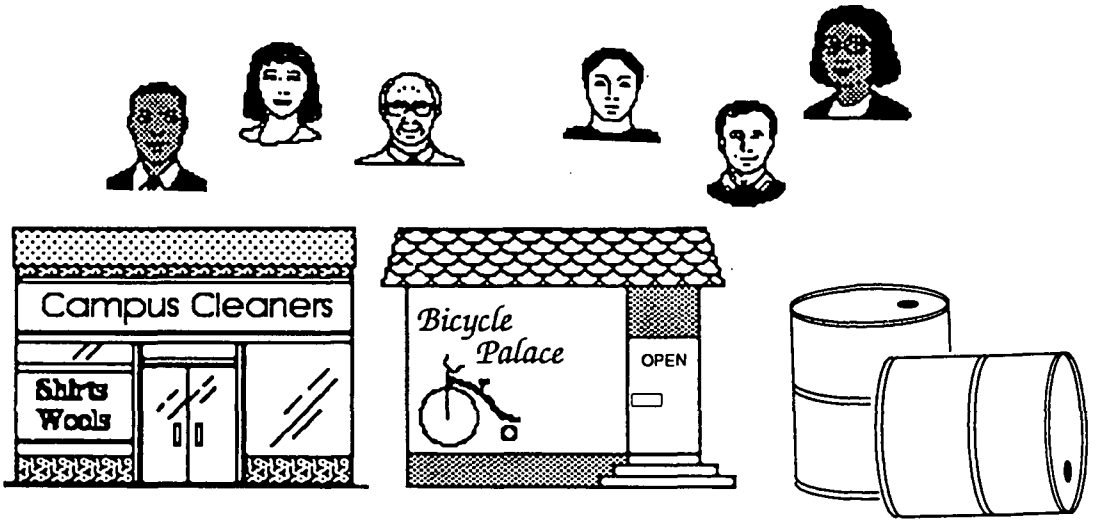

Table of Contents

This brochure has been developed to provide small businesses with important information on whether to report, and how and what to report under Sections 311 and 312 of the Emergency Planning and Community Right-To-Know Act of 1986. The document is not intended to replace any regulations written in support of the law. It is intended to assist the small business owner with compliance. Also, the brochure does not detail all of the sections of the Emergency Planning and Community Right-To-Know Act of 1986. You may face other requirements under this law.

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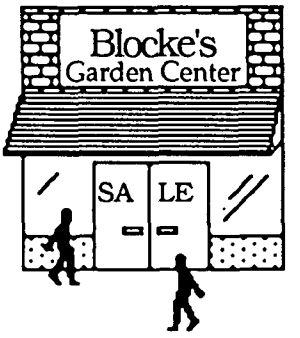
Historical Background

In December 1984, a cloud of highly toxic methyl isocyanate spewed from a chemical plant in Bhopal, India, blanketing the surrounding area in poison. The result—over 2,000 people dead and thousands more injured. Damaged lungs, reduced oxygen flow, severe headaches and temporary blindness accompanied these deaths. Even today, poor health continues to afflict that community. The gravity of this tragedy opened the eyes of the world to the dangers of chemical accidents. Eight months later, a less toxic derivative of that chemical escaped from a West Virginia plant, bringing these same concerns home to the United States.

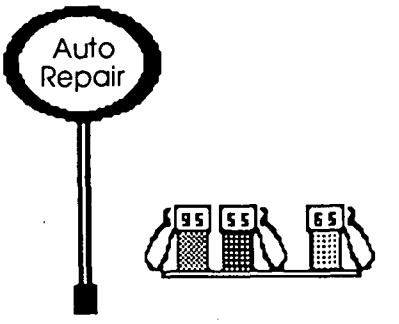
Accidents can happen—at any facility in the appropriate circumstances. In Bhopal, prevention equipment had been installed and a local evacuation plan developed. Unfortunately, the equipment was not in service, and the neighboring community was not aware of the plans. The lack of knowledge proved fatal.



Chemicals serve our world well. Paints, plastics, medical supplies, cleaning fluids and countless other necessities play integral roles in our lives. The manufacturing processes for these goods and the goods themselves often involve hazardous chemicals, but knowledge of the hazards and proper use of the substances help ensure safe factories and businesses. Until recently, that seemed sufficient. However, as Bhopal demonstrated, the general public also needs such knowledge in preparation for chemical accidents.

Title III and Its Purpose

The United States Congress understood this need and responded with the Emergency Planning and Community Right-To-Know Act of 1986. This law, also known as Title III of the Superfund Amendments



and Reauthorization Act (SARA), involves four complementary activities:

1. *Emergency planning (Sections 301-303)*
Local Emergency Planning Committees must organize collected chemical information and develop emergency response plans for their community. Facilities where extremely hazardous substances are present above specified threshold planning quantities (see pages 5-6) must be among those who participate in this planning process.

2. *Emergency notification (Section 304)*
Facilities must report accidental releases of certain hazardous substances above specified reportable quantities to State Emergency Response Commissions and Local Emergency Planning Committees.

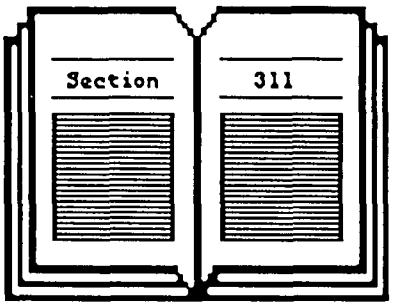
3. *Community right-to-know reporting (Sections 311-312)*
Facilities required to prepare or have available a Material Safety Data Sheet for hazardous chemicals must submit detailed information to the State Emergency Response Commission, a Local Emergency Planning Committee, and the local fire department.

4. *Toxic chemical release reporting (Section 313)*
Manufacturing facilities that release certain toxic chemicals must report the total amount of emissions to the Environmental Protection Agency in Washington, D.C and to State officials.

Together, Title III creates a working partnership, consisting of industry and small business, state and local government officials, public health and emergency response representatives, and other interested citizens. Through this interaction and information-sharing, a safer community can result. Indeed, all parties share the responsibility for Title III, and everyone will benefit.

Community Right-To-Know

Sections 311 and 312 of Title III—popularly named community right- to-know—are the focus of this brochure. These provisions, which affect facilities where hazardous chemicals are present, require submission of data on the amount, type and location of those substances. The collected data serve as an essential informational tool for local planners and response personnel, providing the basis for the emergency planning process of Title III.



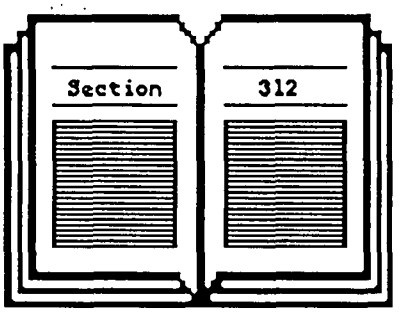
Perhaps most important, fire departments and health officials can tap this wealth of knowledge. At present, firefighters face great risks in battling chemical blazes at factories, small businesses, hospitals, schools. Many chemicals demand special precautions and techniques. If used correctly, Title III information can provide emergency workers with vital data, enabling them to respond safely to chemical accidents. Likewise, medical personnel require ready access to such storage data. Unusual symptoms caused by chemical spills demand immediate attention. Title III will help.

Sections 311 and 312 also create a new entitlement. The public in every state now has the "right-to-know" about hazardous chemicals present at facilities located in the community. Now, any citizen can request such detailed information. Never before have data on chemical use been so accessible to the public. And never before have so many businesses been potentially affected by a reporting regulation. All companies, large or small, manufacturing or non-manufacturing, may be subject to this inventory reporting.

Since the law includes a sector unaccustomed to such reporting requirements—the small business community—special help is being offered in this brochure.

These opening pages provide a brief overview of Title III. The bulk of the brochure details in step-by-step fashion the community right-to-know requirements and allows you, the small business owner, to determine whether you must report, and if so, what. The final pages provide other help, such as an index of the terms and acronyms used in the brochure, and a reference guide of useful contacts, phone numbers and addresses.

Every effort has been taken to clarify the community right-to-know reporting requirements of Title III. The goal is to assist you in complying with the law—an action serving everyone's interests. Though the reporting responsibilities will require extra effort on your part, you will gain through emergency response plans for your facility, improved relations with your community, and perhaps, better management and chemical handling practices. And compliance with Title III will save you from fines of up to $25,000 per day.



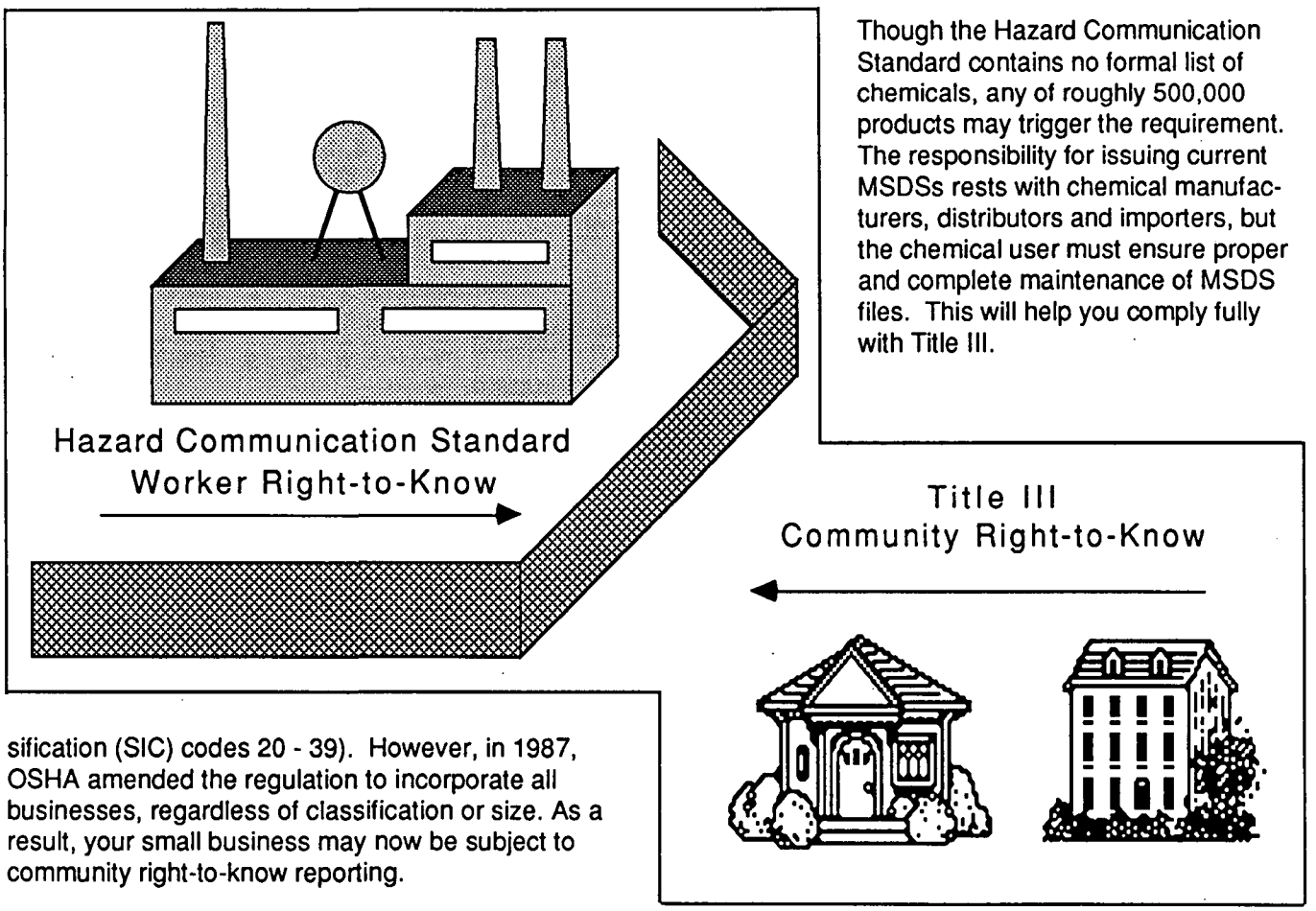
NOTICE

Under Title III, states have the authority to go beyond the reporting requirements written in the law. Title III is the base for right-to-know reporting—it is the minimum. Since your state law may be stricter than Title III, please check wiith your State Emergency Response Commission to make sure that your submissions meet all necessary requirements.

Reporting Requirements

Background - Hazard Communication Standard

The community right-to-know reporting requirements build on the Occupational Safety and Health Administration's (OSHA) Hazard Communication Standard (HCS). The hazardous chemicals defined by the HCS are the hazardous chemicals of Sections 311 and 312. Initially, the HCS applied only to manufacturers (designated by the Standard Industrial Classification (SIC) codes 20 - 39). However, in 1987, OSHA amended the regulation to incorporate all businesses, regardless of classification or size. As a result, your small business may now be subject to community right-to-know reporting.



Under the Hazard Communication Standard, chemical manufacturers and importers must research the chemicals they produce and import. If a substance presents any of the physical and health hazards specified in the HCS, then the manufacturer or importer must communicate the hazards and cautions to their employees as well as to "downstream" employers who purchase the hazardous chemical. The goal behind the HCS is a safer workplace—workers, informed of the hazards they encounter on the job, can create that environment.

One of the required tools of hazard communication is the Material Safety Data Sheet (MSDS). These documents provide many valuable details on the hazardous chemicals regulated by OSHA. Quite likely, you are already familiar with these useful documents. If not, you must become so. The MSDS contains health and safety information for you, and due to the relationship of Title III and the Hazard Communication Standard, having an MSDS indicates that you have a hazardous chemical which may require reporting under Sections 311 and 312.

Though the Hazard Communication Standard contains no formal list of chemicals, any of roughly 500,000 products may trigger the requirement. The responsibility for issuing current MSDSs rests with chemical manufacturers, distributors and importers, but the chemical user must ensure proper and complete maintenance of MSDS files. This will help you comply fully with Title III.

Congress chose to link Title III's community right-to-know rules to the Hazard Communication Standard because both share a common goal of safety—Title III for the community and the HCS for the workplace. Understanding that connection is helpful. Although the community right-to-know rules are associated with the HCS, the Title III provisions are not redundant requirements. Instead, Title III extends the information sharing of workplace right-to-know to the entire community, especially to emergency response personnel.

Do I Have To Report?

To answer the question "Do I have to report?" you should examine four criteria—type of facility, presence of hazardous chemicals, amount present, and any applicable exemptions. As you consider each of these, the chart below will help you determine your reporting status. Simply proceed through the brochure, referring to the chart as necessary.

Note: this section details "automatic" reporting only. Facilities which are not required to report automatically must still report when citizens request data. (See page 15)

1. Facility

As noted earlier, due to the expansion of the Hazard Communication Standard, all businesses may be

1. Type of Facility

Manufacturer (Standard Industrial Classification codes 20 - 39)	Non-manufacturer (Regulated under the expansion of the Hazard Communication Standard i.e. outside SIC codes 20 - 39)
Follow first set of dates on page 7.	Follow second set of dates on page 7.

CRITERIA		RESULT *	
		MUST REPORT (all "Yes")	DO NOT REPORT (any "No")
2.	Do you have a hazardous chemical (includes extremely hazardous substances) present at your facility requiring a Material Safety Data Sheet under the Hazard Communication Standard? (see page 5)	YES	NO STOP
3.	Do you have a hazardous chemical (includes extremely hazardous substances) at your facility not exempt under the five exemptions of Title III? (see page 5)	YES	NO STOP
4.	Do you have an extremely hazardous substance or other hazardous chemical at your facility with its maximum amount greater than the relevant threshold? (see pages 5-6) EHS-500 pounds or the chemical-specific threshold planning quantity, OR Hazardous (Non-EHS) - 10,000 pounds	YES All YES Report	NO STOP

* If you answer "NO" to any of the three questions (2-4), then you are not required to report automatically under Sections 311 and 312 of Title III. If you answer "YES" to all of these three questions, then you must submit the reports to your State Emergency Response Commission, Local Emergency Planning Committee and local fire department.

subject to community right-to-know reporting. However, the Sections 311 and 312 reporting deadlines for manufacturers (designated by SIC codes 20-39) differ from the deadlines facing the non-manufacturing community. The non-manufacturers' deadlines lag behind those for the manufacturers by almost one year. All the pertinent dates for the two sectors are noted on page 7.

Beyond these differences in dates, though, all facilities are treated alike. Any business with one or more hazardous chemicals may have to report under community right-to-know.

2. Substances

The Material Safety Data Sheet (MSDS) serves as the indicator of hazardous chemicals at your facility. If you are not required to prepare or keep any MSDSs, then you have no hazardous chemicals, as defined by the Hazard Communication Standard, at your facility. You do not need to report. The "No" in the "Do Not Report" column indicates that you have fulfilled the mandatory reporting requirements for Sections 311 and 312. On the other hand, if you must prepare or maintain any MSDSs, mark down a "Yes" to the question and continue reading. You may be required to report.

3. Exemptions

There are five exemptions from reporting requirements for community right-to-know. Some apply to specific chemicals and some to specific chemical uses.

1) Any food, food additive, color additive, drug, or cosmetic regulated by the Food and Drug Administration (FDA) is exempt from reporting. With regard to food additives, a chemical is a food additive only when in use as a food additive, and not when it is stored or used for other purposes, or is being sold to another business for use as a food additive.

2) Any hazardous chemical present as a solid in a manufactured item to the extent exposure to that chemical does not occur under normal conditions of use is exempt. For example, steel would be exempt in its solid form until you weld it, cut it, grind it or do anything else that could cause exposure to hazards such as lead, dusts or hazardous fumes.

3) Any substance used for personal, family or household purposes, or if present in the same form and concentration as a product packaged for distribution to and use by the general public. Packaging, not use, triggers the exemption. Regardless of actual use and intended distribution, if the substance is packaged in a similar way and in the same concentration as it is when used by the general public, then that substance is exempt. For example, a cleaner used by your business and packaged for home use remains exempt no matter how you use it. However, the same cleaner, packaged in bulk amounts not intended for sale to home users, must be reported.

4) Any substance is exempt to the extent it is used in a research laboratory, hospital or other medical facility under the direct supervision of a technically qualified individual. Quality assurance labs meet the exemption, but pilot testing labs, where manufacturing of a product takes place, do not.

5) Any substance used in routine agricultural operations or any fertilizer held for sale by a retailer to the ultimate customer is exempt. Again, this exemption applies only if you are the user of the chemical, or in the case of fertilizers, if you are a retailer holding the fertilizer for sale to the ultimate customer.

Please note, there are additional exemptions in the Hazard Communication Standard (HCS) governing the preparation and maintenance requirements for Material Safety Data Sheets. However, the five exemptions noted here are the only ones that limit the scope of the HCS. So, if all of the hazardous chemicals present at your facility are exempt, then insert a "No" in that column of the chart. If any of your hazardous chemicals fail to meet these exemptions, then enter a "Yes" and proceed.

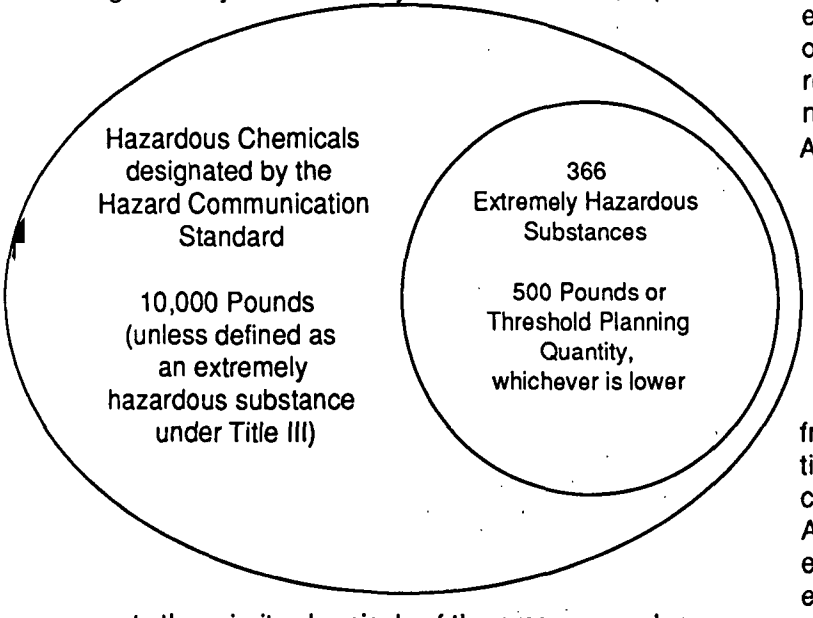
4. Thresholds

To ease everyone's information management burden created under community right-to-know, the Environmental Protection Agency (EPA) established reporting thresholds for the first two years of reporting. That means that any chemical present at your facility, always in an amount less than its threshold level, does not need to be automatically reported (examples page 6).

In addition to the "hazardous chemicals" (those indicated by a Material Safety Data Sheet), you need

to be aware of a subset of these chemicals, the List of Extremely Hazardous Substances (EHS). The extremely hazardous substances—all included as "hazardous chemicals" under the Hazard Communication Standard (i.e. all require a MSDS)—were listed initially in the November 17, 1986 Federal Register. Since then, 40 of them have been removed from the list after public comment. Revised lists can be obtained from your State Emergency Response Commission (SERC) or Local Emergency Planning Committee (LEPC). Also, you can write the Emergency Planning and Community Right-To-Know Information Line for a copy. That address and those for the SERCs are noted in the Appendices at the back of this brochure.

This list of extremely hazardous substances, consisting currently of 366 acutely toxic substances, represents the priority chemicals of the emergency planning effort. Accordingly, reporting thresholds are lower for the extremely hazardous substances than for the non-EHS hazardous chemicals, and each EHS chemical boasts its own threshold planning quantity (TPQ). The TPQ stipulates a storage level of concern for the substance if the entire quantity of that substance were released. Based on the toxicity and mobility of the chemical, the TPQ provides a reporting threshold reflecting health and safety concerns. The TPQ for each of these chemicals is noted on the List of Extremely Hazardous Substances.



When considering thresholds, you must first determine whether or not the hazardous chemical is an extremely hazardous substance. Reporting thresholds vary between these two groups. Those chemicals on the *EHS list* trip the threshold if present *above 500 pounds or the chemical-specific TPQ, whichever is lower.* Those *hazardous chemicals* not on the EHS list require reporting if stored *above 10,000 pounds.* For example, if you own a dry cleaning facility and never store perchloroethylene (a hazardous chemical) in a quantity greater than 5,000 pounds, then you are not required to report because the threshold for that chemical of 10,000 pounds was not exceeded. However, a recreational swimming pool with 5,000 pounds of chlorine (an extremely hazardous substance) surpasses the relevant 500 pound threshold and its threshold planning quantity of 100 pounds. (For EHS, always use the lower of 500 pounds or the TPQ).

After determining the "maximum amount" (see page 12 of the Questions & Answers) of all your non-exempt extremely hazardous substances and hazardous chemicals, check the chart for thresholds and respond appropriately. A "No" signifies that you do not need to report under community right-to-know. A "Yes" means you may need to report.

Please note, after the first two years of Title III reporting—for manufacturers October 1989, and for non-manufacturers September 1990-- these threshold levels may change. Also, since the thresholds depend on pounds of the substance present at your facility, you may need to convert the measure of some gases and liquids from volume to weight (see page 13 of the Questions & Answers). A similar discussion of mixtures can be found on page 16 of the Q & A Appendix. Again, it must be emphasized that if your inventory ever exceeds the threshold ("maximum amount" exceeds the threshold), for any length of time, then your reporting requirement is triggered.

In summary, if you answered "No" to any of the questions in the chart, then you are not required to report under Sections 311 and 312 of Title III. In other words, if you maintain no MSDSs, store no extremely hazardous substances and no hazardous chemicals above their respective thresholds, or are exempt for every reportable chemical at your facility, then you need not report automatically under community right-to-know. However, if you answered "Yes" to all of the questions, then you must report.

PLEASE NOTE: An average 55-gallon drum of chemicals weighs approximately 500 lbs., the EHS threshold.

How Do I Report?

Community right-to-know is a multi-step process for reporting, with different deadlines for manufacturers and non-manufacturers. Non-manufacturers report one year later than the manufacturers. The dates noted below highlight the timing for right-to-know requirements.

The reporting provisions of Sections 311 and 312 require submission of information to the State Emergency Response Commission (SERC), the Local Emergency Planning Committee (LEPC) and the local fire department. Both your SERC and your LEPC are newly formed under Title III. They are the heart of the system. To obtain the addresses of these groups, check the Appendix at the end of this brochure for State Emergency Response Commissions and EPA Regional Offices. The SERC should be able to supply you with the address of your LEPC. Or, you could contact the appropriate Regional Office of the Environmental Protection Agency and obtain the information on the SERC and LEPC there.

Though Section 311 requires no special forms, you are responsible for obtaining the necessary report forms for Section 312. The Local Emergency Planning Committee and/or your State Emergency Response Commission will serve as the key contacts. For Section 312 reports, you will need one of two annual inventory forms, namely a Tier I form or a Tier II form. A facility must submit only one Tier I form annually. However, if you submit a Tier II instead, entries must be made for each reportable chemical at your facility. Since each Tier II form provides room for only three chemicals, you may need several copies.

1987 October 17

Manufacturing facilities subject to reporting under Sections 311-312 (see pages 4-6) submit either Material Safety Data Sheets or a **list** of the reportable hazardous chemicals present at their facility to the State Emergency Response Commission, Local Emergency Planning Committee and fire department.

1988 March 1

Beginning March 1, 1988 and continuing annually thereafter.... Manufacturing facilities subject to reporting under Sections 311-312 (see pages 4-6) submit either Tier I or **Tier II** forms to the State Emergency Response Commission, Local Emergency Planning Committee and fire department.

Key Reporting Dates for Manufacturers
(Standard Industrial Classification codes 20 - 39)

1988 Sept. 24

Non-manufacturing facilities subject to reporting under Sections 311-312 (see pages 4-6) submit either Material Safety Data Sheets or a **list** of the reportable hazardous chemicals present at their facility to the State Emergency Response Commission, Local Emergency Planning Committee and fire department.

1989 March 1

Beginning March 1, 1989 and continuing annually thereafter.... Non-manufacturing facilities subject to reporting under Sections 311-312 (see pages 4-6) submit either Tier I or **Tier II** forms to the State Emergency Response Commission, Local Emergency Planning Committee and fire department.

Key Reporting Dates for Non-manufacturers
(outside Standard Industrial Classification codes 20 - 39)

What Do I Report?

Now that you have learned of your reporting responsibility, you must choose the best method for reporting. Though Sections 311 and 312 of Title III share both a foundation in the Hazard Communication Standard and the thresholds for reporting, the two provisions entail separate reporting requirements. Section 311 involves a one-time submission (with any necessary updates) naming the reportable hazardous chemicals present at your facility. Section 312 remains an annual responsibility, demanding more

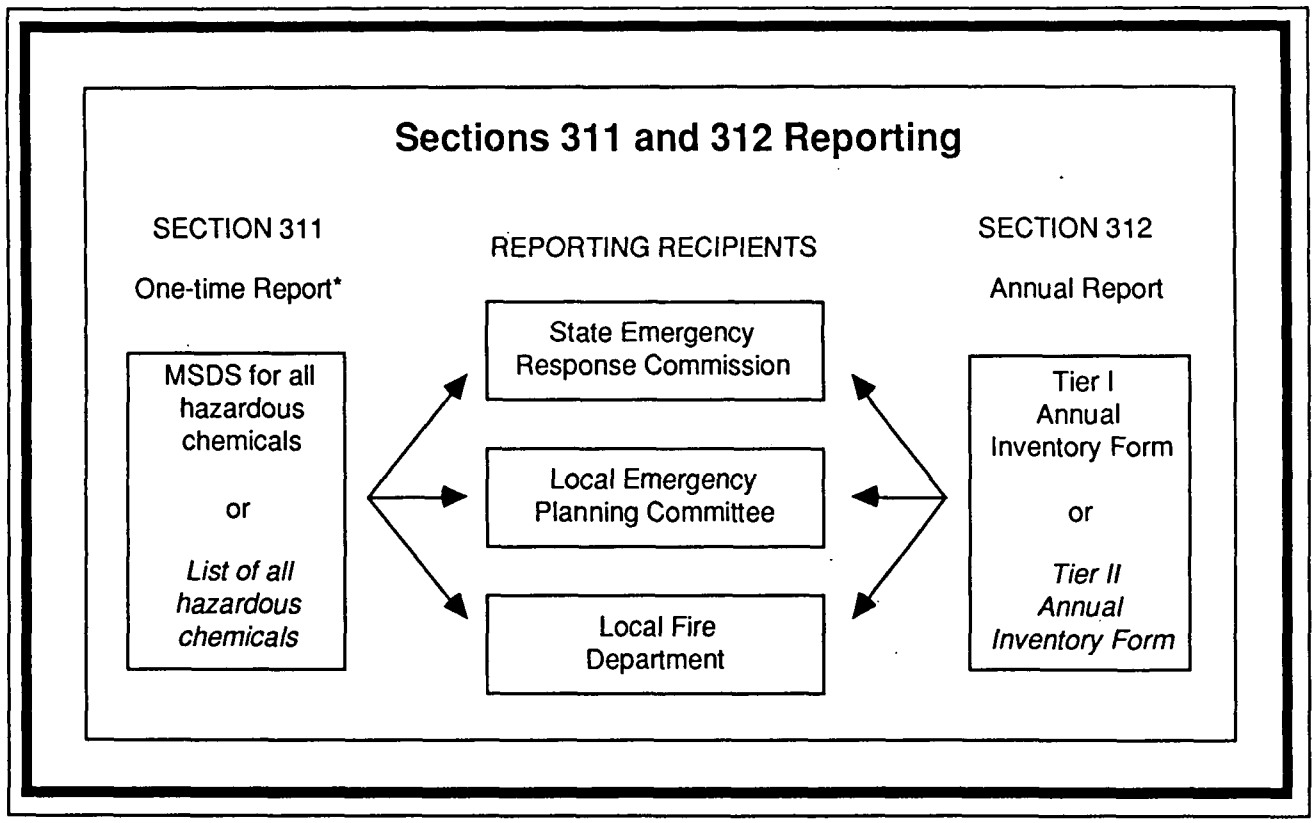
detailed information on your chemical hazards and handling practices.

Section 311

Again, you need no special forms under Section 311. Instead, the Material Safety Data Sheets at your facility are your key resources. Simply compile all of these MSDSs. After taking out those hazardous chemicals exempted by Title III and those present below their thresholds, submit either copies of the remaining MSDSs or a single list of these chemicals, grouped by hazard category, to your State Emergency Response Commission (SERC), Local Emergency Planning Committee (LEPC) and local fire department.

EPA recommends that you supply the list of your reportable chemicals rather than the actual MSDSs. The list will reduce your effort by removing the necessity of copying in triplicate all reportable MSDSs. It will also enhance the capacity of the three recipients—SERC, LEPC and fire department—to manage your data responsibly and effectively. However, if you do opt for submitting the list, then when necessary, the Local Emergency Planning Committee can request substantiating MSDSs as supplemental information. You have a 30 day period to comply with such a request. As noted above, the list must also be grouped by hazard category (described on page 14 of the Questions & Answers). Despite these added steps, the chemical list should greatly ease your reporting effort.

Both the list and the Material Safety Data Sheets should include the reportable hazardous chemicals present at your facility on your date of compliance.



* with updates within 90 days of when you obtain a new, non-reported substance or when a hazardous chemical in your inventory exceeds its threshold for the first time

The list or MSDSs were first due for the manufacturing sector on October 17, 1987, and are now required for non-manufacturing businesses no later than September 24,1988. If at any time after this initial submission you obtain a new, non-reported substance, or a hazardous chemical in your inventory exceeds its threshold for the first time, then either an updated list or the relevant MSDS must be sent to the State Emergency Response Commission, Local

Emergency Planning Committee and fire department. You have 3 months to comply with this provision.

Section 312

Section 312, unlike Section 311, is an annual reporting requirement and cannot be fulfilled by a one-time submission. Each year on March 1 (beginning for manufacturers in 1988 and for non-manufacturers in 1989), reporting facilities must submit reports on their inventories of hazardous chemicals. The reports, which cover the preceding year, can be submitted either on the Tier I or Tier II form. Though Title III requires the Tier I submission, facilities may opt for the Tier II instead. **The Environmental Protection Agency strongly recommends submission of the Tier II.**

The Tier I and Tier II forms solicit similar information, including facility identification, types of substances by hazard category (see page 14 of Questions & Answers), and amounts and locations of hazardous chemicals in storage. Tier I simply compiles the information by hazard category, whereas Tier II asks for specific details on each hazardous chemical. The Tier II form demands more data, but actually serves as a first step to the Tier I. The Tier II offers another advantage—updating your inventory upon receipt of a new hazardous chemical builds more easily from the Tier II base than from the Tier I .

Therefore, while a Tier I report satisfies the law just as fully, you will probably choose to submit the Tier II in its place. By-passing the Tier I submission with the Tier II may save your company valuable time.

HOW DO I REPORT-SUMMARY

If you must report under community right-to-know—i.e. you store, use or produce chemicals, requiring maintenance of a Material Safety Data Sheet under the Hazard Communication Standard, that are present at your facility in excess of the appropriate threshold, and are not exempt under Title III—then you must submit both Section 311 and Section 312 information.

Section 311
- copies of the MSDSs of all those chemicals requiring reporting, OR
- **a single list of all those chemicals requiring reporting, grouped by hazard category,**

must be sent to the State Emergency Response Commission, Local Emergency Planning Committee and the local fire department, one time, with updates to reflect changes in your inventory.

Section 312
- the aggregate Tier I information on all those chemicals requiring reporting, grouped by hazard category, OR
- **the chemical-specific Tier II data on all those chemicals requiring reporting,**

must be sent to the SERC, LEPC and the local fire department, annually every March 1.

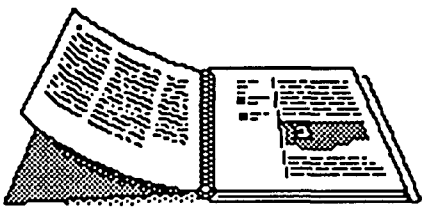
Because the inventory reports involve so much effort and provide such value, a detailed Question & Answer section focusing on the Tier I and Tier II forms is included at the end of this brochure. These hints coupled with the instructions on each form should cover all of your concerns. If not, then please contact either your LEPC or SERC, or the Emergency Planning and Community Right-To-Know Information Line. All SERC addresses and that of the Information Line are noted in the Appendices.

How Will This Information Be Used?

Now that you have fulfilled the reporting requirements of Sections 311 and 312, you understand the enormity of the information flow generated by Title III. With roughly 5 million facilities in the country as potential reporters, community right-to-know will create a wealth of chemical information. Effective management and use of that data must follow.

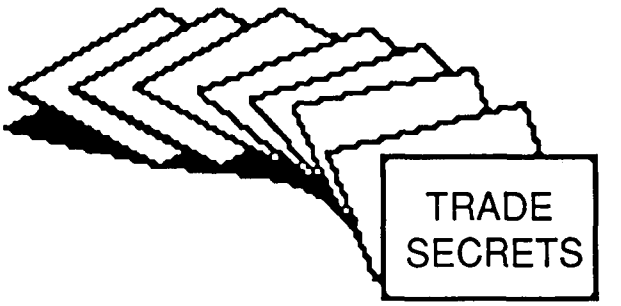
Exactly what groups and uses will community right-to-know reporting serve? As noted earlier, the **lists** (or Material Safety Data Sheets) of your reportable chemicals and your **Tier II** (or Tier I) data must be sent to three recipients—the State Emergency Response Commission, the Local Emergency Planning Committee and your local fire department. Each of these groups performs a role in Title III. The SERC integrates all the chemical-user data gathered across the state, enabling the accomplishment of state-wide goals. The LEPC, including all the affected sectors in the community (your neighbors), develops emergency response plans for the community. Fire departments, who also participate actively in the planning phase, can learn methods and precautions required in various emergencies. And public health officials, though not direct data recipients, will gain from Title III information.

The LEPCs' emergency response plans play the critical role in the Title III effort. These plans are designed to identify the major chemical dangers facing communities, so in the event of an accident, full knowledge of the hazards and proper emergency preparation will be readily available to the emergency responders. Community right-to-know reporting suppports that process by collecting the essential data.



In addition to the established groups in the Title III structure, there will be another key participant—the general public. Perhaps, most important of all, Title III gave the community its right-to-know about chemical usage in the neighborhood. **Even if you have no chemicals that trigger thresholds, you, the small business owner, may be required to provide your community with information about chemical usage and storage practices.** Anyone can request your Material Safety Data Sheets and Tier II forms by writing their Local Emergency Planning Committee, and you have 30 days to respond.

Just as the public can make requests beyond Title III reporting requirements, the State Emergency Response Commissions, Local Emergency Planning Committees and fire departments can ask for extra data on your chemicals, too. Only through broad access to chemical data can public officials plan fully for accidents and chart possible long-term health problems caused by hazardous chemicals. Though such right-to-know requirements can be burdensome, the value justifies the effort of the participants.



Trade Secrets

In some manufacturing processes and business practices, strict confidentiality must be maintained as protection against competitor firms. Section 311 and 312 disclosures can threaten that secrecy. For this reason, companies can claim a chemical identity as a trade secret and modify this reporting requirement. Section 311 and 312 information must still be reported to the State Emergency Response Commission, Local Emergency Planning Committee and fire department, but the detail of the submission is reduced. A valid trade secret claim can protect the name of your hazardous chemical. Please note, since trade secrets can be claimed by suppliers, some downstream businesses may find themselves lacking the specific chemical identity information on their hazardous chemicals. In these instances, businesses can simply use the trade name of the substance in reporting under Sections 311 and 312. They will not need to make a trade secret claim.

Trade secret claims must be legitimate and must be substantiated upon submission of your community right-to-know information. This is accomplished through completion of a trade secret substantiation form, which you can obtain from EPA Headquarters in Washington, D.C. The actual trade secret claims and substantiations should be sent to the following address.

Emergency Planning & Community Right-to-Know
P.O. Box 79266
Washington, D.C. 20024-0266

In making any trade secret claims, please follow the guidelines in the Federal Register (see page 20) explicitly. Incorrect submissions will not only jeopardize your trade secret claim, but may also result in a fine. All justifications--safeguards taken to protect your secret, the harm incurred in the event of disclosure, and proof that no other federal or state law requires the information and that discovery of the secret is impossible through reverse engineering--must be sent to the address above. There are strict rules in making trade secret claims, and your requests may be challenged by the public or reviewed by the EPA, so deny access to data only under vital and certain circumstances. Trade secret claims found to be frivolous can result in a fine of $25,000.

Conclusion

Community right-to-know reporting creates many new responsibilities and tasks for you, the small business owner--from the time involved in reporting to any emergency planning duties resulting from your storage of extremely hazardous substances. However, the value of the program justifies this endeavor.

You and your community will benefit from enhanced safety. The emergency response plans developed from community right-to-know data will serve small businesses well. Now, in the event of an accident at your facility, fire fighters can protect you better; medical personnel can treat unusual chemical symptoms faster; property and lives may be saved. Also, the communication channels between chemical users and the public will be more effective. Finally, Title III may teach you valuable lessons about the hazardous chemicals used at your business. In fact, you may decide to substitute certain less hazardous substances for those you currently store, or you may simply improve your handling practices. And you can also avoid the costly fines threatened under Title III.

Community right-to-know was designed to fill a void of knowledge concerning chemical usage in our neighborhoods. Many hazardous chemicals play indispensible roles in our society. We cannot completely eliminate the risks, but we can prepare adequately for accidents to minimize their danger. We must all work together through effective preparation to prevent or minimize the devastation of a severe chemical accident. In this challenge, small businesses, along with all the other participants in Title III, will play a part. The combined effort can enhance all of our lives.

Remember

Non-manufacturing facilities must report Section 311 data to the State Emergency Response Commission, Local Emergency Planning Committee and fire department by **September 24, 1988.** Section 312 reports will be due later.

Questions & Answers

For Sections 311 and 312 Reporting

1. Do I have to submit both Tier I and Tier II forms?

No. Title III requires facilities with reportable chemicals* to submit only the Tier I form to the State Emergency Response Commission, Local Emergency Planning Committee, and the local fire department. The Tier II form must be submitted only when these groups or the public request additional information. **However, the Tier II form is actually a first step to the Tier I and serves as a useful worksheet for Tier I. Since Title III allows submission of the Tier II in place of the required Tier I, EPA recommends that facilities use the Tier II.** This approach should ease your reporting effort.

2. How do I determine the "maximum amount"?

You should start with the Tier II form. On the Tier II form, you must consider the daily (weekly, monthly) amounts (in pounds) of each reportable chemical at your facility. The amounts should vary as shipments increase your inventory and regular use depletes it. The "maximum amount" occurs for each chemical when its storage level reaches its highest point for that year. Enter the appropriate two-digit code on the front of the form. The two-digit codes provide broad ranges (factors of ten) for indicating your storage levels. You need be no more exact than these ranges. Please note, reporting thresholds depend on the "maximum amount" (see page 6).

If you do submit the Tier I, use the same procedure outlined above. Then for every reportable chemical, separate them into the five hazard categories (see page 14). Add up all of the "maximum amounts" for the chemicals in each hazard category. Chemicals that overlap several categories will be counted more than once. Using this total, enter the appropriate two-digit code on the form for each of the five categories.

Additional instructions are attached to both forms.

3. How do I calculate the "average daily amount"?

Again, the Tier II form should be completed first. Weights of reportable chemicals may be measured daily, weekly or monthly as appropriate to your type of operation. On the Tier II form, for every reportable chemical, consider the number of days (weeks, months) that chemical is at your facility and compute its daily (weekly, monthly) storage weight. Then, total these numbers and divide by the number of days (weeks, months) the chemical is on-site. Enter the appropriate two-digit code for the "average daily amount." These codes offer broad ranges, and you need to calculate your "average daily amount" only to an exactness within these ranges.

On the Tier I form, use the same procedure. Separate all of the reportable chemicals into their hazard categories. Then, total the "average daily amounts" of the chemicals in each category and enter the appropriate two-digit code on the form. Chemicals overlapping several categories will be counted more than once.

4. What is the Chemical Abstrract Service (CAS) number and where can I find it?

The Chemical Abstract Service (CAS) number is requested on the Tier II form as an informational aid for the Local Emergency Planning Committees and State Emergency Response Commissions. Though many chemical labels do not display the CAS number, Material Safety Data Sheets should. Also, the List of Extremely Hazardous Substances and the List of Toxic Chemicals (Section 313) cite the CAS numbers of their chemicals.

* "reportable chemical" refers to hazardous chemicals and extremely hazardous substances present at your facility in excess of the relevant reporting threshold and not exempt under the five exemptions of Title III.

For mixtures (which frequently do not have a specific CAS number), note the CAS numbers of as many of the components in the mixture as possible. If you are unable to locate the CAS number for a chemical, then submit the form without it. This requirement should not stop you from reporting accurately.

5. How specific must I be in reporting "general location"? Is a site plan necessary?

For both the Tier I and Tier II forms, you must indicate at least the building, lot, warehouse, shed, tank, field, etc. where the chemical is stored. On the Tier II form, where practical, the specific room in a building or quadrant of a field should also be noted. On the Tier I form, all the locations of each chemical contained in the hazard category must be reported. For example, if you store flammables in both warehouse A and lot C, cite both locations.

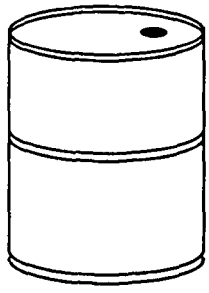
The Environmental Protection Agency recommends that you use a site-plan to indicate where chemicals are stored at your facility. Simply copy the facility plans and mark all appropriate storage areas for your reportable chemicals. Show all symbols and abbreviations in a complete, clear notation key.

If you submit Tier II information, you may request the LEPC, SERC and fire department to withhold location information from the public by using the "Confidential Location Information Sheet."

6. How do I convert volumes of liquids and gases into weight (pounds)?

Density of Water
8.3 pounds per gallon 2.2 pounds per liter

Only the weight of the substance needs to be reported and not the weight of the container.



The average weight of a full 55-gallon drum of chemicals is approximately 500 pounds

Most gases and liquids are sold by the pound, and these weights should be noted on the label. If so, then the weight of liquids can easily be estimated by multiplying the weight of the liquid in a full container by the fraction of the volume remaining. If the liquid is not labeled in pounds, then you can calculate its weight by multiplying the volume of the liquid by its density. The density (mass per unit volume) should be noted on the Material Safety Data Sheet. If not, then simply estimate the weight by the density of water. Be careful with your units of measure (gallons, liters, pounds, kilograms).

If the weight of the gas is listed on the cylinder's label, base your calculation on this measure. You can obtain the "tare weight" (the weight of the cylinder without the gas) either from the label or by subtracting the listed weight of the gas from the total weight of the full cylinder. Knowing the tare weight, you can chart the weight of the gas remaining in the cylinder by subtracting the cylinder's tare weight from its total weight at that time. This procedure can be used for both liquified and fixed gases.

If these methods fail, contact your supplier for assistance.

7. How can I locate my Standard Industrial Classification code? My Dun & Bradstreet number?

Every type of business can be categorized by a Standard Industrial Classification (SIC) code. These codes range in specificity from two digits to seven. Title III requires the four-digit number. If you are not familiar with your facility's code, then check the front of most Dun & Bradstreet publications, such as the Million Dollar Directory, which should be located in your public library.

Every individual facility can be assigned a Dun & Bradstreet (D & B) number. These numbers code the facility for financial purposes. If you have a D & B number but have forgotten it, you can retrieve it from your local Dun & Bradstreet office (check the White Pages). If your facility does not subscribe to the D & B service, then you can obtain a "support number" from the Dun & Bradstreet center located in Allentown, Pennsylvania (telephone: (215) 391-1886).

8. What if I fail to report under these requirements?

In addition to losing the benefits Title III offers your facility—emergency response plans, improved public relations and potentially better management and chemical handling practices—failure to report can trigger costly fines. Under Title III, failure to submit the list of reportable chemicals or the appropriate

Material Safety Data Sheet (Section 311) results in penalties up to $10,000. Penalties associated with Tier I and Tier II information (Section 312) range as high as $25,000 per violation. All fines can be assessed on a daily basis.

9. What is a hazard category? How can I determine the appropriate hazard category?

Under Title III, there are five such physical (3) and health (2) categories—Fire Hazard, Sudden Release of Pressure, Reactivity, Immediate (acute) and Delayed (chronic). Hazard categories allow emergency responders to classify broadly the reportable chemicals present at your facility.

Many employers are already familiar with the physical and health categories designated under the Occupational Safety and Health Administration's (OSHA) Hazard Communication Standard (HCS). In addition, many Material Safety Data Sheets note a hazardous chemical's appropriate OSHA hazard category. For these reasons, the chart on this page, comparing the Title III categories with the HCS categories should be useful. The link between Title III's five categories and the twenty-three of OSHA is not exact, so use caution as you report. Contact your supplier for any additional assistance.

Hazard Category Comparison
For Reporting Under Sections 311 and 312

Environmental Protection Agency's Hazard Categories	Occupational Safety and Health Administration's Hazard Categories
Fire Hazard	Flammable Combustible Liquid Pyrophoric Oxidizer
Sudden Release of Pressure	Explosive Compressed Gas
Reactive	Unstable Reactive Organic Peroxide Water Reactive
Immediate (Acute) Health Hazard	Highly Toxic Toxic Irritant Sensitizer Corrosive Other hazardous chemicals with an adverse effect on a target organ that generally occurs rapidly as a result of short term exposure and with a short duration
Delayed (Chronic) Health Hazard	Carcinogens Other hazardous chemicals with an adverse effect on a target organ that generally occurs as a result of long term exposure and with a long duration

As noted in the text, Section 311 lists and Section 312 Tier I forms require you to compile information by category.

10. How do I respond to requests for information from the public?

If a request for information from the public comes directly to you, you can supply the information if you wish, or you can refer the person to the LEPC. Under Title III, the Local Emergency Planning Committee (LEPC) serves as the channel for public access. Citizens can request both the Material Safety Data Sheets and the Tier II information on your hazardous chemicals. If a citizen requests information on a chemical already reported to the LEPC, then they can address the concern immediately. Otherwise, the LEPC will request the information from you. You will have 30 days to respond.

Even information on those hazardous chemicals present below the reporting thresholds can be obtained by the public. Again, you have 30 days beginning with the date on which you receive any such request to respond.

11. Who can serve as an emergency contact?

Anyone who can be reached at all times to aid responders in the event of an emergency can serve as the emergency contact. Many small firms already post an emergency or "after hours" telephone number. That would be appropriate here. The emergency contact does not need to be an expert on chemical hazards, but must be able to act as a referral for responders. In case one emergency contact is not sufficient for 24-hour coverage, both the Tier I and Tier II forms have spaces for two emergency contacts.

12. Must I report a hazardous chemical that is on-site for less than 24 hours?

Yes. Under community right-to-know reporting, any hazardous chemical on site for any length of time in excess of the established reporting threshold (and not exempt under Title III) must be reported.

13. What is the List of Extremely Hazardous Substances? How can I obtain a copy?

The List of Extremely Hazardous Substances (EHS) currently contains 366 chemicals which present known acute health hazards. All of the chemicals are included under the Occupational Safety and Health Administration's definition of hazardous chemical—they are a subset. These chemicals were selected, as stipulated under Section 302 of Title III, as the priority chemicals of the emergency planning process. Due to this higher priority, these substances have a lower reporting threshold than other hazardous chemicals and also have chemical-specific threshold planning quantities, indicative of health concerns (see the text page 6).

Facilities where extremely hazardous substances are present incur another responsibility, namely participating in the emergency planning process. Under Section 302, these facilities had to notify the State Emergency Response Commission (SERC). They were required to designate a facility contact and provide the name to the Local Emergency Planning Committee (LEPC).

The initial List of Extremely Hazardous Substances, published as a final rule in the Federal Register on April 22, 1987, contained 406 chemicals. Since that time 40 chemicals have been delisted, 4 of which were noted in the Federal Register on December 17, 1987, and the other 36 in the Federal Register on February 25, 1988. Updated lists can be compiled from these sources, or you can request them by writing your SERC, LEPC or from the Emergency Planning and Community Right-to-Know Information Hotline. These addresses are noted in the Appendix.

14. What do the storage codes "ambient" pressure and temperature, and "cryogenic conditions" mean?

"Ambient pressure" means the pressure of the surrounding area. So, materials stored at ambient pressure are stored at the same pressure as that of the surrounding area. Most drums, bags, boxes, cans, etc. fit this category. Any gases stored in high-pressure containers should be reported as greater than ambient pressure.

Similarly, ambient temperature means that the material is stored in the same temperature range as that of the surrounding area. Outdoor storage tanks that are heated or cooled to counter the variation in

temperature should also be classified as ambient. However, a tank maintained at a high (or low) temperature not close to the normal range of temperatures of the region should be noted as greater (or less) than ambient temperature.

Some gases are stored under "cryogenic conditions," that is, they are stored at very low temperatures (-130 degrees Fahrenheit or less). Examples of gases that may be stored this way include air, argon, carbon monoxide, ethylene, fluorine, helium, hydrogen, methane, nitrogen and oxygen.

For assistance in determining a chemical's storage conditions, contact your supplier or your local trade association. The Material Safety Data Sheet should also have some helpful data.

15. Do I have to report the hazardous components of a mixture?

Under Title III, the owner of a facility can choose to report all the components of a mixture separately or the mixture as a whole. The decision is yours and should be made on the basis of the substances at your facility.

For example, you can report the entire quantity of a particular paint stored at your facility as a bulk weight, noting the paint by its trade name in both the Section 311 and 312 reports. Alternatively, you could break down the various hazardous chemicals contained in the paint and calculate their respective weights. To do so, simply multiply the total weight of the mixture by the percentage composition of each hazardous chemical in the mixture. So, if compound A comprised 5% of the paint by weight, and the quantity of the paint at your facility was 10,000 pounds, then the amount of compound A would be 0.05 x 10,000 pounds, or 500 pounds. Again, the choice is yours.

STATE EMERGENCY RESPONSE COMMISSIONS

Alabama

Alabama Emergency Response Commission
Department of Environmental Management
1751 Federal Drive
Montgomery, Alabama 36109
(205) 271-7700

Alaska

Alaska Emergency Response Commission
P.O. Box 0
Juneau, Alaska 99811
(907) 465-2600

American Samoa

Territorial Emergency Management Coordination Office
American Samoan Government
Pago Pago, American Samoa 96799
International # (684) 633-2331

Arizona

Arizona Emergency Response Commission
Division of Emergency Services
5636 East McDowell Road
Phoenix, Arizona 85008
(602) 244-0504

Arkansas

Arkansas Hazardous Materials Emergency Response Commission
P.O. Box 9583
8001 National Drive
Little Rock, Arkansas 72219
(501) 562-7444

California

California Emergency Response Commission
Office of Emergency Services
2800 Meadowview Road
Sacramento, California 95832
(916) 427-4201

Colorado

Colorado Emergency Planning and Community Right-to-Know Commission
Division of Disaster Emergency Services
Camp George West
Golden, Colorado 80401
(303) 273-1624

Commonwealth of Northern Mariana Islands

Office of the Governor CNMI
Saipan, CNMI 96950
International # (670) 322-9529

Connecticut

Connecticut Emergency Response Commission
Department of Environment Protection
State Capitol Building
Room 161
165 Capitol Avenue
Hartford, Connecticut 06106
(203) 566-4017

Delaware

Delaware Commission on Hazardous Materials
Department of Public Safety
Administration Center
Dover, Delaware 19901
(302) 834-4531 or 736-4321

District of Columbia

Office of Emergency Preparedness
2000 14th Street, NW 8th Floor
Washington, D.C. 20009
(202) 727-6161

Florida

Florida Emergency Response Commission
Florida Department of Community Affairs
2740 Centerview Drive
Tallahassee, Florida 32399
(904) 487-4915

Georgia

Georgia Emergency Response Commission
Georgia Department of Natural Resources
205 Butler Street, SE
Floyd Towers East
Atlanta, Georgia 30334
(404) 656-4713

Guam

Civil Defense
Emergency Services Office
Government of Guam
P.O. Box 2877
Aguana, Guam 96910
FTS 550-7230

Hawaii

Hawaii Emergency Response Commission
Hawaii Department of Health
Environmental Epidemiology Program
P.O. Box 3378
Honolulu, Hawaii 96801
(808) 548-2076 or 548-5832

Idaho

Idaho Emergency Response Commission
Department of Health & Welfare
State House
Boise, Idaho 83720
(208) 334-5898

Illinois

Illinois Emergency Response Commission
Illinois Emergency Services & Disaster Agency
Attn: Hazmat Section
110 E. Adams Street
Springfield, Illinois 62706
(217) 782-4694

Indiana

Indiana Department of Environmental Management
Emergency Response Branch
5500 West Bradbury Street
Indianapolis, Indiana 46241
(317) 243-5176

Iowa

Iowa Emergency Response Commission
301 East 7th Street
Des Moines, Iowa 50319
(515) 281-6175

Kansas

State Emergency Response Commission
Kansas Department of Health and Environment
Forbes Field, Building 728
Topeka, Kansas 66620
(913) 296-1690

Kentucky

Kentucky Emergency Response Commission
Kentucky Disaster and Emergency Services
Boone National Guard Center
Frankfort, Kentucky 40601
(502) 564-8682

Louisiana

Louisiana Emergency Response Commission
Department of Public Safety & Correction
Office of Public Safety
P.O. Box 66614
Baton Rouge, Louisiana 70896
(504) 925-6117

Maine

Bureau of Labor Standards
Attn: SARA
State Office Building
Station 82
Augusta, Maine 04333
(207) 289-4291

Maryland

Governor's Management Advisory Council
Maryland Emergency Management & Civil Defense
2 Sudbrook Lane East
East Pikesville, Maryland 21208
(301) 486-4422

Massachusetts

Title Three Emergency Response Commission
Department of Environmental Quality Engineering
One Winter Street
Boston, Massachusetts 02108
SERC (617) 292-5851
LEPC Info (617) 875-1381

Michigan

Michigan Department of Natural Resources
Environmental Response Division
Title III Notification
P.O. Box 30028
Lansing, Michigan 48909
(517) 373-9893

Minnesota

Minnesota Emergency Response Commission
Division of Emergency Services
State Capitol Room B-5
St. Paul, Minnesota 55155
(612) 296-2233

Mississippi

Mississippi Emergency Response Commission
Mississippi Emergency Management Agency
P.O. Box 4501
Fondren Station
Jackson, Mississippi 39216-0501
(601) 352-9100

Missouri

Missouri Emergency Response Commission
Missouri Department of Natural Resources
P.O. Box 3133
Jefferson City, Missouri 65102
(314) 751-7929

Montana

Montana Emergency Response Commission
Environmental Sciences Division
Department of Health & Environmental Sciences
Cogswell Building A-107
Helena, Montana 59620
(406) 444-3948

Nebraska

Nebraska Emergency Response Commission
Nebraska Department of Environmental Control
Technical Services Section
P.O. Box 94877
State House Station
Lincoln, Nebraska 68509
(402) 471-4230

Nevada

Nevada Division of Emergency Management
2525 South Carson Street
Carson City, Nevada 89710
(702) 885-4240 or 885-5300

New Hampshire

State Emergency Management Agency
State Office Park South
107 Pleasant Street
Concord, New Hampshire 03301
(603) 271-2231

New Jersey

New Jersey Emergency Response Commission
SARA Title III Project
Department of Environmental Quality
CN-402
Trenton, New Jersey 08625
(609) 292-6714

New Mexico

New Mexico Emergency Response Commission
New Mexico Department of Public Safety
P.O. Box 1628
Santa Fe, New Mexico 87504-1628
(505) 827-9226

New York

New York Emergency Response Commission
New York State Department of Environmental Conservation
Bureau of Spill Prevention & Response
50 Wolf Road, Room 326
Albany, New York 12233-3510
(518) 457-4107

North Carolina

North Carolina Emergency Response Commission
Division of Emergency Management
North Carolina Department of Crime Control and Public Safety
116 West Jones Street
Raleigh, North Carolina 27611
(919) 733-2126

North Dakota

North Dakota State Department of Health
1200 Missouri Avenue
P.O. Box 5520
Bismarck, North Dakota 58502-5520
(701) 224-2370

Ohio

Ohio Emergency Response Commission
Ohio Environmental Protection Agency
Office of Emergency Response
P.O. Box 1049
Columbus, Ohio 43266-0149
(614) 481-4300

Oklahoma

Oklahoma Emergency Response Commission
Office of Civil Defense
P.O. Box 53365
Oklahoma City, Oklahoma 73152
(405) 521-2481

Oregon

Oregon Emergency Response Commission
c/o State Fire Marshall
3000 Market Street Plaza
Suite 534
Salem, Oregon 97310
(503) 378-2885

Pennsylvania

Pennsylvania Emergency Response Commission
SARA Title III Officer
PEMA Response & Recovery
P.O. Box 3321
Harrisburg, Pennsylvania 17105
(717) 783-8150

Puerto Rico

Puerto Rico Emergency Response Commission
Environmental Quality Board
P.O. Box 11488
Santurce, Puerto Rico
(809) 722-1175 or 722-2173

Rhode Island

Rhode Island Emergency Response Commission
Rhode Island Emergency Management Agency
State House M. 27
Providence, Rhode Island 02903
(401) 421-7333

South Carolina

South Carolina Emergency Response Commission
Division of Public Safety Programs
Office of the Governor
1205 Pendleton Street
Columbia, South Carolina 29201
(803) 734-0425

South Dakota

South Dakota Emergency Response Commission
Department of Water & Natural Resources
Joe Foss Building
523 East Capitol
Pierre, South Dakota 57501-3181
(605) 773-3151

Tennessee

Tennessee Emergency Response Commission
Tennessee Emergency Management Agency
3041 Sidco Drive
Nashville, Tennessee 37204
(615) 252-3300
(800) 258-3300

Texas

Texas Emergency Response Commission
Division of Emergency Management
5805 Lamar
Austin, Texas 76752
(512) 465-2138

Utah

Utah Hazardous Chemical Emergency Response Commission
Department of Health
288 North 1460 West
P.O. Box 16690
Salt Lake City, Utah 84116-0690
(801) 538-6101

Vermont

Department of Labor and Industry
120 State Street
Montpelier, Vermont 05002
(802) 828-2286

Virgin Islands

U.S. Virgin Islands Emergency Response Commission
Title III
179 Altona
St. Thomas, VI 00802
(809) 774-3320 Ext. 169 or 170

Virginia

Virginia Emergency Response Council
Department of Waste Management
James Monroe Building
11th Floor
101 North 14th Street
Richmond, Virginia 23219
(804) 225-2999

Washington

Washington Emergency Response Commission
Division of Emergency Management
4220 East Martin Way,
Mailstop PT-11
Olympia, Washington 98504
(206) 753-5255

West Virginia

West Virginia Emergency Response Commission
Department of Natural Resources
Capitol Building, Room 669
1800 Washington Street, East
Charleston, West Virginia 25305
(304) 348-2754

Wisconsin

Division of Emergency Governor
4802 Sheboygan Avenue
Room 99A
P.O. Box 7865
Madison, Wisconsin 53707
(608) 266-3232

Wyoming

Wyoming Emergency Management Agency
Comprehensive Emergency Management
5500 Bishop Boulevard
P.O. Box 1709
Cheyenne, Wyoming 82003
(307) 777-7566

EPA REGIONAL OFFICES

Region -- State

4 -- Alabama
10 -- Alaska
9 -- American Somoa
9 -- Arizona
6 -- Arkansas
9 -- California
8 -- Colorado
9 -- Commonwealth of Northern Mariana Islands
1 -- Connecticut
3 -- Delaware
3 -- District of Columbia
4 -- Florida
4 -- Georgia
9 -- Guam
9 -- Hawaii
10 -- Idaho
5 -- Illinois
5 -- Indiana
7 -- Iowa
7 -- Kansas
4 -- Kentucky
6 -- Louisana
1 -- Maine
3 -- Maryland
1 -- Massachusetts
5 -- Michigan
5 -- Minnesota
4 -- Mississippi
7 -- Missouri
8 -- Montana
7 -- Nebraska
9 -- Nevada
1 -- New Hampshire
2 -- New Jersey
6 -- New Mexico
2 -- New York
4 -- North Carolina
8 -- North Dakota
5 -- Ohio
6 -- Oklahoma
10 -- Oregon
3 -- Pennsylvania
2 -- Puerto Rico
1 -- Rhode Island
4 -- South Carolina
8 -- South Dakota
4 -- Tennessee
6 -- Texas
8 -- Utah
1 -- Vermont
2 -- Virgin Islands
3 -- Virginia
10 -- Washington
3 -- West Virginia
5 -- Wisconsin

Contact the Preparedness Coordinator at the Regional Office

Region 1

EPA - Region 1
New England Regional Laboratory
60 Westview Street
Lexington, MA 02173
(617) 860-4300 Ext. 221

Region 2

EPA - Region 2
Woodbridge Avenue
Edison, NJ 08837
(201) 321-6656

Region 3

EPA - Region 3
841 Chestnut Street
Philadelphia, PA 19107
(215) 597-0807

Region 4

EPA - Region 4
345 Courtland Street, NE
Atlanta, GA 30365
(404) 257-3931

Region 5

EPA - Region 5
230 South Dearborn Street
Chicago, IL 60604
(312) 886-1964

Region 6

EPA - Region 6
Allied Bank Tower
1445 Ross Avenue
Dallas, TX 75202-2733
(214) 655-2270

Region 7

EPA - Region 7
726 Minnesota Avenue
Kansas City, Kansas 66101
(913) 236-2806

Region 8

EPA - Region 8
One Denver Place
999 18th Street
Suite 1300
Denver, CO 80202-2413
(303) 293-1723

Region 9

EPA - Region 9
215 Fremont Street
San Francisco, CA 94105
(415) 974-7460

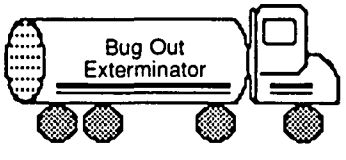
Region 10

EPA - Region 10
1200 6th Avenue
Seattle, WA 98101
(206) 442-1263

Acronyms

with page number where the acronym first appears

CFR -- Code of Federal Regulations p. 21
D & B -- Dun & Bradstreet p. 13
EHS -- Extremely Hazardous Substances p. 6
EPA -- Environmental Protection Agency p. 5
FDA -- Food and Drug Administration p. 5
HCS -- Hazard Communication Standard p. 3
LEPC -- Local Emergency Planning Committee p. 6
MSDS -- Material Safety Data Sheet p. 3
OSHA -- Occupational Safety and Health Administration p. 3
Q & A -- Questions & Answers p. 6
SARA -- Superfund Amendments and Reauthorization Act of 1986 p. 1
SERC -- State Emergency Response Commission p. 6
SIC -- Standard Industrial Classification code p. 3
Title III -- Title III of the Superfund Amendments and Reauthorization Act of 1986 p. 1
TPQ -- Threshold Planning Quantity p. 6



Terms

with introductory page and/or key pages of discussion

ambient pp. 15, 16
Average Daily Amount p. 12
Chemical Abstract Service Number pp. 12, 13
Community Right-to-Know pp. 2, 3, 10
cryogenic p. 16
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extremely hazardous substance pp. 5, 6, 15
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List of Extremely Hazardous Substances pp. 6, 15
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For Further Information

Emergency Planning & Community Right-to-Know Information Hotline

Emergency Planning & Community Right-to-Know
U. S. Environmental Protection Agency OS-120
401 M Street, S.W.
Washington, D.C. 20460

For all document requests, please write the Hotline at the above address.

(800) 535-0202
(202) 479-2449 in Washington, D.C.

Other questions and inquiries can be addressed by phone.

The final rule for Sections 311 and 312 of the Emergency Planning and Community Right-to-Know Act of 1986 was published in the Federal Register on October 15, 1987. It contains a detailed discussion of the reporting requirements of Sections 311 and 312, the Tier I and Tier II report forms, and instructions for these forms.

"Emergency and Hazardous Chemical Inventory Forms and Community Right-to-Know Reporting Requirements; Final Rule" Federal Register October 15, 1987; 40 CFR Part 370. Environmental Protection Agency.

The final rule on Trade Secrets was published in the Federal Register on July 29, 1988; 40 CFR Part 350: "Trade Secrecy Claims for Emergency Planning and Community Right-to-Know Information."

For additional information on the OSHA Hazard Communication Standard, contact your local OSHA Area Office. If you do not know the Area Office location or telephone number, contact the OSHA Office of Information Consumer Affairs at (202) 523-8151.

Example of a Hypothetical Facility

The owner of a hypothetical facility has five substances for which he maintains Material Safety Data Sheets. None of these substances are exempt under the five Title III exemptions. As a result, he must calculate their maximum amounts to determine if the substances trigger the reporting thresholds. The owner considers whether each substance is an extremely hazardous substance or simply a hazardous chemical, and whether it is a mixture. Then, the substance's largest storage level at the facility (maximum daily amount) must be determined. This process must be performed once (with any necessary updates) for Section 311 and annually for Section 312 (sample on page 22).

Calculations

I. Chloroform is an extremely hazardous substance (EHS) stored at the facility in two 55-gallon drums.* With two drums (1,000 pounds), the facility exceeds the threshold for EHS (500 pounds or the threshold planning quantity (TPQ), whichever is lower), even though the TPQ for chloroform is 10,000 pounds. One drum is used at the main plant, and a back-up is kept at the warehouse.
Maximum Daily Amount (MDA) = 2 drums X 500 lbs = 1,000 lbs
Average Daily Amount (ADA) =
(1 full drum + 1 half-filled drum) X 500 lbs = 750 lbs
Hazards: immediate, delayed, and sudden release of pressure

II. Chlorine is an EHS stored at the facility in as many as eight 50-pound cylinders. The maximum amount is 400 pounds. Although present in a quantity less than 500 pounds, the chlorine must be reported because that TPQ is just 100 pounds. The owner has chlorine on-site only six months of the year and on average has only five cylinders.
MDA = 8 cylinders X 50 lbs = 400 lbs
ADA = 5 cylinders X 50 lbs = 250 lbs
Hazards: immediate, reactivity, and sudden release of pressure

III. "Stick-E" is a mixture containing 2% toluene (a hazardous chemical) by weight. The owner always keeps twenty-five 55-gallon drums of "Stick-E", and no more, on-site. Instead of calculating the components of the mixture individually, the owner chooses to report this industrial glue as a product. Its maximum amount of 12,500 pounds exceeds the threshold for hazardous chemicals (10,000 pounds). The owner must report "Stick-E".
MDA = 25 drums X 500 lbs = 12,500 lbs
ADA = 25 drums X 500 lbs = 12,500 lbs
Hazards: fire, immediate, and delayed

IV. "Solvent-C" is a mixture with 0.5% tabun (an EHS) by weight. It is stored at the facility in two 55-gallon drums. Though tabun's TPQ is a mere 10 pounds, when it is calculated as a component of the mixture, the maximum amount is only 5 pounds--less than 500 pounds and the TPQ. The owner does not report "Solvent-C".
MDA = 0.005 X 2 drums X 500 lbs = 5 lbs

V. Turpentine is a hazardous chemical stored at the facility in a 1,000-gallon tank. The density of turpentine is less than water's density (0.87 g/cc versus 1.00 g/cc), so the owner can use the density of water (8.3 lbs/gallon) to estimate the weight of the turpentine in the tank. Since the tank is 1,000 gallons, the maximum amount is less than 8,300 pounds. The owner does not report.
MDA = 8.3 lbs/gallon X 1,000 gallons = 8,300 lbs

NOTE: This example is not intended to replicate any specific facility nor any standard handling practices for the substances cited. Also, "Stick-E" and "Solvent-C" are both fictitious trade names.

* An average 55-gallon drum of chemicals weighs approximately 500 pounds

Section 311 List

Hazardous Chemical	Fire	Sudden Release of Pressure	Reactivity	Immediate Health Hazard	Delayed Health Hazard
chloroform		X		X	X
chlorine		X	X	X	
"Stick-E"	X			X	X

Note: Neither the amount of the substance nor its location at the facility is noted on the Section 311 submission. The list (or the Material Safety Data Sheets) of the reportable substances at a facility must be submitted to the State Emergency Response Commission, Local Emergency Planning Committee and local fire department once, with any necessary updates. (see pages 7-9)

☆ U.S. GOVERNMENT PRINTING OFFICE: 1988 - 516-002 - 1302/80225

Tier Two
EMERGENCY AND HAZARDOUS CHEMICAL INVENTORY

Specific Information by Chemical

Facility Identification

Name: Example Facility
Street Address: 123 Main Street
City: Small Town State: OH Zip: 12345
SIC Code: 1234 Dun & Brad Number: 12-345-6789

FOR OFFICIAL USE ONLY: ID # ____ Date Received ____

Owner/Operator Name

Name: John Doe Phone: (216) 765-4321
Mail Address: 123 Main Street, Small Town, OH. 12345

Emergency Contact

Name: Jim Street Title: Security Officer
Phone: (216) 234-5678 24 Hr. Phone: (216) 234-8000

Name: Mr. John Doe Title: Owner
Phone: (216) 234-5678 24 Hr. Phone: (216) 234-0023

Important: Read all instructions before completing form

Reporting Period From January 1 to December 31, 19____

Chemical Description / Physical and Health Hazards (check all that apply) / Inventory / Storage Codes and Locations (Non-Confidential)

Chemical Description	Physical and Health Hazards	Max. Daily Amount (code)	Avg. Daily Amount (code)	No. of Days On-site (days)	Storage Code	Storage Locations
CAS 67 ____ Trade Secret ☐ Chem. Name: Chloroform Check all that apply: ☒ Pure ☐ Mix ☐ Solid ☒ Liquid ☐ Gas	☐ Fire ☒ Sudden Release of Pressure ☐ Reactivity ☒ Immediate (acute) ☒ Delayed (chronic)	02	01	365	D11 D11	Plant - Room D Warehouse 2
CAS 7782 50 5 Trade Secret ☐ Chem. Name: Chlorine Check all that apply: ☒ Pure ☐ Mix ☐ Solid ☐ Liquid ☒ Gas	☐ Fire ☒ Sudden Release of Pressure ☒ Reactivity ☒ Immediate (acute) ☐ Delayed (chronic)	01	01	182	L24	Swimming Pool Storage Garage
CAS 108 88 3 Trade Secret ☐ Chem. Name: Stick-E Check all that apply: ☐ Pure ☒ Mix ☐ Solid ☒ Liquid ☐ Gas	☒ Fire ☐ Sudden Release of Pressure ☐ Reactivity ☒ Immediate (acute) ☒ Delayed (chronic)	03	03	365	C11	Warehouse 1

Certification *(Read and sign after completing all sections)*

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete.

John Doe, Owner — Name and official title of owner/operator OR owner/operator's authorized representative
John Doe — Signature
February 20, 1988 — Date signed

Optional Attachments *(Check one)*

☒ I have attached a site plan
☐ I have attached a list of site coordinate abbreviations

The Revolution Ahead:

Public Information on Toxic Emissions — CSMA Talks with EPA's Charles Elkins

Government and private industry are faced with the enormous task of meeting the requirements of Toxic Chemical Release Reporting Rules—Section 313 of Title III of the Superfund Amendments and Reauthorization Act. Sec. 313 requires companies to report annual releases of toxic substances into air, water, or land to the U.S. Environmental Protection Agency (EPA). The EPA then must use those data to establish a national inventory of toxic chemical emissions.

CSMA's Vice President Stephen S. Kellner and Legal Counsel George G. Misko recently talked with the man responsible for orchestrating EPA's collection of these data, Charles Elkins, director of the Office of Toxic Substances. With final regulations issued Dec. 31, 1987, Elkins updated CSMA on the agency's requirements and gave his outlook on the consequences for our industry.

On Congress...

CSMA: Do you believe that the Sec. 313 reporting requirements will fulfill congressional intent?

ELKINS: The congressional intent is not as clear as one might want because there wasn't much debate on this section of the law. It's clear that Congress thinks individual citizens have a right to know what chemicals are discharged in their community, particularly as they affect their health.

The program is quite revolutionary when you think about it. We have never had that kind of information, even here at EPA. As it is said, "information is power," and these data will give citizens more power over toxics in their environment.

The Administration did not ask Congress for this right-to-know legislation. But now that it's the law of the land, we will implement it the best that we can.

CSMA: If the Bhopal accident had not happened, do you think we would have the statute?

ELKINS: It might have been longer in coming. People began to realize that the environment is dangerous. I'm not sure the situation changed since the release in Bhopal, but people began to realize that they need to know more about it.

CSMA: Do you think the deadlines that Congress set are reasonable?

Elkins: The deadlines are very tight. But by diverting resources from other activities, we'll make them. The deadlines are certainly tight for industry as well.

CSMA: Is Community Right-to-Know one of the larger projects that the Office of Toxic Substances has taken on in the last few years?

ELKINS: Yes, particularly as measured by its potential impact on the air, water, and Resource Conservation and Recovery Act programs in the future. When these programs look back—say two or three years from now—and say, "Look what the Office of Toxic Substances did to us!" I would like them at least to have to admit, "Well, it is a quality product."

"When these programs look back—say two or three years from now—and say, 'Look what the Office of Toxic Substances did to us!' I would like them at least to have to admit, 'Well, it is a quality product.'"

CSMA: Do you think Congress will be revisiting Sec. 313 reporting requirements within the next few years?

ELKINS: It may. There is an interest there. Just now, in the appropriations process, the committees have put $10 million in as grants to states to help them work on community right-to-know—not just Sec. 313, but all of Title III. This shows that Congress is watching this program and [is] willing to put some money behind it.

"Sec. 313 is not simply the creation of the world's largest data base. Citizens and public interest groups will use this information to work for change."

Charles Elkins

There are certainly some people who will lobby for a regulatory program which controls each of the identified emissions. Sec. 313 is not simply the creation of the world's largest data base. Citizens and public interest groups will use this information to work for change. Your member companies should be prepared to make the changes where they are called for. Of course, if a particular discharge presents no public health problem, such change is unnecessary.

On the List...

CSMA: Sec. 313 gives the agency authority to add or delete chemicals and substances from the list of chemicals that the law specifies on which emissions must be reported. How will the agency determine which chemicals to add and which chemicals to delete, if any?

ELKINS: We've interpreted the statutory history as allowing us to take potential exposure into account in making those decisions. This makes the determination more complex.

CSMA: One thing that has arisen—at least in rumor form—is whether, for instance, those extremely hazardous substances under Sec. 302 will, at one point or another, automatically be deemed Sec. 313 chemicals, or through the regulatory process will be deemed such.

ELKINS: There certainly won't be any chemicals *automatically* added to this list. At the same time, I envision that some additional chemicals will qualify to go on. My long-term goal is that this list become EPA's main list of toxic chemicals. I think that the public would be well served to be able to consolidate many of EPA lists. What it means is that we probably will add some chemicals and we will probably delete some in order to serve the needs of all EPA programs.

On Making the Estimates...

CSMA: Some people are concerned that the methods available for estimating emissions will necessarily lead to drastic overestimates. Do you think that information submitted by industry will be accurate?

ELKINS: We will have a problem in getting accurate data, mainly because all of us will be estimating many of these emissions for the first time. It is very difficult to make estimates in some situations—industry has many different processes. The public has a right to expect a good-faith effort on the part of those who are reporting. In the first year, we will emphasize the importance of a good-faith effort and will be sympathetic where the estimates are difficult to make.

CSMA: Is the agency going through any specific measures to assist industry in developing methods for estimating emissions?

ELKINS: We are putting together technical guidance tailored to the major industry groups. We recognize that each segment of the manufacturing industry is different in the way it deals with chemicals and its ability to estimate emissions. The guidance [manual] is an effort—our best effort—and we are expecting feedback from industry.

CSMA: Will industry be required to use that guidance manual to estimate emissions?

ELKINS: Absolutely not. The manual is there to help. We have a few months' head start on this issue, and we want to give industry the benefit of our thinking. But, the guidance is simply that: guidance. Individual companies know their processes better than we do, and should make the best estimates they can.

"Simply saying, 'My engineer knows best,' will not be sufficient even though it may be true."

However, they should recognize that this doesn't constitute a blank check. Two kinds of people will ask industry about these estimates. First, EPA inspectors need to know how the estimate was made. Second, and perhaps more importantly, the citizens of the local community may come in and want to know how the estimates were made. Simply saying, "My engineer knows best," will not be sufficient, even though it may be true. For this reason, our rule will require firms to document their estimation methods and keep these records for a period of time, although they will only have to report the final estimates.

It is absolutely essential that this data base have credibility. It is not in your interest and it is not in our interest for people to say that the data base is just full of fictitious numbers. If the public can't get accurate information from the data base, Congress may insist that they get it some other way, such as through mandatory monitoring.

CSMA: Some have expressed concern that the technical guidance manual may take on a life of its own. It may suddenly become the thing that companies have to be in compliance with, irrespective of all good intentions. Is the agency going to take steps to make sure that it is understood that another method can be used for estimating?

"If the public can't get accurate information from the data base, Congress may insist that they get it some other way, such as through mandatory monitoring."

ELKINS: The best way, in the long term, is for industry groups to participate in writing guidance for themselves and for each other. It seems to me that a number of companies—particularly the smaller companies—are going to have difficulties, while some of their bigger cousins might be able to give them some tips about how to make some calculations. The burden of making these estimates is placed by the Congress on the reporting community, not on EPA. We're writing technical guidance because we realize that making these estimates is not an easy task.

On EPA Assistance . . .

CSMA: At CSMA's Regulatory Conference in October, you expressed some concern that companies might not understand the importance of compliance. What type of programs are you implementing to assist companies?

ELKINS: We are staffing the regional offices with people who will be of some assistance. But companies should recognize that we're learning this process just as they are learning it. So they may well have to turn to their own staffs, or even to the private sector, to get some assistance because the July 1988 deadline for reporting is approaching fast.

To a large extent, companies are going to have to be on their own to get the assistance where they can find it. We will help as best as we can, but with 30,000 reporting facilities, most will have to cope as best as they can. We are also investigating mechanisms for making training courses available.

I would hope that your member companies would recognize and agree that their customers may not like hearing the bad news that they must report under Sec. 313, but they probably are going to be more unhappy if they miss the reporting date and get caught up in an enforcement action. So there is a need for all of us to try to make this program work in a way that accomplishes what Congress intended without having more disruptions than absolutely necessary.

CSMA: Will there be a Toxic Substances Assistance-type office? Is there any thought to starting something like that?

Quite frankly, most of our efforts between now and the reporting deadline of July 1988 will be devoted to trying to tell people that they need to report. Assistance in actually filling out the form, making the estimate, and this sort of thing will have to come primarily from our written guidance manuals—and that's why it is so important for people who really know these processes in industry to look at those drafts and to give us meaningful comments.

"Mixtures may turn out to be one of the most important reportable items on this data base."

On Mixtures . . .

CSMA: Mixtures are widely processed, manufactured, and used by the chemical specialties industry. What is the agency's latest thinking with regard to the reporting obligations for Sec. 313 chemicals contained in mixtures?

ELKINS: Mixtures may turn out to be one of the most important reportable items on this data base. We think that a lot of the interest in local communities will be on mixtures, and not in the large commodity chemicals.

A question exists of how to report where the subject chemical is a very small percentage of the mixture. We are considering adopting the Occupational Safety and Health Administration cut-offs of 1% or 1/10th of a percent at least for the first few years.

We are also seriously considering requiring the suppliers to make data available to the users about Sec. 313 chemicals contained in mixtures. This is not without controversy. But for the long term, we believe that this is in the best interest of everyone, including the suppliers—that is, to be able to provide this information in an organized, efficient manner, rather than receiving 10,000 phone calls from their angry customers who are trying to fill out a Sec. 313 form.

CSMA: Certain Sec. 313 chemicals are not products intentionally added to the mixture, but may result as a by-product reaction and then be found in trace amounts in mixtures. Is it the agency's inclination to require the manufacturer to find out whether any Sec. 313 chemicals are in the mixture?

ELKINS: No new analytical testing is required, but if you have reason to believe that such by-products exist, you must estimate then for purposes of reporting.

Stephen S. Kellner

George G. Misko

On Trade Secrets . . .

CSMA: Proposed regulations address trade secret claims by establishing a list of generic classifications that could be used in place of specific chemical identity. There has been some concern that this list will not provide adequate protection of chemicals for legitimate trade secrets. How is the agency going to address this concern?

ELKINS: We read the legislation to recognize legitimate trade secrets with regard to the name of the

chemical. It is not our intention to run the program in such a way that, either directly or indirectly, forces companies to reveal such legitimate trade secrets.

On the other hand, the statute contemplates putting a very high burden of proof on those who are claiming legitimate trade secret claims because the agency has had some bitter experience with people very easily claiming confidential business information. The regulations will require people to meet a very high burden of proof.

At the same time, we will not through indiscretion give away these trade secrets by, for instance, telling people the health effects of the secret chemical in such detail that anyone would be able to determine the chemical identity from this information. That means that users of the data base will have to put up with less in health information in order to keep this protection for trade secrets. This is a very uncomfortable trade-off which we have to make between trade secrets and the public's right to know about health effects and it is one that Congress may want to revisit.

CSMA: In mixtures, we are talking about chemical identity as well as concentrations. If suppliers are required to inform customers of the presence of Sec. 313 chemicals in those mixtures, how is the agency going to handle the problem of providing percentage concentration information which may be confidential?

ELKINS: We have not yet made all these determinations about how that information should be provided in such a way as to protect the legitimate trade secrets.

CSMA: Who is going to decide whether the trade secret claim is legitimate?

ELKINS: EPA will first look to see whether the *prima facie* case has been made under the regulations. We are warning people whose companies make this claim initially that they and their companies face a potential $25,000 fine for frivolous claims. We would consider it frivolous if a company makes an assertion which they can't back up with facts. If in the substantiation phase we find that this company can only make assertions and has no facts, we have the $25,000 fine as a way to discourage illegitimate use of the trade secret provision in the future.

In the opening year, we plan to put considerable staff time on this, because if we have a large number of trade secret claims, it will not be credible that they are all legitimate. This would jeopardize the credibility of the whole data base. So we will be pursuing these claims and sifting the illegitimate ones from the legitimate ones.

A trade secret expert from outside the government indicated recently that he didn't think EPA would pursue the $25,000 fine. He was right in the sense that we don't go out looking for opportunities to have people pay fines, but in this case, the credibility of the data base is at stake, so people who submit trade secret claims can expect close scrutiny.

On the Data Base . . .

CSMA: The purpose of Sec. 313 is to readily provide information to the general public through a data base. Will the data base be constructed and run by EPA or another government agency, or operate through a privately funded effort or private organization such as a university?

ELKINS: We haven't decided that yet. Instead, we have determined the quality of that service and looked for the best way to provide it. Specifically, we are looking for the ability for people to sit at their computer terminals, dial up this data base from anywhere in the country, and be able to not only look at each individual emission report, but actually analyze the data. So they could ask questions like: "How many tons of carcinogens are released in the air in my community?" or "How does Company X compare to other companies in its Standard Industrial Code?'

CSMA: How soon after the first reports are due, July 1, 1988, does the agency expect to have the data base up and operating?

ELKINS: We are shooting for January 1989, assuming that we get something on the order of 160,000 reports.

CSMA: Do you think that there will be any user fees attached to the data base?

ELKINS: There may [be], if we make this data base available to the public through a private vendor, who is in the business of providing data. We don't expect these fees to be high enough to discourage use.

On Public Access . . .

CSMA: Do you think that the public, in general, will be able to understand the information in the data base, so as to make an analysis?

ELKINS: This is a matter of concern. Title III represents a shift from how we used to operate. In the old days, EPA analysts would collect the data and analyse it. When they had something to say about it, they would make the data available to the public in some aggregate form, and tell the public what the government was going to do as a result of the data. It was pretty much a government-regulated or government-modulated program which, on its own timetable, collected the data, analyzed and then released it.

Title III really turns this process upside down. Under Sec. 313, EPA collects the data, puts it up on the computer and people can analyze it any way they want to. There will be no EPA press release or "editorial" from EPA. That's the way the statute was

written, and our assistance to the community in understanding the data will have to be supplementary to this primary task.

CSMA: Does the agency intend to take any steps to reduce the potential problem of the public misinterpreting the data?

ELKINS: First, the agency has no obligation under the statute to do so. The problem of interpreting the data is left to the public. However, we recognize that if society is going to spend this much money collecting the data, it is appropriate that it be used intelligently. So, we are anxious to see what we can do—from an educational and technical assistance point of view—to try to help. We have encouraged industry and environmental groups to focus on this same need.

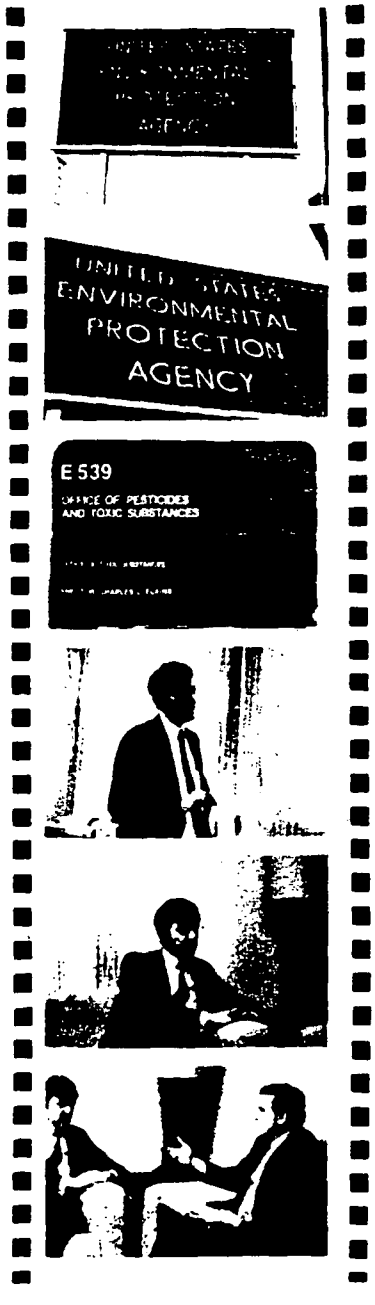
"The greatest potential misunderstanding is that the information will be *emission* data, but people make believe it represents *exposure* data."

The greatest potential misunderstanding is that the information will be *emission* data, but people make believe it represents *exposure* data. People may tend to think that if a toxic chemical is going into the air in their community, they are probably breathing it; if it's going into the river, they will think they are probably drinking it. Of course, this is simply not the case in many situations.

CSMA: How can we cut down potential misunderstandings? Exposure data is not being reported. How is the agency going to communicate that to the public so that they can understand what that data represents?

ELKINS: We are thinking of helping the layman translate from emission to exposure. If we can help them make that translation, even in gross terms, this at least allows them to communicate to their state or local agency about the risk of exposure. Once emissions can be translated to exposure, you are talking about a dose, parts-per-million, concentration numbers. Those are terms which people in other agencies, companies, and environmental groups can relate with some assumptions to risk estimates. But you can't take raw emission numbers and arrive at a risk estimate. There is no algorithm to do that. We think that the most important thing we all can do is to help people estimate potential exposure from these emission numbers.

CSMA: What can industry do?



ELKINS: There are a number of things that industry can do. First of all, it is not too early for each company to take the draft form, look at their own emissions in tons per year, and plan what they are going to say about that emission to their community.

Why not think through what that emission means in exposure terms to that specific community? Why not write down what you would expect the president of the company to say to the first reporter who calls the day after the data are announced? Companies don't have to wait until the day they fill out

the form to know what those chemicals are and have some general idea about the tonnages. If you think the emissions are not protective of public health in the community, then now is the time to do something about them—voluntarily! If they are safe levels, now is the time to think through what facts can be presented to the community and to regulatory agencies to help them reach the same conclusions.

Second, EPA has kicked off a project called "Common Ground," an attempt to have industry, environmental groups, public interest groups, state governments, and EPA sit down around the table now and talk about whether or not there is any common ground around the issue of intelligent use of the data base.

I believe that each one of those groups has an interest in seeing that data intelligently used. Companies are interested in seeing that they get a fair shake. Environmental groups should be interested that society's energy and resources are devoted to curing the real problems that are identified in this data base, rather than chasing after "red herrings." There will certainly be a lot of red herrings identified in the data base, simply because it is emission data and not exposure data. But I expect us to find a lot of *real* problems too.

If we don't meet around the table, we can expect to meet each other in the community. In the past, the toxic chemical issues were fought out in Washington D.C. or state capitols. Now Sec. 313 will allow the debate to shift to plant-specific issues which can be dealt with, at least in part, in the local community. This will be a whole different playing field for government, industry, and public interest groups, and the stakes for this country's public health and for its economy are high. We are trying to do our part to get ready. I hope your member companies and public interest groups are too.

Barbara Melber
Communications, CSMA

As American as

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U S General Services Administration

Section 313: A "Bear" of a Problem

Charles Elkins, director of the Office of Toxic Substances at the U.S. Environmental Protection Agency (EPA), appeared at CSMA's Fourth Annual Regulatory Conference in October. His comments to CSMA members on Title III's Toxic Release Inventory (Section 313 of Superfund Amendment and Reauthorization Act (SARA)) contain valuable advice for companies preparing for the difficult situation created by the law.

I usually introduce the subject of the Toxic Release Inventory by telling the following story. A hunter went out to do some hunting. Walking along the edge of a ravine, he dropped his rifle down the ravine, and he had no choice but to follow it.

When he got halfway down the ravine, he heard this growl behind him, and out of a cave came a bear. He decided that the best thing to do was pray.

Looking up to heaven, he said, "God, please give this bear religion." Suddenly there was a strike of lightning and thunder. The bear looked up, folded paws, and said, "Dear God, for these gifts which are about to receive. . . . "

The moral of this story is "be careful what you ask for!" In fact, even when you don't ask for it, Congress sometimes gives you a "gift" anyway and it you are not alert, it can turn into a "bear" for you.

One of these potential bears is Section 313 of SARA, known as the Toxic Release Inventory. It's an inventory of the annual emissions of over 300 toxic chemicals to air, land, and water by individual companies. Your first report is due July 1, 1988.

Recently, the Roper Polling Organization asked people, "Are there any toxic chemicals in your neighborhood?" Three out of four people said, "Nope, no toxic chemicals in my neighborhood. Maybe over there, but not in my neighborhood."

"People simply do not know what's really going on in their community."

You and I know that's not true. People simply do not know what's really going on in their community. Sec. 313 chemicals are released in most communities every day.

The Office of Toxic Substances has the job to collect this information from about 30,000 facilities across the country, put it on a computer, and make it available electronically to everyone who wishes to receive it on their home computers. Our target is to make it available in the spring of 1989.

What does this mean for your corporations and your customers who are using some of these chemicals? Keep in mind that reports are required when you manufacture more than 75,000 pounds or use more than 10,000 pounds of any one of these chemicals. The headlines next year, either in your company's home town or in your customer's home town, could read something like, "Happy Chemical Company dumps five tons of toxic chemicals in the local river—what does this mean for the city's water supply?"

A second headline: "Happy Chemical Company among the top worst dischargers of toxic chemicals in its industrial class. Local activist charges that profits are made by using the community as a toxic dump."

"Dealing with emissions will be a little tougher, because those who receive your emissions are not the same people who benefit from your products."

I think these headlines that I made up are really not as unreal as you might think. Every one of those statements would be possible to write after 10 minutes of looking at the computer data.

I know that many of you have dealt with this communication issue in the past with chemical products. Education efforts help your customers understand that they're dealing with chemicals that are not perfectly safe, but if they are used according to the label and with good common sense, they can be used safely. Dealing with emissions will be a little tougher, because those who receive your emissions are not the same people who benefit from your products.

"Sec. 313 is here to stay and it is going to have a big impact on the way this society deals with toxic chemicals."

As I have watched other people's response to the Community Right-to-Know Program, I have observed that it's a reaction similar, though, of course, on a much smaller scale, to one outlined in the book, "Death and Dying."

People react to such situations in five stages. The first stage is disbelief. Many people react, "This can't be true. It can't happen to me."

Next, people get angry. In the case of Sec. 313 they might say, "Why would Congress pass a law which dumps all these data on people who may not know how to use it?"

The third reaction people have is to bargain. We see this as people try to get their chemical off our list. The bad news is that it is unlikely that anyone is going off the list until after the first reporting period.

The fourth reaction that people have is depression, and many people never get beyond this stage. However, the fifth stage is acceptance. If people who are facing death get to this stage, then they are able to make the best use of the time that remains. The same is true, I believe, with Community Right-to-Know. It's a radical departure from the past, but you cannot deal effectively with the real challenge it presents in risk assessment and risk communication if you're always fighting the concept. Sec. 313 is here to stay and it is going to have a big impact on the way this society deals with toxic chemicals. I'd suggest we all try to move as quickly as possible to the acceptance of this program.

Until you accept the fact that this program is coming and that in July you're going to file these reports and everyone is going to know that your company is dumping tons of chemicals into the environment, you won't be ready.

What can you do about this? Well, let me just give you a few suggestions. First of all, you might try filling out the draft form for your company.

Second, estimate the tonnage of some of your major pollutants, and with your public affairs official, try drafting the press release that tells why these discharges are necessary, why they meet public health ordinances—and do that in plain English, please.

Tell about the progress your company is making in controlling your emissions in the last 20 years, or what plans you have for dealing with it in the future.

You can write it today. There is no sense in waiting for the day that it happens. Because you know it's going to happen. And you might try to tell your customers, too.

If you have a real toxics pollution problem at your company instead of just an apparent one, then now is the time to start fixing it, not when the reports are released.

Make some contacts with the press in your community if you haven't already done so, so that when they meet you on the day of the press conference, they're not meeting you for the first time.

Think about the problem for your customers. How will you react when they ask you what's in your product? How will you react when they ask you why you're making them fill out all of these government forms? What will you answer when they ask you if there aren't some substitutes you can put in the product that aren't on the Sec. 313 list; or whether your competitor's product may be better since it doesn't have a Sec. 313 chemical in it?

Think about how you might inform your customers about what is in your products; the fact that they contain a Sec. 313 chemical, and in what percentage.

This legislation is going to have a big impact on the way that effluents are controlled. Now you might say, "I'm not in the effluent business, I'm in the product safety business. Effluents are the job of another department in the company." Your corporate president is going to be happy for all the help he can get, and those of you who are experienced, as you are I'm sure in dealing with the risk questions related to your products, are going to be invaluable to your company and to your customers.

So, are you are going to be standing next to this bear when he emerges from hibernation next year? Well, bears are like toxic chemicals. Proximity has a lot to do with how safe they are. If you're already 100 yards down the canyon, you're going to feel better about that bear.

Of course, it you do find yourself five feet away from the bear, I suggest you pray—there is no telling what might happen. But always keep in mind, "God helps those who help themselves."

Getting involved in community right-to-know

William Beranek Jr., chairman
Committee on Environmental Improvement

John P. McCullough, chairman
Committee on Chemistry & Public Affairs

Stanley H. Pine, chairman
Committee on Chemical Safety

Robert L. Soulen, chairman
Committee on Local Section Activities

In recent years, people throughout the U.S. have decided they want and have an obligation to know about potentially hazardous chemicals being used in their communities. As a result of some unfortunate major chemical accidents and the subsequent public pressure, Congress enacted legislation to address these concerns. On Oct. 17, 1986, the "Superfund Amendments and Reauthorization Act of 1986" (SARA) was signed into law. SARA contains a separate section, Title III, known as the "Emergency Planning and Community Right-To-Know Act of 1986." It requires each state to establish a planning commission and local planning committees, to develop local chemical emergency preparedness programs, and to gather and disseminate information on hazardous chemicals in the community. Under various provisions of Title III, manufacturers, processors, and users of chemicals must submit technical information on certain chemicals to state and local planning committees as well as to local fire departments and to the Environmental Protection Agency. EPA, in turn, must develop a database, accessible to the public, containing information on the potentially hazardous chemicals in a community.

The goals of this community right-to-know program are commendable, but data gathering and interpretation as well as emergency planning are complicated tasks. Furthermore, supplying all available data on a particular chemical may not be the best way to help people make informed decisions. Most people do not have the necessary training and experience to understand the significance of the information they receive. The same may be true for local fire departments, many of which are volunteer and are poorly equipped to handle massive amounts of technical data.

There is a great need to improve communication about potentially hazardous chemicals with the public as well as with officials who must implement the regulations. The community right-to-know program can benefit from technical expertise—from individuals capable of lending their experience and knowledge to ensure that proposed programs are technically and scientifically sound. ACS has been an active participant in the development of the community right-to-know legislation and regulations. However, at this time a more coordinated, societywide program is warranted. Most of the regulations are being implemented at the state and local levels, and it is at these levels that ACS members can be most helpful. The society's 182 local sections can serve as an excellent resource to provide technical expertise to assist community officials and the general public in complying with the community right-to-know regulations. The influx of data on potentially hazardous chemicals will require knowledgeable and experienced chemists and engineers to help local committees evaluate the significance of the information and disseminate it to those who need and/or want to know it in terms they can understand. The subject of risk will arise, and it is the responsibility of professionals such as ourselves to describe these risks and put them into perspective.

As professionals, ACS members may offer their expertise and experience in several ways: by serving on the state or local planning committees established by the governors; by peer-reviewing the emergency response plan developed by the local committees; by providing technical guidance to the state and local committees and fire departments, such as interpreting data submitted by facilities, identifying hazards, and assisting in the development of the emergency response plan; and by communicating risk information on potentially hazardous chemicals to the public.

To encourage involvement, the society is planning to hold training sessions at ACS regional and national meetings. These workshops will train ACS members in how to communicate to citizens the technical and risk information about chemicals in the community.

We, as technically trained chemists and chemical engineers, are one of the greatest resources of ACS. We are also members of the community and have a social obligation—an ethical, moral, and professional responsibility—to use this training and knowledge to further the public welfare. The current community right-to-know regulations provide the framework for how we may fulfill these obligations. The emergency planning and notification provisions of Title III of SARA will affect all segments of the chemical community. Working together, yet as individuals in our respective communities, we may make a difference.

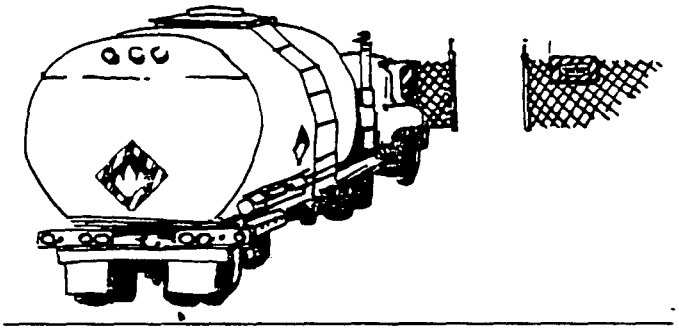
To assist ACS members who wish to volunteer their technical expertise, the society's Department of Government Relations & Science Policy has available background material, including a general overview of Title III provisions, copies of official ACS policy statements commenting on Title III implementation, and persons to contact in the states. To receive this information please contact Michele Boisse, ACS, 1155—16th St., N.W., Washington, D.C. 20036, or call (202) 872-4391.□

United States
Environmental Protection
Agency

Emergency Response EPA Region III

EPA

TITLE III
What it Means To You



Citizens' Fact Sheet - Emergency Planning and Community Right-to-Know Law

October 1987

The Emergency Planning and Community Right-To-Know Act of 1986

What It Means to You:

- **It Helps You and Your Family Be Prepared for Chemical Emergencies.**
- **It Provides for Your Participation in Your Community Emergency Planning.**
- **It Keeps You Informed About Chemicals in Your Community.**
- **It Assists Your Community in Preparing for Chemical Emergencies.**

What is Title III?

Title III is a part of the Superfund Amendments and Reauthorization Act (SARA) which became law in 1986. Title III legislation establishes a partnership between states, local communities, and industries to help in emergency planning and notification. This legislation gives assistance to State and local programs and is designed to meet community needs for potential chemical emergencies. As a result, your State and local governments are organizing your community for quicker, better responses to potential chemical emergencies.

- Title III requires that you, the citizen, have access to information about possible chemical hazards in your community.
- Title III defines what information is available to you and where and how you can obtain it.
- Title III explains local emergency planning requirements and describes how you and others in your community can contribute to those plans.

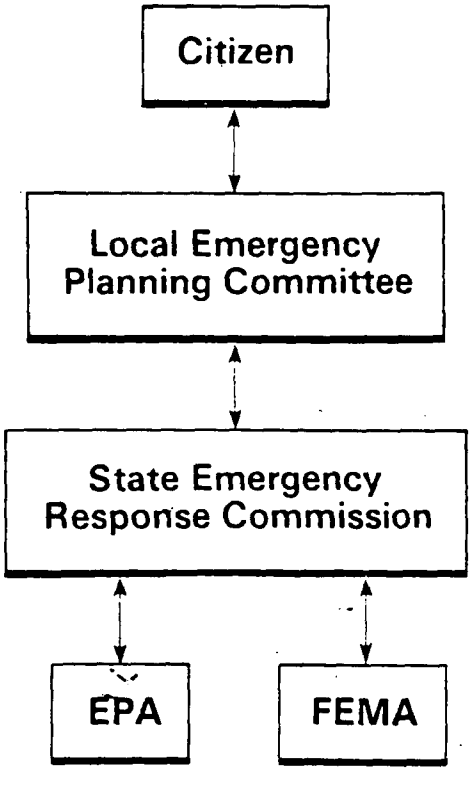
Title III makes it possible for you to learn what steps your local planning committee should take to be fully prepared for any possible chemical emergency. By learning what should be done, you can better prepare yourself and your family, and your community for chemical emergencies.

As of August 1987, the states of Delaware, Maryland, Pennsylvania and West Virginia have Right-to-Know Laws. These laws address Community and Worker Right-to-Know requirements. Worker Right-to-Know Laws require industries to inform employees about chemicals in their workplaces. Community Right-to-Know Laws require industries to provide this chemical information to the communities in which they are located.

How is the Federal Government Helping?

Local emergency planning committees now have technical assistance and training available to them. The Federal government makes this assistance and training available to local agencies through their States. The Environmental Protection Agency (EPA) and the Federal Emergency Management Agency (FEMA) are two Federal agencies actively involved in emergency planning, training and assistance. Regional Response Teams, with representatives from Federal and State agencies, also play a significant role in planning for and responding to chemical emergencies. Local committees may contact their State Emergency Response Commissions and regional Federal offices to receive assistance for emergency response plans, for inventories of toxic chemical emissions from certain local industrial facilities, and to review existing and proposed emergency response plans.

Information Flow



Place Stamp Here

How Can You Participate? Easy as 1, 2, 3

1. How Can You Obtain Information?

Local emergency planning committees are being organized as a result of Title III. Your committee, which should have been appointed by August 1987, will become your most immediate source of information. Your local committee will receive information from industrial facilities in your community about the chemicals in use. Title III requires that between now and July 1988, all industries in your community must submit information about chemicals that exist in their plants. This information is available to you from your local emergency planning committee upon request.

Your local community emergency response plan will be published annually. It will tell how you can obtain chemical information such as Material Safety Data Sheets (MSDSs) and chemical inventory forms. You will have an opportunity to comment on revisions to the plans when an updated version is published in your local newspapers each year.

Information on toxic chemical emissions in your community is available through the EPA and through designated State officials. (Please refer to the "contacts" panel of this brochure for the contact in your state.)

Title III authorizes you to bring suit to obtain the information described above. If you are denied information to which you are entitled, you may sue any or all of the following: The EPA, your State Emergency Response Commission (SERC), the Governor of your state, or the owner/operator of a facility in your community, depending on the type of information you are seeking. Once you have submitted your request for information, the owner of the facility is obligated to provide your committee with the requested information.

2. What Part Will Your State and Local Government Play?

The Governors of each State have already appointed State Emergency Response Commissions. These Commissions will establish procedures for receiving and processing requests for information. Your local government is already organizing local emergency planning districts and committees. Counties are the designated districts in most areas.

Local community groups are among the participants to be represented on your local emergency planning committee. Other participants include State and local agencies such as fire and police departments, emergency medical services, health agencies, civil defense, hospitals, local environmental agencies, the media, and owners of industrial facilities. Owners and operators of industrial facilities must submit information on their use and manufacture of chemicals to your local emergency planning committee and to the State commission. Your local committee will establish its own rules, give public notice of its activities, and establish procedures for handling your requests for information.

The local committee's primary responsibility will be to develop an emergency response plan by October 17, 1988. Many communities and facilities may already have emergency plans and procedures. These existing plans will be modified to meet Title III's new requirements. Your community's emergency response plan will:

- Identify facilities in your community where chemicals are used.
- Identify transportation routes for extremely hazardous substances used in or passing through your community.
- Establish emergency response procedures to be followed within industrial facilities and in your community.
- Name a community coordinator and facility coordinator(s) to implement your community's plan.
- Issue emergency telephone numbers, emergency assistance locations, and other notification procedures.

- Establish ways to determine the occurrence of a hazardous chemical release and the probable affected area and population.
- Describe local and industrial emergency equipment and facilities available for use during a chemical emergency and identify the persons and agencies responsible for putting them into action.
- Develop evacuation plans for your community.
- Provide a training program for your local emergency response personnel.
- Organize emergency response plan exercises in your community to practice emergency response procedures.

3. How Can You be Involved?

You can contribute to the emergency planning process by making sure your community group is participating on the local committee or by being active yourself. These are some ways to participate:

- Be certain your local emergency planning committee has been formed.
- Call the community coordinator at your local emergency administration.
- Contribute to meetings of your emergency planning committee.
- Examine your community emergency response plan to be certain it meets your needs.
- Review and comment on your community's annual emergency response plan.
- Request information that you need about local industrial facilities from your local planning committee.
- If your requests are denied, you may bring civil action to obtain information to which you are legally entitled.

The more involved you and your neighbors are, the better you can respond, and the safer you and your family will be when an emergency happens. Knowing what to do will help you and your family avoid panic in the event of an emergency.

CONTACTS

U S EPA Region III
(800) 438-2474
Attention: Title III Coordinator
841 Chestnut Building
Philadelphia, PA 19107

Delaware
Delaware Department of Public Safety
Dover, DE 19903
(302) 736-4619

District of Columbia
Office of Emergency Preparedness
Washington, DC 20009
(202) 727-6161

Pennsylvania
For more information:
Department of Labor and Industry
Bureau of Right-to-Know
Harrisburg, PA 17120
(717) 783-2071

For emergencies:
Pennsylvania Emergency
Management Agency
Harrisburg, PA 17120
(717) 783-8150

Maryland
Maryland Emergency Response Commission
Pikesville, MD 21208
(301) 486-4422

Virginia
For emergencies:
800-468-8892 (Virginia only)
Virginia Department of Waste Management
Richmond, VA 23219
(804) 225-2667

West Virginia
Department of Natural Resources
Charleston, WV 25305
(304) 348-2755

EPA Toll Free Number
(800) 535-0202
(479-2449 in the Washington, DC area)
for the following information:
- General Inquiries
- Title III Fact Sheet
- Title III-related Federal Registers
- Hazardous Materials Emergency Planning Guide

Risk Communication: Getting Ready for 'Right-to-Know'

by Charles L. Elkins

"We are drowning in information and starved for knowledge." —John Naisbitt, *Megatrends*

During the next two years, a tidal wave of new information on hazardous chemicals will wash over thousands of communities across the United States. The "wave" will consist of reports to the public on the amount of hazardous chemicals stored in and released to the air, water, and soil of those communities—reports required by the Emergency Planning and Community Right-to-Know Act of 1986 (Title III of the Superfund Amendments and Reauthorization Act of 1986).

The Community Right-to-Know law is an exciting new approach to environmental protection. It is based on the belief that the more information citizens have about environmental conditions in their communities, the better equipped they will be to ensure their own protection from unacceptable risks to their health and safety. The law requires disclosure by industry of both the presence and release into the environment—including both accidental and "routine" releases—of hazardous substances. The information will be available not only to government regulators, but also to the people most directly affected—the residents of the communities where the substances are located.

From EPA's point of view, Title III presents both great opportunities and great challenges. Its promise lies in the wealth of new data on levels and sources of hazardous substances in the environment that the law eventually will provide. As the program matures and the data become more and more reliable, information from the Title III reports could become the "front end" of the Agency's toxic substances and other regulatory programs. Title III data could help EPA, as well as state and local authorities, set regulatory and enforcement priorities to control hazardous substances in all environmental media—air, water, and soil.

The law also could become a driving force for the development of new industrial processes and techniques to eliminate hazardous wastes at their source—before they are produced and either released into the environment or trucked away for expensive, and not always effective, treatment and disposal.

But the promise of the community right-to-know information over the long run is equalled by the problems it could cause, if not properly understood and used, in the short run. Except in a handful of states that already have community right-to-know laws, businesses have little or no experience in reporting this kind of data. Consequently some reports—especially the reports of annual "routine" emissions of toxic chemicals required by Section 313 of Title III—are likely to be very rough estimates of actual releases. The value of the emissions data in the first years of the program probably will be limited to helping EPA and other authorities identify potential "hot spots"—areas with apparently high levels of toxic emissions—for careful monitoring and evaluation to determine if an environmental hazard may be present that requires immediate attention.

Despite the limited reliability and value of some Title III reports in the early years, however, the information collected from more than one million industrial facilities, farms, small businesses, and other chemical users around the nation will be immediately available to the public. The Community Right-to-Know law requires the states in which the facilities are located to release the information to anyone who requests it, either in printed form or—in the case of the annual emissions reports by EPA—on a national computerized database called the Toxic Release Inventory (TRI). Title III's requirements for reporting on the storage and accidental release of hazardous chemicals are already in effect; the first round of annual emissions reports must be submitted by July 1, 1988. EPA expects the national database to be ready for public access by the spring of 1989.

How prepared are America's communities to receive, understand, and act on this unprecedented deluge of information about hazardous chemicals? That question has been a central concern to EPA since the law was passed. And the answer, unfortunately, seems to be: not very.

Public opinion polls such as those taken by the Roper Organization during the past few years show that most Americans believe that toxic chemicals can be found in the air, water, and soil in the United States—but not in their own neighborhoods. Except in industrialized regions or areas where hazardous substances are known to have been dumped or buried—the "Superfund" sites—toxic chemicals seem to be, for most Americans, "somebody else's" problem.

But some people who hold this view could be in for a surprise as the first Title III reports become public knowledge—especially if they indicate that substantial amounts of hazardous chemicals are stored and routinely released into the environment in their particular neighborhoods.

The routine emissions reports, which will show estimated or actual toxic releases on an annual basis, could be especially alarming.

Continued on next page

How prepared are America's communities to receive, understand, and act on this unprecedented deluge of information about hazardous chemicals?

For example, a newspaper article based on the Section 313 reports might look like this:

Local Plant Dumps Toxic Chemicals in Crystal River

The ABC Manufacturing Co. in downtown River City dumped more than 200 tons of toxic chemicals, including several cancer-causing substances, into the Crystal River last year, according to reports made public yesterday by the U.S. Environmental Protection Agency.

The river is the major source of drinking water for River City and most of surrounding Utopia County.

The reports also show that ABC, a leading producer of chrome-plated industrial widgets, released nearly 50 tons of toxins into River City's air in 1987, and sent another 300 tons of potentially poisonous material to the Utopia waste-treatment plant for disposal.

Last year, the plant reported to EPA that it stores more than 1,000 tons of hazardous substances within a few blocks of River City High School. On three different occasions over the past six months, plant accidents have released clouds of hazardous and toxic chemicals into the surrounding neighborhoods.

Now, if you were a resident of River City, what would your reaction be? Outrage? Skepticism? Concern for your family's well-being? A heated phone call to the Mayor or the company president, demanding an explanation or an immediate shut-down of the plant?

The question is not altogether hypothetical. Articles similar to this could begin popping up in the news media around the country as the Title III reports become available. Such news stories, based on accidental release or annual missions reports of questionable accuracy and written out of context, could be extremely misleading. And even accurate reports, by themselves, simply will not provide enough information for citizens or government officials to reach informed conclusions about whether hazardous chemicals actually pose a serious health risk in their communities.

In some instances, in fact, public concern over Title III reports could be entirely justified; toxic emissions into the air, water, or soil, for example, could endanger the health of citizens or the welfare of the environment.

The key word, however, is "could." The simple fact that toxic chemicals are released doesn't necessarily mean that public health and environmental quality are threatened. The fact that Company A says it released 50 tons of chemical X while Company B reports releasing 100 tons of chemical Y doesn't necessarily mean that Company B's emissions are twice as big a problem as Company A's. Much more than raw, unverified release information is needed to determine the risk in a given situation. And that's where the Community Right-to-Know law creates a major challenge for those whose job it is to assess and manage environmental risks to human health.

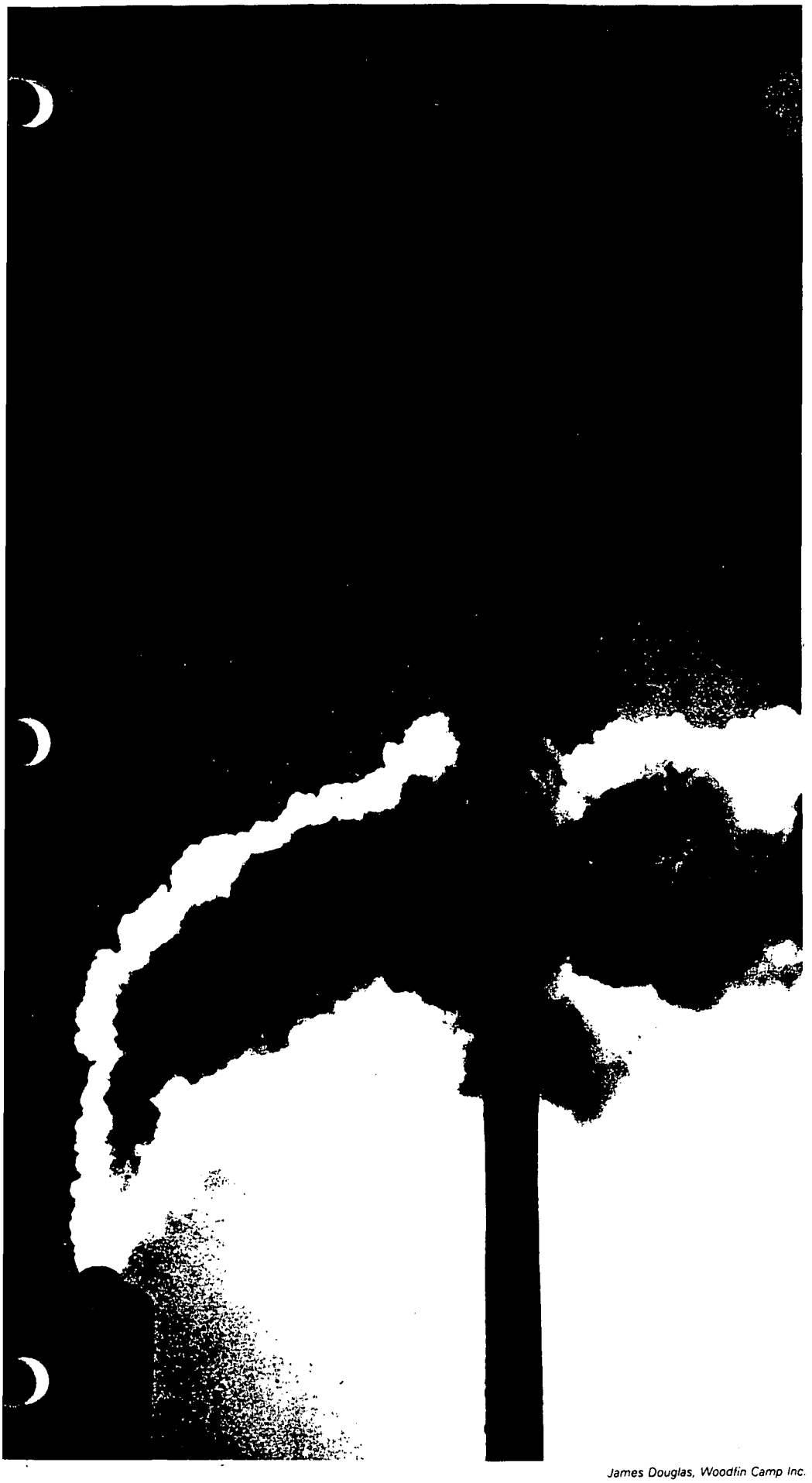
EPA management believes that the Agency, along with industry, environmental groups, and state and local governments, has a responsibility to help the public understand the significance of hazardous substances in the environment. We must do more than simply collect and verify the information and make it available.

Under Sections 301-303 of Title III, states and localities have established state emergency response commissions and local emergency planning committees to receive and handle community right-to-know information required by the law. Section 302 requires facilities (manufacturing plants, distributors, farmers—anyone storing more than a specified quantity of any of 406 chemicals listed as "extremely hazardous" by EPA) to report the presence of those chemicals to their local emergency planning commission. Thousands of facilities will be reporting this year. They must also report accidental releases of hazardous chemicals under Section 304, provide on-site inventories of hazardous chemicals under Sections 311 and 312, and provide other chemical-specific information.

The local committees are required to make the information available to the public and to develop emergency plans in the event of a chemical accident. EPA is working closely with the state commissions and local committees to provide guidance for interpreting and understanding the meaning of all of information reported under Title III.

Communicating information on the risks posed by hazardous chemicals, however—in toxic waste dumps, in consumer products, or in the air, water, and soil from industrial emissions—is not easy. Different perceptions of risk, conflicts between new information and existing beliefs, and mistrust of the people or institutions doing the communicating can be extremely difficult to overcome.

To meet these communications challenges, EPA is developing a number of programs to help inform and educate community leaders, the news media, and citizens about the relationship between toxic substances in the environment and human health. For example, in keeping with the Right-to-Know law's emphasis on community awareness and decision-making, EPA, through its regional offices around the country, is attempting to provide states—and ultimately local health agencies and other public officials—with technical tools and training to help them evaluate public exposure to toxic chemicals. is intended to help them estimate the degree to which toxic releases may pose a threat to their state's or community's well-being; rank the problems in order



James Douglas, Woodfin Camp Inc.

Under Right-to-Know provisions in a new law, people will receive a lot of information about discharges of hazardous chemicals in their communities.

of priority; and then make informed choices about courses of action based on the values and needs of their citizens.

By itself, hazardous release data from the Title III reports means very little in terms of human health. Along with emissions information, at least two other sets of data are needed to set priorities for managing risk. They are a chemical's toxicity—its ability to cause adverse health effects at specific concentrations—and the degree of public exposure to the chemical—in air, water, or food. Some toxicity information is already available on many of the chemicals and chemical categories whose presence and release must be reported under Title III. EPA will make that information available to state and local officials and the public as quickly as possible. At the same time, EPA plans to step up its efforts to define the toxicity of other substances which have not yet been thoroughly evaluated.

Determining the level of exposure to particular chemicals is, in some ways, even more difficult than assessing their toxicity. One method is to take measurements at various points near a known or suspected emissions source, and then relate the results to the size of the local population. This kind of monitoring, however, is expensive and time-consuming. Many measurements must be taken because exposure levels can vary under different atmospheric conditions or at different times of the year.

Another method of determining exposure involves computer modeling. Here sophisticated techniques are employed to relate reported or measured emissions to atmospheric, climatological, demographic, geographic, and other data in order to predict a population's potential exposure to a given chemical. EPA has been working for many years to develop, refine, and expand these computer modeling programs. One system developed by EPA's Office of

Determining the level of exposure to particular chemicals is, in some ways, even more difficult than assessing their toxicity.

Toxic Substances, the Graphical Exposure Modeling System (GEMS), integrates many other modeling programs in a single "user-friendly" package, complete with graphics and mapping capabilities. GEMS, already in use throughout EPA, in 21 states, and in two European countries, shows promise for application to the toxic emissions data—especially after the data have been evaluated and steps taken to improve their reliability. We are now considering ways that GEMS (or a similar system) might be used, at least initially, as a broad screening tool to identify areas that might warrant closer scrutiny by state and local officials.

Like emissions data, chemical toxicity information, exposure estimates, and risk evaluations are subject to many uncertainties. But by making technical tools like GEMS and chemical toxicity information available to state and local authorities, and by conducting a public education effort to inform the American people about the relationship between toxic chemicals and human health, EPA hopes that public concern and attention will begin to focus on the particular chemical hazards that pose the most serious threats.

Armed with the information required by the Community Right-to-Know law, including the emergency preparedness plans required by sections 302 and 303 and bolstered by a better public understanding of the significance of toxic chemicals in the environment, America's communities should be much better prepared than they have been in the past to make informed, reasoned risk management decisions that will best reflect the needs and values of their citizens. □

(Elkins is Director of EPA's Office of Toxic Substances.)

Who Must Report?

Title III, or the Emergency Planning and Community Right-to-Know Act of 1986, requires a variety of reports to citizens on the chemicals being produced, used, or stored in their communities—including releases of hazardous chemicals into the environment.

Here is a brief summary of Title III reporting requirements:

- All facilities that have on their premises specified quantities of chemicals designated under Title III as "extremely hazardous substances" must cooperate with state and local planning officials in preparing comprehensive emergency plans (Sections 302 and 303).
- Facilities that produce, use, or store specified hazardous substances must report accidental releases of those substances above certain quantities to state and local response officials (Section 304).
- All facilities that are required to prepare Material Safety Data Sheets (MSDSs) must make them available to state and local authorities. They must also report to local and state officials on inventories (including locations) of chemicals on their premises for which MSDSs exist (Sections 311 and 312).
- Some facilities must file annual reports on industrial releases of toxic chemicals into the environment. A facility is covered by this requirement if it is a manufacturing facility in Standard Industrial Classification (SIC) codes 20 through 39; has ten or more full-time employees; and either used more than 10,000 pounds of one of 329 chemicals and chemical categories during the previous year, or manufactured or processed more than 75,000 pounds of a listed chemical during the year. (The reporting threshold for manufacturing and processing drops to 50,000 pounds for reports covering 1988 and to 25,000 pounds for 1989 and thereafter). (Section 313)

To obtain more information about reporting requirements under Title III, call EPA's Title III Hotline. 800-535-0202

CHEMICAL RISK COMMUNICATION

PREPARING FOR COMMUNITY INTEREST IN CHEMICAL RELEASE DATA

CHEMICAL RISK COMMUNICATION

PREPARING FOR COMMUNITY INTEREST IN CHEMICAL RELEASE DATA*

*As required under Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 of the Superfund Amendments and Reauthorization Act (SARA Title III)

American Chemical Society
Department of Government Relations
and Science Policy
1155 Sixteenth Street, NW
Washington, DC 20036

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Foreword

Title III, Section 313, of the Superfund Amendments and Reauthorization Act (SARA) of 1986 requires certain industrial facilities to report to the U.S. Environmental Protection Agency (EPA) and to the states the amounts of more than 300 chemicals that are routinely released into the environment. In turn, the EPA will compile this information for a national public database to inform citizens and to evaluate the need for further regulations to reduce the releases. As a result, an unprecedented amount of information about chemicals in the environment will become available to the public, and will likely lead to public discussions about chemical risks to human health and the environment.

The American Chemical Society (ACS) prepared this handbook to present a basic understanding of risk assessment concepts and risk communication techniques that can be used as a framework when responding to questions from the public about releases of chemicals to the environment. The handbook is aimed at the persons who bear the public communication obligations, those to whom citizens and the news media will turn with questions and concerns: local public health officials and other local leaders. It was written to encourage citizen discussions that are productive and constructive.

While public health officials have historically answered citizens' questions about health problems, communicating information about risks from chemical releases is a new experience for everyone. Local community leaders who have not been involved in the public health field will nonetheless be expected to address citizens' concerns about chemical releases to the environment. This publication is written primarily for local public health officials, but it may be useful also to anyone involved in explaining environmental pollution, exposures, and risks.

We hope that the information provided, along with the suggestions and examples shown, will be helpful to those interested in risk communication, either as practitioners or as recipients of the information. For further information contact: Department of Government Relations and Science Policy, American Chemical Society, 1155 16th Street, NW, Washington, DC 20036, 202/872-4395.

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Questions local public health officials may need to ask when information about chemical emissions becomes available:

1. Is anyone in the community at risk?
2. How much of the chemical could have been breathed or ingested by an individual?
3. Are the concentrations safe?
4. What is chemical risk?
5. What is chemical toxicity?
6. What is "exposure"?
7. What were the quantities emitted per day?
8. Were releases continuous, intermittent, or planned?
9. What is the danger of chemicals detected at low concentrations?
10. What is the source of that information?
11. What else is the chemical combined with or in the presence of?
12. How often, when, and how are the releases occurring?
13. At what height are emissions released?
14. At what temperature?
15. Where on the property?
16. What is the predominant daily wind direction? Are releases restricted during certain wind or weather conditions?
17. What are the potential exposure routes (eg., drinking water, air, or surface water) for the community? Are the air and water safe?
18. How do the chemical risks compare with other risks in the community?
19. What are the symptoms of adverse chemical exposure?
20. Are people who work outdoors at greater risk?
21. Is it risky to sleep in rooms with open windows?
22. Is eating fish from or swimming in local streams risky?
23. Are older people, pregnant women, and children at greater risk than others?
24. Are chemical risks affected by diet, smoking, and other personal choices?
25. Are government standards the best guide to determine "safety" or "purity" of drinking water or contaminant levels?
26. Are "toxic" and "hazardous" the same thing (in regulatory language)?
27. What are "extremely hazardous substances"?
28. Why can't these emissions be stopped entirely?
29. What will the government do about this?
30. Why didn't you tell me this before?

I. Introduction

In 1986, Congress passed the Emergency Planning and Community Right-To-Know Act*, which addresses hazardous materials emergency planning, emergency notification, and reporting of annual routine releases of chemicals to the environment. The routine release reporting requirement, Section 313, requires certain companies around the country that manufacture, use, or process certain chemicals above specified quantities to report about releases of those materials to the air, water, or land. Facilities first began submitting reports of annual releases to the U.S. Environmental Protection Agency (EPA) and to state agencies on July 1, 1988. The public and the news media have access to this information. Specific chemical identity is not provided if the company has requested confidentiality. In that instance, the company must report a generic class or category for that chemical.

No one can predict how a community will respond to this information. Reactions are likely to vary among and within communities. In all communities, however, people will want answers to questions that concern them. The answers will seldom be simple because there are many steps between knowledge of annual releases and estimated impacts on human health and the environment. For those answers, citizens will turn first to sources from whom they have sought information in the past: their friends and neighbors, the news media, their doctors, and, sooner or later, local political and health officials and other community leaders.

Informing people about the release data, listening and responding to their questions and concerns, and describing ongoing activities to improve our knowledge will be part of the process of risk communication. The risk communicator's job is a difficult one. Even though the information may be limited by the absence of comprehensive data, the risk communicator's responsibility is to inform the public about what is known as well as to help decide what can be done to address their concerns. It is the risk communicator's job to facilitate more constructive dialogue among the public, regulators, and industry and help place things into a meaningful perspective.

The first section of the handbook provides some basic information about the assessment of risk that may help in communicating the significance of

*The new law also is known as Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986.

the emissions data. Following this discussion, the handbook describes some of the major principles that researchers and environmental professionals believe are important in communicating about health and environmental risks. Whenever possible, these principles are applied to the situation local community leaders and local public health officials may confront before and after chemical emissions data are made available to the community. Finally, this handbook provides a list of sources (e.g., organizations and publications) from which you or others can get additional or more detailed information.

Although the process of communicating about issues of life and health can be difficult and even painful, the American Chemical Society believes that the process of risk communication can be a constructive and unifying experience for a community. The risk communicator's efforts should help minimize confusion and create an opportunity for understanding and cooperation among all involved parties.

Who Must Report?

Title III of the Emergency Planning and Community Right-to-Know Act of 1986, requires companies to submit a variety of reports to federal, state, and local agencies on the chemicals being produced, used, or stored in their facilities, including routine and accidental releases of toxic chemicals into the environment. Different reports are required for different chemicals.

Here is a brief summary of Title III reporting requirements:

- All facilities that have on their premises specified quantities of chemicals designated under Title III as "extremely hazardous substances" must cooperate with state and local planning officials in preparing comprehensive emergency plans (Sections 302 and 303).
- Facilities that produce, use, or store specific hazardous substances must report accidental releases of those substances above certain quantities to state and local response officials (Section 304).
- All facilities that are required to prepare or make available Material Safety Data Sheets (MSDSs) must submit copies of these sheets to state and local authorities or provide a list of these chemicals organized into health and physical chemical categories. They must also report to local and state officials on inventories (including locations) of chemicals on their premises for which MSDSs exist (Sections 311 and 312).
- Some facilities must file annual "Toxic Chemical Release Reports" ("Form R") on industrial releases of toxic chemicals into the environment with EPA and state officials. This filing is required of manufacturing facilities in Standard Industrial Classification (SIC) codes 20 through 39 that have ten or more full-time employees and either used more than 10,000 pounds of one of 329 specific chemicals and chemical categories during the previous year, or manufactured or processed more than 75,000 pounds of a listed chemical during the year. The reporting threshold for manufacturing and processing drops to 50,000 pounds for reports covering 1988, and to 25,000 pounds for 1989 and thereafter (Section 313).

Source: Elkins, C.L., "Risk Communication: Getting Ready for 'Right-to-Know'", EPA Journal, Office of Public Affairs (A-107), U.S. Environmental Protection Agency, Vol. 13, No. 9, Washington, DC, November 1987, p.26.

II. Framework For Making Data Relevant

The public, including the news media and concerned citizens, has the right to request access to the annual release data required under SARA Title III. In most cases, individuals requesting such information from state or federal government sources will receive raw, uninterpreted data. With these data in hand, an individual or group faces the difficult task of interpreting information in order to answer such questions as "Am I at risk?", "How big is the risk?", and—the especially relevant question—"Is the risk acceptable to me?"

How can you, as the local public health official, help the public understand the meaning of the reports that they will be receiving?

• **First**, learn about your community's information needs by listening to its members. The essence of effective communication is understanding; without this understanding, you are unlikely to succeed in significantly addressing the concerns being expressed. Ways to accomplish this include (1) arranging meetings with individuals and community groups where specific questions can be addressed and (2) using focus groups to identify concerns. Focus groups can also be used to test the effectiveness of communication messages.

• **Second**, understand the limits of the information provided under SARA Title III. Be aware that the magnitude of the reported quantities is often uncertain and is usually an estimate based on best engineering judgments. More importantly, however, the reports do not address the issue of exposure; nowhere do they indicate how much, if any, of the released chemical can be or is likely to be inhaled, absorbed through the skin, or ingested by individuals in large enough quantities to cause discomfort, illness, or other adverse effects. Dilution, degradation, and chemical interactions affect the concentration of substances as they move through the air, water, or soil and are fundamental to understanding the ultimate effects on humans and the environment. Such information, however, will not be routinely available.

• **Third**, even if it is determined that people are being exposed to chemicals, the health effects of exposure to low concentrations of many chemicals or mixtures of chemicals is uncertain because toxicology is still an evolving field of science. Nevertheless, many health effects are not known to occur or are not expected to occur below certain low exposure levels. Unfortunately, some other effects, especially cancer, may be a consequence of exposure to some chemicals at any level. In all cases, citizens

should be informed about the potential likelihood of harm and about the likely severity of that harm.

For some carcinogens, even small concentrations cannot be designated as either "safe" or "not safe." For exposure to these substances, the risk from a particular chemical exposure can be discussed in terms of a range. The range has an upper limit of "it is probably not more risky than ..." and a lower limit of "possibly posing some risk, but one that is very low." Also, note that variation in some factors, such as routes of exposure (e.g., inhalation or ingestion), diet, lifestyle, and an individual's age and health, may magnify the uncertainty about the effects of a particular dose of a chemical.

Despite the fact that annual release reports provide incomplete information for making public health and risk assessment decisions and our knowledge of toxicity is still evolving, the release data provide some information that was not available previously. As a local public health official, you will be asked to put this information into a framework that will make sense to the public.

To start, we offer a few definitions and basic principles of chemical risk that may help you address the concerns of your community.

Understanding Chemical Risk

A chemical risk involves the toxicity of a substance and the exposure to it. The toxic potential of chemicals vary—some are very toxic, but others are essentially nontoxic at levels typically encountered in the environment. Actual levels of exposure vary and depend on many factors. The risk itself is a probability; it is not something that is guaranteed to happen. An example of a chemical risk is the probability of developing lung cancer from smoking cigarettes. This example is one of only a few cases accepted by the majority of the scientific community to have a clear cause-and-effect relationship for humans. Yet, even in this case, scientists are unable to say unequivocally that any specific smoker will develop lung cancer. They can say only that the smoker's risk (probability) of developing lung cancer is increased and that it is increased by a certain degree.

Many chemical exposures, including low-level environmental exposures, entail some risk, but the ability to calculate that risk is far more limited than in the case of smoking, which is a known high risk exposure. Both variables in the risk equation for chemicals released into the environment—toxicity and exposure—are based on assumptions that carry varying degrees of uncertainty.

Predicting Chemical Toxicity

The fundamental question of any chemical risk assessment is whether a chemical substance will reach a target (e.g., a person) in a large enough concentration to cause damage. The extent of the damage is an indication of the chemical's toxicity at a specific concentration. Toxicity is the property of a substance to cause harm when it comes in contact with a living organism (e.g., via ingestion, inhalation, or absorption through the skin).

The specific type of damage can be influenced by the dose and route of exposure and the often idiosyncratic attributes of an individual's body to resist or to break down the substance. No chemical (whether natural or synthetic) is free of toxicity; at a high enough concentration, all substances exhibit toxic characteristics. The health effects associated with toxic chemicals are usually categorized as either acute (symptoms appear soon after exposure, such as skin burns) or chronic (symptoms appear long after exposure, such as cancer).

Techniques most commonly used to learn about chemical toxicities include: (1) clinical studies; (2) epidemiological studies, which are studies of the incidence and distribution of disease in humans; (3) animal studies; (4) test tube studies (in vitro or short-term tests); and (5) structure-activity relationships, which are based on the principle that chemicals with similar structures may have similar toxic properties. Each type of study has limitations associated with it. For example, in animal studies, the chemical is usually administered in large doses, which raises doubts in the minds of some scientists as to the accuracy and usefulness of these experiments for predicting effects at much lower exposures. Because epidemiological studies are not available in most cases, scientists, in making predictions for human risks, must rely on extrapolating the toxicity of a chemical in test animals to the potential toxicity in humans. At every step along the way, assumptions are made, each having inherent uncertainties that define the limitations of predicting human toxicity. To account for these uncertainties, margins of safety are incorporated when government agencies establish "safe dose" or "toxic dose" levels.

Predicting Chemical Exposure

Determining human exposure to a chemical is also based on assumptions and estimates and is fraught with uncertainties. First, the chemical must get from the source of the emission to the target (e.g., human body). During transport, it could be diluted into large volumes of air or water, retained in soil, or broken down by sunlight or other environmental agents. The substance also may accumulate or concentrate in animal tissues and expose humans through the food chain, or it may interact with other chemicals or break down into more toxic byproducts. Once the chemical reaches the body, it can be absorbed by body fluids and tissue.

The eventual amount in the body is sometimes called the "dose". Determining the route (or routes) of entry into the body—dermal (skin contact), oral (ingestion), or inhalation (breathing)—and the fate of the chemical within the body are critical in estimating human responses. Many changes may occur to a chemical after entering the body and before reaching an organ or tissue, where it may cause an effect.

Important variables in assessing human dose are the magnitude, duration, and frequency of exposure—elements that are often difficult to determine. For example, the data required under Section 313 are in amounts or volumes of annual emissions. These numbers do not address the quanti-

ties emitted per day or whether releases are continuous or intermittent. Therefore, when attempting to interpret the numbers' significance, it is important to maintain a frame of reference that takes into account dilution, concentration, exposure, effects at various dose levels, and combined effects from multiple sources and chemicals.

Public Perceptions of Risk

The previous sections focused on some of the scientific issues involved in estimating risk from exposure to chemicals released into the environment. This information, the product of "risk assessment," serves as just one part of the equation used to answer the question, "Is the risk acceptable to me?" Determining the acceptability of a risk is not a scientific decision. Instead, it is a societal decision and a personal decision based on various value judgments and influenced to a great extent by perception of risk.

When communicating about chemical risks, various social and psychological perception factors should be taken into consideration. These factors must be addressed when discussions of "acceptable risk" arise. Keep in mind that "perceptions" should not be treated as either "right" or "wrong." However formulated, they are what individuals believe and use to understand the world around them. If the perceptions appear to be based on inaccurate information, then an effective risk communicator attempts to present accurate information in a frame of reference that can be understood by the individuals.

Several factors, including voluntariness, controllability, benefits, alternatives, familiarity, and fairness, have been identified by researchers as influencing public perceptions—and therefore acceptability—of risk. In general, a risk that is undertaken voluntarily is more acceptable than one that is imposed; a risk over which individuals have control is more acceptable than one beyond their control. Similarly, risks associated with clear, desirable benefits are more acceptable than those that are not; and risks that are distributed fairly are more acceptable than those that are not.

The magnitude and nature of the risk (determined scientifically) alone do not determine acceptability. Therefore, caution should be used when attempting to compare risks. Just because a certain risk is smaller in magnitude than another risk does not necessarily mean it will, or should, be more acceptable than that risk. In addition, these factors actually influence the perception of the magnitude of the risk. It is important to identify those factors in your community that are of particular concern and that may affect how individuals perceive chemically related risks.

If risk perception factors are applied to the potential risks from exposure to chemicals released by facilities, most of the risks will be viewed by the public as involuntary, uncontrollable, and unfair. For example, some individuals may feel that they personally are bearing the risks posed by the chemical emissions (by living in the area) but are not receiving any benefits (e.g., they are not employed by the facility).

FACTORS IMPORTANT IN RISK PERCEPTION AND EVALUATION

Factor	Conditions Associated with Increased Public Concern	Conditions Associated with Decreased Public Concern
Catastrophic potential	Facilities and injuries grouped in time and space	Facilities and injuries scattered and random
Familiarity	Unfamiliar	Familiar
Understanding	Mechanisms or process not understood	Mechanisms or process understood
Uncertainty	Risk scientifically unknown or uncertain	Risk known to science
Controllability (personal)	Uncontrollable	Controllable
Voluntariness of exposure	Involuntary	Voluntary
Effects on children	Children specifically at risk	Children not specifically at risk
Effects manifestation	Delayed effects	Immediate effects
Effects on future generations	Risk to future generations	No risk to future generations
Victim identity	Identifiable victims	Statistical victims
Dread	Effects dreaded	Effects not dreaded
Trust in institutions	Lack of trust in responsible institutions	Trust in responsible institutions
Media attention	Much media attention	Little media attention
Accident history	Major and sometimes minor accidents	No major or minor accidents
Equity	Inequitable distribution of risks and benefits	Equitable distribution of risks and benefits
Benefits	Unclear benefits	Clear benefits
Reversibility	Effects irreversible	Effects reversible
Origin	Caused by human actions or failures	Caused by acts of nature or God

Source: Covello, V.T., Sandman, P.M., and Slovic, P., "Risk Communication, Risk Statistics, and Risk Comparisons: A Manual for Plant Managers", Chemical Manufacturers Association, Washington, DC, 1988, p. 54.

What Does it All Mean?

If a chemical's toxicity and exposure can be estimated, the risk of those toxic effects can be estimated. Thus, chemical risk assessment is an attempt to identify in a qualitative sense, and then to quantify scientifically, the risk associated with a given exposure.

According to the "threshold theory" of toxicity, a toxic substance must be present in an organism at some "threshold" concentration before any toxic effects are evident. Below this concentration, no such effects are observed. Threshold theories are generally accepted for most kinds of toxic effects, but not for cancer. Until the mechanisms of carcinogenesis are understood more completely, there will be wide differences of opinion among scientists as to whether the "threshold theory" can be applied to carcinogens. However, many scientists and regulators agree that for most carcinogens thresholds do not exist. Thus, any amount of exposure to a carcinogen may pose a risk.

Risk assessment may provide information about the degree of risk but not whether the chemical is "safe". Safety is a qualitative judgment of the acceptability of a risk. Whether a risk is acceptable to an individual or to a society is determined by evaluating additional factors such as personal preferences, perceived benefits, and costs associated with alternatives or elimination. Risk management decisions involve value judgments that integrate social, economic, and political concerns with scientific risk assessment. Risk management is a method to reach a societal decision and to draw the line to determine an allowable level of risk.

Essentially, risk assessment and risk management are processes used by government agencies to determine what levels of emissions are allowable. These same processes may help individuals evaluate the possible impacts of chemical emissions upon their communities.

Use of Government Information to Determine and Explain Chemical Risk

- **Proper use of the Toxic Chemical Release Form**

The Toxic Chemical Release Form (referred to as the "R" form under Section 313) contains many data. However, the information may be meaningless and confusing without the proper framework for interpretation. This information about annual chemical releases is only a starting point for obtaining the detailed information needed for a risk assessment. Therefore, it is important to become familiar with the nature of the data submitted. Some of the major aspects of the release reporting data follow:

1. Quantity data are approximate

The amounts of chemicals stated are calculated release estimates. Title III does not require measurements to be made. In addition, these data are being reported as **annual** emissions. In order to estimate risk, you also would need to know release rates and their timing. However, the information provided is useful in identifying sources and approximate amounts of chemical releases.

2. Exposure and toxicity estimates need to consider the particular form of the emitted substance

The name and amount of the released substance is not enough to determine the dose and possible toxicity. Toxicity and exposure may vary depending on whether a chemical is released as a gas, aerosol, or particulate. Additional information—such as with what substance(s) the chemical is combined or is in the presence of, or in the case of a metal, its "oxidation state" (i.e., the particular chemical form of the metal)—is critical for determining potential exposure and toxicity.

3. Chemicals may be released into different media

Chemicals behave differently depending on the media (air, water, or soil) into which they are released. If the chemical is released into the air, it is important to know such factors as the concentration of the chemical emission, the stack height, the prevailing wind direction, and local meteorology. For a release into water, the initial chemical concentration, the flow rate (if a river), and dilution factor are just some of the factors necessary for estimating exposure to downstream residents. For all releases, it is important to know their frequency and duration.

Exposure estimates must take into account the potential exposures to individuals in a community from all possible routes (e.g., drinking water, air, contaminated soil, and surface water) and all possible sources. Exposure can vary widely according to the daily behavior of individuals, wind direction, and the magnitude of the releases. With respect to possible exposure in the community, it is desirable to consult with a plant manager or with knowledgeable state or federal environmental agency officials before you attempt to draw conclusions from the data.

4. Trade secret provisions may limit information disclosure

If a health professional must know the specific chemical identity of a substance in order to diagnose or treat an exposed individual, then that chemical identity must be made available, even if it is a trade secret.

If it is not an emergency medical situation, then written confidentiality agreements must be signed in advance by the health professional to prevent further disclosure of trade secrets. If it is an emergency situation, then the signing of the confidentiality agreement can be delayed until emergency circumstances are controlled.

Moreover, local government health officials may request such information to assess potential degree and impact of exposure to the community. In all cases, a written statement must be prepared by the health professional explaining why the precise identity is needed and the use to which this information will be put. Note that trade secret information allowed under this rule can be of utmost value to a corporation, and unauthorized disclosure can be penalized harshly.

The federal Occupational Safety and Health Administration (OSHA) also has provisions for the health professional to obtain necessary chemical identity information.

- **Personal risk situations must be evaluated**

The public and its elected officials are often interested in studies to determine if exposures to chemicals are creating adverse affects among the population. A complicating factor when considering possible effects from a release is that some symptoms of additional chemical burden are the same as effects caused by other conditions, such as stress and infections. This situation makes it difficult to determine what really causes a health effect. The following conditions may be useful to your understanding of whether a potential problem exists:

—***Sensitivity to a chemical*** (e.g., pesticides or cleaning solvents) could occur in some individuals even at relatively low exposures. Chemical sensitivities may be characterized by headaches, nausea, inability to concentrate, fatigue, irritations, or rashes.

—***If an individual complains of symptoms,*** obtain as much information as possible about both the intensity and duration of exposure, then compare those to the exposures that are associated with the adverse effects of the chemicals. Also, check for exposures to other biological and chemical agents, especially indoor exposures. These tasks of making comparisons and obtaining information are difficult, time consuming, and will probably involve consultation with other experts.

—***People who work or play outdoors*** near a release site and sleep with their windows open might receive more exposure. People who eat fish from a stream into which a persistent chemical is released might receive higher exposure to that chemical.

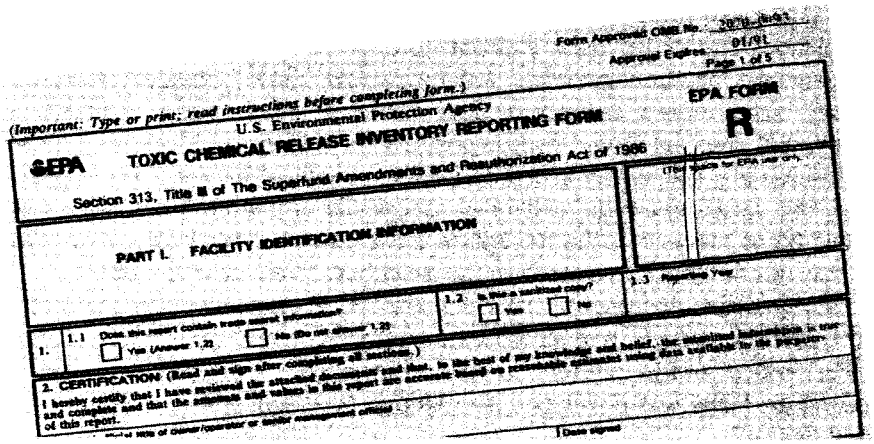
—***Elderly people, people with diseases, pregnant women, and young children*** are among the groups of people who might be more susceptible to chemical exposure than an otherwise healthy young adult. Children who play outdoors during the period of chemical releases into the air or into streams that receive chemical discharges might absorb a cumulative dose higher than others in the neighborhood. That dose could have a greater toxic effect on children because they have lower body weights than adults. Also, those with poor diets or smoking habits would be more susceptible.

If you have determined that a problem does exist and have identified a group of exposed individuals with similar symptoms, immediately notify your state health department and the federal Agency for Toxic Substances and Disease Registry at 404/488-4100.

- **Government standards will vary**

When determining the potential risk from a suspected exposure to a chemical, it may be possible to refer to existing government standards. Be very careful when doing this, however, because each standard is prepared for a specific purpose, which may be quite different from the risk that you are being asked to explain.

The national standards for the maximum level of certain chemicals in drinking water are based on the exposure received by an adult drinking two liters of that water per day for seventy years. However, the standards


(Important: Type or print; read instructions before completing form.)
U.S. Environmental Protection Agency
EPA
TOXIC CHEMICAL RELEASE INVENTORY REPORTING FORM
EPA FORM
R
Section 313, Title III of The Superfund Amendments and Reauthorization Act of 1986
PART I. FACILITY IDENTIFICATION INFORMATION
1.3 Reporting Year
2. CERTIFICATION

TOXIC CHEMICAL RELEASE INVENTORY REPORTING FORM

EPA FORM R

(Outline)

Part I. Facility Identification Information

Part II. Off-Site Locations to Which Toxic Chemicals are Transferred in Wastes

Part III. Chemical Specific Information

1. Chemical identity
2. Mixture component identity
3. Activities and uses of the chemical at the facility
4. Maximum amount of the chemical on site at any time during the calendar year
5. Releases of the chemical to the environment
6. Transfers of the chemical in waste to off-site locations
7. Waste treatment methods and efficiency
8. Optional information on waste minimization

Part IV. Supplemental Information

(The "Toxic Chemical" list is found in 40 CFR 372.65)

also take into account the cost of treatment to further reduce the concentration of those chemicals in the water, and make assumptions about where else in the diet or in the air the average person would receive a dose of the chemical in question. For some people, there may be no "safe" dose of a particular contaminant in their drinking water because they have already been exposed from other sources in their life; for others, the "safe" dose from drinking water actually may be higher than the federal standard. It is difficult to apply a standard to all individuals because of these built-in underlying assumptions.

It is possible to apply safety factors, which account for more sensitive populations and longer term exposures, to workplace exposure standards to generate another guideline for estimating "safe" doses. However, these "safe" doses assume healthy workers, intermittent peak exposures, and constant lower level exposures for a lifetime. Moreover, these exposures are voluntarily accepted for the benefit of having a job. In general, the values show the orders of magnitude of chemical exposure that would be of concern in the workplace environment. This information may or may not be directly relevant to the neighbors living near the plant.

EPA guideline documents and rules are based on conservative assumptions and calculations, and incorporate safety factors to cover the technical uncertainties always present in risk assessment. Understanding how a federal guideline was developed may help in providing advice about associated risks.

- **Be careful with regulatory terms**

Be cautious about the natural impression created by regulatory terms such as "toxic" and "hazardous." Frequently, they do not have a direct relationship to the public health or safety impact. For instance, explosives are missing from the SARA "extremely hazardous substances" list. The absence of these substances does not mean that they are not extremely hazardous from a public safety perspective; rather, it means that at this point in time and for the purpose of the list, explosives are not regulated as an "extremely hazardous substance" under Title III. On the other hand, ingots of solid copper for use in manufacturing, which many people would not think of as particularly hazardous, are on the list of "toxic chemicals." Good reasons exist for placing certain substances on particular lists, but the average person could read more into a list's title than what is warranted.

III. Guidelines For Communicating About Risks

Communicating about health and environmental risks has become considerably more difficult than it used to be. As Lee Thomas, EPA Administrator, said at a recent conference:

*"We will never return to the days when we were content to let people in white coats make soothing noises. Citizens must share directly in decisions that affect them, and we must ensure that they do so with a fuller understanding of the inevitable trade-offs involved in the management of risk."**

A recent review of the literature on risk communication† identified a long list of problems or obstacles that may complicate communication between decisionmakers and experts on the one hand, and the public on the other. Many of these risk communication problems or obstacles may be applicable to your community. In particular, problems may arise from the following sources:

- **Lack of data that addresses the specific fears and concerns of individual communities.** Industrial facilities must report emissions in tons per year. Additional information on toxicity, exposure, and release patterns over different time periods are necessary for constructive dialogue and to pinpoint those releases that require attention. Because environmental exposure standards exist for only a few of the chemicals reported, it often will be difficult to respond to concerns about safety.
- **Multiple and conflicting interpretations of the emissions data.** The absence of additional information also will lead to speculations from various sources about the significance of the reported emissions. These speculations may be conflicting or inconsistent; thus, people may be unsure of whom or what to believe.

**Risk Communication*, Proceedings of the National Conference on Risk Communication, J. Clarence Davies, Vincent T. Covello, and Frederick W. Allen (eds.), The Conservation Foundation, 1987.

†"Communicating Scientific Information about Health and Environmental Risks," Vincent T. Covello, Detlof Von Winterfeldt, and Paul Slovic, in *Risk Communication*, Proceedings of the National Conference on Risk Communication, The Conservation Foundation, 1987.

- **Use of the terms "hazardous" and "toxic."** These terms will be used in media reports and elsewhere to identify the class of regulated chemicals for which emissions reports must be filed. Inappropriate use of these terms in a public context (i.e., interchanging the regulatory meaning for the safety and health meaning and vice versa) may influence public perceptions of the magnitude of the risk and make explanations based on principles of risk assessment seem less credible or confusing.
- **Desire for absolute answers and reluctance to change strongly held beliefs.** People generally prefer certainty and may have difficulty accepting probabilistic or highly uncertain information, particularly if it conflicts with fundamental convictions or strong beliefs.
- **Limited governmental authority for reducing risk.** Title III does not provide government officials with any special authority to take risk-reduction actions in response to Section 313 release reports. Officials may have difficulty responding to public concerns or media questions about what can be done.
- **Limited understanding of the interests, concerns, fears, values, priorities, perceptions, and preferences of individual citizens and public groups.** Not knowing the questions and interests of the public can complicate the risk communication process.
- **Selective and biased media reporting.** The media may tend to emphasize disagreements and conflict, and oversimplify or distort technical information. Reporters are more interested in the event that has happened, not necessarily the difficult determination of how risky it actually is.
- **Public apathy or outrage.** In some communities, the public may lack interest in emissions or may be overconfident in its ability to avoid harm, making communication difficult. In other communities, communication may be similarly complicated by public outrage about emissions or a general distrust of industry.

No simple approach exists to avoid these problems and to ensure effective risk communication. People who have studied risk and communication, however, have generated several rules or guidelines, listed below, that will aid you in your dealings with the public.* Although these guidelines may seem obvious, they are often violated in practice. As a result, the opportunities presented by Title III may be missed.

1. Accept and Involve The Public as a Legitimate Partner

A basic tenet of risk communication in a democracy is that people and communities have a right to participate in decisions that affect their lives, their property, and the things they value. The goal of risk communication

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**Seven Cardinal Rules of Risk Communication*, Vincent T. Covello and Frederick Allen, Office of Policy Analysis, U.S. Environmental Protection Agency, 1988.

should be to produce an informed public that is involved, interested, reasonable, thoughtful, solution-oriented, and collaborative. The goal should never be to manipulate the public into accepting decisions that have already been made or to avoid action. Time is needed for hearing concerns, generating alternatives and solutions, and for making decisions.

In practice, accepting the public as a partner in a dialogue about chemical emissions means that industry officials and community leaders must recognize that

- the information about exposures and toxicity provides a useful, if limited basis for evaluating the risks;
- the acceptability of the reported emissions is a separate issue from the estimated magnitude of the risk; and
- the acceptability of the risks associated with the emissions is a value judgment that must consider the perceptions and values of the community, not just the values of the experts and the decisionmakers.

Involving the public as a legitimate partner means involving all parties *with an interest or stake in the issue and in the decision making process to* determine acceptable emission levels.

2. Listen to Your Audience

Communication is a two-way activity. If people perceive that you are not listening to them, they will not listen to you or trust what you have to say. Do not make assumptions about what people know, think, or want done about risks. People are often more interested in the social and psychological dimensions of risks (e.g., voluntariness and controllability) and in the trustworthiness, competence, and credibility of industry officials and community leaders than they are interested in the quantitative aspects of risk.

Exercising leadership means taking the time to determine what people are thinking. By meeting with individuals and groups in your community, you can begin to identify those who care about the issue of chemical emissions and to learn about their concerns, fears, perceptions, priorities, and preferences. You also may begin to recognize hidden agendas, symbolic meanings, and broader economic or political considerations that often underlie and complicate risk communication.

3. Assess and Nurture Your Credibility

Studies of risk communication repeatedly emphasize the credibility of the source of risk information as one of the most—if not the most—important factor in effective risk communication. Representatives of government agencies or industries that are not trusted or that are perceived as insincere are unlikely to communicate effectively even if they do everything else well.

Credibility is difficult to earn, easy to lose, and, once lost, almost impossible to regain. The most effective way to earn and nurture your credibility is to ensure that you follow up your words with concrete actions. Failing to deliver on promises or commitments is the quickest way to lose credibility.

4. Plan Carefully Before Communicating, and Evaluate Your Performance

Successful risk communication cannot and will not occur without planning. Develop clear and explicit objectives that are consistent with the overall goal of risk communication. Remember that there is no such entity as "the public"; there are many publics, each with its own interests, needs, concerns, priorities, perceptions, and preferences. Different objectives, audiences, and media channels may require different communications strategies. Target your communications to specific audiences, if possible. Carefully evaluate your efforts and learn from past mistakes.

5. Be Honest, Frank, and Open

Honesty and sincerity are important for building and preserving trust and credibility. When communicating with the public and the media, state your credentials, but do not expect to be trusted. If you are asked a question but do not know or are uncertain about the answer, admit your ignorance or uncertainty. Admit your mistakes. Get back to people with answers. If in doubt, share more information, not less, because people often interpret hesitation to discuss a subject as trying to hide something. Discuss openly the strengths, limitations, and uncertainties in data and assumptions, including the judgments of other credible sources.

6. Speak Clearly and with Compassion

Technical language and jargon are useful as professional shorthand, but can pose substantial barriers to risk communication. People can understand even complex scientific subjects if they are explained in clear, everyday language. Use of scientific jargon is confusing to most people and may erode the trust of a general audience. Instead, use simple, nontechnical language, illustrated by examples or concrete images to which people can respond on a personal level.

In addition, when communicating with the public, it is particularly important to acknowledge and respond (verbally and through your actions) to emotions people may express. Avoid distant, abstract, unfeeling language about deaths, injuries, and illnesses; never let efforts to inform people about risks prevent you from acknowledging (and saying) that any illness, injury, or death is a tragedy. Also, acknowledge and respond to the qualitative dimensions of risk (e.g., equity and catastrophic potential) that people consider important. Avoid comparing unfamiliar risks to familiar ones unless you are confident that they are similar in all of the dimensions people consider important.

7. Coordinate and Collaborate with Other Credible Sources

Third-party experts are extremely useful in communicating about risk because the information is reinforced and the audience does not have to rely on only one source. Internal coordination within government agencies can avoid confusion resulting from conflicting messages. Try to coordinate with other organizations (e.g., other governmental agencies, industry and

trade associations, unions, academic institutions, and environmental groups) that have an interest in chemical emissions. Some conflicts about interpretation will be unavoidable, of course, but may help illuminate different views of a complex issue.

8. Meet the Needs of the News Media

The media are prime channels for transmitting information about chemical emissions and potential health effects from exposure to chemicals. They play a critical role in influencing public perceptions of hazards. In addition, they are often more interested in simplicity than complexity, which can be helpful if done objectively.

Meeting the needs of the media means being open and accessible to reporters and respecting their time and space constraints. You can help reporters by providing information tailored to the needs of their specific media (e.g., visual images or graphics for television) and offering background information on risk issues that are difficult for nontechnical people to understand. Try to establish longstanding relationships with reporters and editors in your community and do not be afraid to follow up on stories with praise or constructive criticism, as warranted.

These guidelines may help you facilitate a more constructive dialogue in your community about chemical emissions reported under SARA Title III, Section 313. However, these guidelines cannot guarantee success and must be tempered by good judgment and intimate knowledge of the local community.

Remember that the goal of risk communication is not to stifle disagreements, but to expose them and try to resolve them. No matter how well you communicate risk information, however, some people will not be satisfied. Their dissatisfaction may stem from a broader political, economic, or social agenda. For instance, some people in the community who have benefitted economically from a chemical plant may object to any discussion of risk. Others who are ill and searching for the cause of an illness may conclude that chemical releases are responsible for their diseases whether or not information is available that supports a casual link between specific chemicals and specific diseases. Dissatisfaction may also stem from sincere disagreements about the interpretation of facts, about assumptions made in evaluating risks, or about values.

IV. Preparing For Community Interest

The Emergency Planning and Community Right-To-Know Act presents a new challenge to those involved in public health and safety. Individuals will turn to local public health officials, physicians, environmental professionals, college professors, and others in the health and safety arena to explain the significance of reported chemical releases and possible exposure to these emissions.

The questions are likely to cover subjects as diverse as the possible impacts on the community's long-term health, the possible effects on property values, and what actions government might take. Responding to these questions will be complicated by limited information on toxicity, exposure, and the likelihood of a health impact.

Inquiries will often center on how people will be affected personally by exposure to chemical emissions. However, environmental impacts are of increasing concern. Most people may not focus on general scientific issues or the probabilities of events occurring. Instead, they may want absolute

Photo courtesy of the Chemical Manufacturers Association

statements that something either will or will not occur to them, to people they know, or to their community. Lack of knowledge about the cumulative impact of exposure to many different chemical emissions complicates the problem. Data may be available for each of the chemicals of local concern, but data will rarely be available on the possible combined impact of exposure to all of the chemicals.

Section 313 of SARA requires EPA to make the emissions data generally available to the public. Until the Toxic Release Inventory (TRI) database becomes available, copies of individual forms are available from the U.S. Environmental Protection Agency, P.O. Box 70266, Washington, DC 20024-0266. ATTN: TRI Public Inquiry. The name and address of the facility should be included when requesting a completed TRI form.

Government, industry, and other leaders will have to respond to the implications of the TRI information. The data will be based on calculated release estimates, not on actual measurements of releases. No analysis or interpretation of the data will be made by the Agency or any other organization prior to its release to the public. Except for obvious errors, EPA will not be able to perform extensive quality control before the data are released. TRI data will, however, provide a starting point for determining exposures and identifying potential problems. Individuals such as you who must respond to the public's questions will have to prepare carefully.

1. Identify Chemicals In Your Community

The first step in preparing for the public's reaction to information on chemical emissions is to gather data on the substances that are likely to be of concern. One of the most important steps in gathering information is to establish contact with local companies that report emissions data. Many of these firms are prepared to respond to the public's questions and may already have had extensive interactions with the local community on this subject. They will have data on the chemicals, including possible health impacts, and may know the route of human exposure to the chemical emissions. At least initially, however, note that compliance with reporting requirements may very likely be inconsistent from community to community.

A local plant may not have all the information needed to evaluate the potential impact of the chemical exposures. However, the plant manager should be able to identify the individual in the company who would be able to provide this information. Larger companies also may have booklets, information sheets, videotapes, and other materials that will help explain the potential risk.

2. Obtain Technical Data and Interpretation

The next step in the preparation process is to obtain additional technical information on the chemicals reported. (Sources of information on chemical toxicity, exposure, and health effects are listed at the end of this handbook.) For some chemicals, information on chemical toxicity is available in

the Material Safety Data Sheets (MSDS) that companies have filed with the Local Emergency Planning Committee, the State Emergency Response Commission, and with local fire departments. Another source of information is the Hazardous Substances Data Bank (HSDB) available through TOXNET, an on-line database at the National Library of Medicine. HSDB focuses on the toxicology of potentially hazardous chemicals, with data grouped into classes of information such as emergency handling procedures, environmental fate, human exposure, detection methods, and regulatory requirements. HSDB is fully peer reviewed.

As mentioned before, the State Emergency Response Commission and the Local Emergency Planning Committee will have some information on chemicals used and stored locally. They also will be able to offer guidance on when and how information on chemical emissions will be made available to the public and the news media. The hundreds or thousands of reports that companies must file may take months to sort and organize in a meaningful way. Thus, early releases of information and questions may be based on incomplete data.

Other sources of information and guidance include:

- The state environmental protection department
- The state health department
- EPA and EPA's regional offices responsible for Title III compliance information
- The Agency for Toxic Substances and Disease Registry in Atlanta, GA
- The Centers for Disease Control-Center for Environmental Health and Disease Control
- Industry trade associations
- Scientific, engineering, and health professional organizations, including the ACS
- Environmental organizations
- Labor unions
- Universities and colleges

Knowledgeable individuals from a variety of backgrounds such as government, industry, universities, environmental organizations, and professional associations will prove very helpful in evaluating and explaining the meaning of emissions data. Identifying and working with some individuals before the data become widely available will provide a head start on meeting the public's concern. These individuals can provide advice on the meaning of exposure to chemical emissions and discuss the issue with the news media and interested citizen groups. The local sections of the ACS will be able to help in this effort (see Section V, Resources).

Close coordination among the individuals and groups involved in this program is vital to its success. Nothing is more confusing and disruptive than contradictory statements among supposedly knowledgeable experts. A joint plan of action can help ensure that the public understands the infor-

mation released on chemical emissions. Nevertheless, it is to be expected that the public will hear more than one assessment. The risk communicator has to be prepared to listen to all assessments and to explain support for one or more of them.

3. Identify Perceptions and Concerns Of Your Community

Knowing the technical information (toxicity and exposure) about the chemicals reported and being able to relate those to possible effects on human health is only one part of your responsibility as a risk communicator. You also must know the publics with whom you are dealing. In preparing for the public's interest in the emissions data, it is important to determine the existing perceptions and concerns of individuals and groups in your community. Take advantage of opportunities to meet informally with community groups and individuals. Factors specific to your community also are important to identify, such as whether there has been a history of chemically related accidents at local facilities.

4. Identify Potential Questions

Another important step is to identify the types of questions, once again specific to your community, that might be asked. Although you cannot anticipate all questions that may arise, giving prior thought to the most likely ones will allow you to prepare thoughtful, understandable responses.

The following is a list of sample questions that may be raised:

- Will this cause cancer?
- Will my children be born deformed?
- Are these emissions hurting me or my family?
- What effect will combinations of chemicals have on my health?
- Is it safe for me to breathe the air?
- Why can't these emissions be stopped entirely?
- Are emission levels going to be decreased in the future? When?
- What will the government do about this?
- Why didn't you tell me this before?
- Is there an emergency plan for our town?
- Where are these hazardous chemicals located? How close are they to my home?
- How often do leaks, spills, or accidents occur?
- Are the rivers and groundwater being polluted?

Careful preparation is the key to successful communication.

How To Prepare For Community Interest

Step 1: Identify the chemicals in your community most likely to be of concern. Contact plant managers to find out what emissions data local manufacturers are reporting.

Step 2: Obtain additional toxicity and exposure information on these reported chemicals, including information on any associated risks. Of particular importance is interpreting the significance of this technical information to personal health.

Step 3: Identify the perceptions and concerns of individuals in your community. If possible, assess your community's "chemical risk" awareness with some type of baseline study. Influencing factors may include whether or not a Superfund site is present, for example. It is important that you know the public with whom you are dealing.

Step 4: Determine the types of questions, specific to your community, that you might be asked, such as "Is it safe to drink my water?"

V. Resources

This section lists various materials and services that may serve as useful references. Resources for SARA Title III and risk communication are becoming more plentiful. The following list is far from comprehensive; however, it provides a starting point for further study of these important issues. Those publications that can be obtained free of charge—while the respective supply lasts—are so noted.

Literature

Chemical Risk: A Primer, Susan Moses, 1984. American Chemical Society, Department of Government Relations and Science Policy, 1155 16th Street, NW, Washington, DC 20036. This information pamphlet for nonscientists focuses on scientific issues involved in determining the health risks arising from exposure to chemicals. Discusses public perceptions of risk. (Single copies are free.)

Chemicals in the Community: Methods to Evaluate Airborne Chemical Levels, 1988. Chemical Manufacturers Association, 2501 M Street, NW, Washington, DC 20037. This document identifies methods used to evaluate emission levels of airborne chemicals in the community. The intended user is the health professional who can judge the most appropriate approach and can evaluate the available data.

Directory of State and Territorial Environmental Health Services, 1987. Public Health Foundation, Environmental Health Program, 1220 L Street, NW, Suite 350, Washington, DC 20005. Functional area listings are given for each state. This directory is updated annually and sent to each state health department.

Effective Risk Communication: The Role and Responsibility of Government and Nongovernment Organizations, Vincent T. Covello, David B. McCallum, and Maria Pavlova, 1988. Proceedings of the Workshop on the Role of Government in Health Risk Communication and Public Education. Plenum Press, 233 Spring Street, New York, NY 10013. This publication was sponsored by the Interagency Task Force on Environmental Cancer and Heart and Lung Disease.

"The Emergence of Risk Communication Studies: Social and Political Context", Alonzo Plough and Sheldon Krimsky, *Science, Technology and Human Values*, Summer/Fall 1987, Vol. 12, Issues 3 & 4, 4-10.

Environmental Hazards: Communicating Risks as a Social Process,

Sheldon Krimsky and Alonzo Plough, 1988. Auburn House Publishing Co., 14 Dedham St., Dover, MA 02030-0658. 800/223-BOOK. Technical risk assessment and the public's perception of risk are often in conflict. Risk communication has become a key element of the risk management process. This book offers a framework for understanding risk communication of environmental hazards.

Explaining Environmental Risk, Peter Sandman, 1986. Office of Toxic Substances, TSCA Assistance Office, U.S. EPA, Washington, DC 20460. This publication presents some notes on environmental risk communication dealing with the public and with the media. The premise is that risk communication must become an integral part of risk management, not just a public relations tool. (Free)

Formula for Safety: Making Communities Safer from Chemical Hazards, Janice M. Adkins, 1988. Atlantic Information Services, 1050 17th Street, NW, Suite 480, Washington, DC 20036. This book provides information about Title III of the 1986 SARA law. It is a tool to assist in developing community dialogue about chemical safety among citizens, active environmental participants, government leaders, emergency response officials, and industry.

Hazardous Substance Fact Sheets, New Jersey Department of Health. Distributed by Section 313 TRI state contacts. Call the U.S. EPA regional office for the state contact. The fact sheets, originally written for exposures in the workplace, contain valuable information on the health effects of select chemicals. In some cases, the U.S. EPA is adding attachments on aquatic toxicity.

Identifying and Regulating Carcinogens, 1987. Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. A special report of the U.S. Congress' Office of Technology Assessment.

Improving Dialogue with Communities: A Risk Communication Manual for Government, Billie Jo Hance, Caron Chess, and Peter M. Sandman, 1988. New Jersey Department of Environmental Protection, Division of Science and Research, CN409, Trenton, NJ 08625.

Information Resources in Toxicology (2nd edition), Phillip Wexler, 1987. Elsevier Science Publishing Co., Inc., P.O. Box 1663, Grand Central Station, New York, NY 10163-1663. Definitive guide (U.S. and international resources) to literature, computer files, organizations, and activities in the field of toxicology.

Public Education on Toxic Substances, An Annotated Bibliography, 1988. National Technical Information Service, Springfield, VA 22161. 703/487-4650. This bibliography is part of a program, developed by the U.S. EPA Office of Toxic Substances, to increase public understanding of toxic substances and of Title III.

Resource Guide for Environmental Health Risk Assessment, 1986. Public Health Foundation, Environmental Health Program, Suite 350, 1220 L Street, NW, Washington, DC 20005. Organizational contact and other resource information to aid professionals who assess the public health risk

from polluted environments. Includes government resources, private organizations, computerized resources, and general references.

Risk Assessment, Management, and Communication: A Guide to Selected Sources. U.S. EPA, Office of Information Resource Management and the Office of Toxic Substances. Initial document was published in 1987, and several updated publications have followed as addenda. Available in hardcopy and microfiche from the National Technical Information Service, Springfield, VA 22161. 703/487-4650.

The Risk Assessment Manual: A Guide to Understanding and Using Health and Environmental Risk Assessments, Brad Brockbank, John Cohrsson, and Vincent T. Covello, 1988. Council on Environmental Quality. A "desk reference" manual on risk assessment techniques for decision-makers, managers, and citizens.

Risk Assessment and Risk Control, 1985. The Conservation Foundation, 1250 24th Street, NW, Washington, DC 20037. This special issue report delineates the basic steps in risk assessment and how risk assessment relates to the larger process of controlling risk.

"Risk Communication: Getting Ready for Right-To-Know", Charles Elkins, *EPA Journal*, Vol. 13, No. 9, 23-26. Office of Public Affairs (A-107), U.S. EPA, Washington, DC 20460.

Risk Communication: Proceedings of the National Conference on Risk Communication, J. Clarence Davies, Vincent T. Covello, and Frederick W. Allen, Eds., 1987. The Conservation Foundation, 1250 24th Street, NW, Washington, DC 20037.

Risk Communication, Risk Statistics and Risk Comparisons: A Manual for Plant Managers, Vincent T. Covello, Peter M. Sandman, and Paul Slovic, 1988. Publications Inquiry, Chemical Manufacturers Association, 2501 M Street, NW, Washington, DC 20037. Guidelines for explaining risk-related information and for presenting risk comparisons. This publication discusses the problems of zero risk and uncertain data.

Seven Cardinal Rules of Risk Communication, Vincent T. Covello and Frederick Allen, Office of Policy Analysis, U.S. EPA, 1988.

Some Printed Sources for Information on Environmental Health and Toxicology and *Some Publicly Available Sources of Computerized Information on Environmental Health and Toxicology*. Bibliographies available from Technical Information Services, CEHIC, Chamblee 27, F-29, Centers for Disease Control, Atlanta, GA 30333. (Free)

Title III Community Awareness Workbook, 1988. Publications Inquiry, Chemical Manufacturers Association, 2501 M Street, NW, Washington, DC 20037. This workbook provides general communications guidance to chemical industry personnel about community relations, an overview of the risk communication process, and guidelines for working with the media.

Toxic Release Inventory Interpretive Documents are available from the TSCA Assistance Office, US EPA (TS-799), 401 M Street, SW, Washington, DC 20460. Single copies may be obtained at no cost.

—*Toxic Chemical Releases and Your Right to Know.* A four-page introductory brochure about the Toxic Release Inventory, intended for public distribution.

—*Questions and Answers About the Emergency Planning and Community-Right-to-Know Act and the Toxic Release Inventory for Use by State and Local Officials.* A document intended to assist persons who will be responding to questions from the public.

—*Summary of Regulatory Levels, Standards and Threshold Limit Values on TRI Chemicals.* The tables focus primarily on regulations and standards which establish risk-based levels of release or exposure for SARA 313 chemicals.

Toxicological Profiles, 1988. National Technical Information Service, Springfield, VA 22161. 703/487-4650. Twenty-five reports of chemicals having the highest priority from a list of 100 hazardous substances listed in the *Federal Register* on April 17, 1987, p. 12869. Prepared for the Agency for Toxic Substances and Disease Registry.

Toxicology: A Primer on Toxicology Principles and Applications, Michael A. Kamrin, 1988. Lewis Publishers, 121 South Main St., P.O. Drawer 519, Chelsea, MI, 48118. 800/525-7894. Basic toxicology is presented in a nontechnical style. The strengths and limitations of the discipline are outlined in this document.

Toxicology for the Citizen, Alice E. Marczewski and Michael Kamrin, 1987. Center for Environmental Toxicology, Michigan State University, East Lansing, MI 48824. This publication presents basic information about the principles of toxicology. (Single copies free)

Other Resources

The American Chemical Society. Organized into 182 Local Sections across the country, members are chemists and chemical engineers who may be able to help citizens interpret technical data. ACS staff can identify a scientist in your community. For more information, call 202/872-4391.

Chemical Referral Center, Chemical Manufacturers Association. 800/CMA-8200 (in the continental U.S.A. and in Hawaii) or 202/887-1315 (call collect in Alaska or outside the continental U.S.A.). The referral center assists in obtaining nonemergency health and safety information on chemicals.

Emergency Planning and Community Right-To-Know Information Hotline, U.S. EPA. Operated between 8:30 a.m.-4:30 p.m. Eastern Standard Time. 800/535-0202; in Washington, DC and Alaska, 202/479-2449. The hotline is staffed with technical engineers, whose primary function is responding to calls from industry and from state emergency response commissions about how to comply with Title III.

National Air Toxics Information Clearinghouse, U.S. EPA, Pollutant Assessment Branch, MD-13, Research Triangle Park, NC 27711. 919/541-0850. This clearinghouse serves as the focal point for information exchange about air toxics issues between federal, state, and local

governments. Clearinghouse information is compiled in a database and distributed via printout and hardcopy reports. (Free to government agencies and nonprofit organizations.)

National Pesticide Telecommunications Network. 800/858-7378. This hotline operates 24 hours a day, 365 days a year. This service provides pesticide product information, toxicology, safety and health, and environmental effects information about pesticides.

Roadmap to Information on Section 313 Chemicals, 1988. National Technical Information Service, Springfield, VA 22161. 703/487-4650. A menu-driven database of sources of information on Section 313 chemicals, prepared by the U.S. EPA Office of Toxic Substances, including health and environmental effects, federal and state regulations and standards, on-line databases, documents from the EPA and other sources, and information on state air and water monitoring and emissions data.

Scientists' Institute for Public Information (SIPI) Media Resource Service. SIPI, 355 Lexington Avenue, New York, NY 10017. 800/223-1730 or 212/691-9110 (in New York state). The resource service refers members of the print and broadcast media to expert scientists, engineers, and physicians who have agreed to serve as expert sources within their area of expertise.

Toxicology and Public Health: Understanding Chemical Exposure. Audio-Visual Resource Center, Media Services Distribution Center, Cornell University, 8 Research Park, Ithaca, NY 14850. This IBM computer program outlines what you need to know to understand the risk of exposure, kinds of effects, and problems of understanding cancer risk and birth defects.

TOXNET. Specialized Information Services Division, National Library of Medicine, 8600 Rockville Pike, Bethesda, MD 20894. 301/496-6531 or 301/496-1131. A computerized search and retrieval system that permits access to data from numerous sources on potentially toxic or otherwise hazardous chemicals. After registration with MEDLARS, access to the system is provided on a fee-for-service basis.

SECTION 313 U.S. EPA REGIONAL CONTACTS

Region 1.
Pesticides & Toxic Substances Branch
U.S. EPA Region 1
APT 2311
JFK Federal Building
Boston, MA 02203
617/565-3273

This region includes Connecticut, Massachusetts, Maine, New Hampshire, Rhode Island, and Vermont.

Region 2
Pesticides & Toxic Substances Branch
U.S. EPA Region 2
Woodbridge Avenue, Building 209
Edison, NJ 08837
201/321-6765

This region includes New Jersey, New York, Puerto Rico, and the Virgin Islands.

Region 3
Toxics and Pesticides Branch
U.S. EPA Region 3
841 Chestnut Street
Philadelphia, PA 19107
215/597-1260

This region includes Delaware, Maryland, Pennsylvania, Virginia, West Virginia, and the District of Columbia.

Region 4
Pesticides & Toxic Substances Branch
U.S. EPA Region 4
345 Courtland Street, N.E.
Atlanta, GA 30365
404/347-3222

This region includes Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, and Tennessee.

Region 5
Pesticides & Toxic Substances Branch
U.S. EPA Region 5
5S PT-7
536 So. Clark Street
Chicago, IL 60605
312/886-6418

This region includes Illinois, Indiana, Michigan, Minnesota, Ohio, and Wisconsin.

Region 6
Pesticides & Toxic Substances Branch
U.S. EPA Region 6
Allied Bank Tower
1445 Ross Avenue
Dallas, TX 75202-2733
214/655-7244

This region includes Arkansas, Louisiana, New Mexico, Oklahoma, and Texas.

Region 7
Office of Congressional and Intergovernmental Liaison
U.S. EPA Region 7
726 Minnesota Avenue
Kansas City, KS 66101
913/236-2806

This region includes Iowa, Kansas, Missouri, and Nebraska.

Region 8
Toxic Substances Branch
U.S. EPA Region 8
999 18th Street, Suite 500
Denver, CO 80202-2413
303/293-1730

This region includes Colorado, Montana, North Dakota, South Dakota, Utah, and Wyoming.

Region 9
Pesticides & Toxic Substances Branch
U.S. EPA Region 9
P-5-1
215 Fremont Street
San Francisco, CA 94105
415/974-7054

This region includes Arizona, California, Hawaii, Nevada, American Samoa, Guam, and the Trust Territory of the Pacific Islands.

Region 10
Pesticides & Toxic Substances Branch
U.S EPA Region 10
1200 Sixth Avenue
Seattle, WA 98101
206/442-1270

This region includes Alaska, Idaho, Oregon, and Washington.

Law brings chemical hazards into open

New information gives local citizens a chance to prevent accidents

By Jim Makris
Special to the Journal-Constitution

It happened more than three years ago and half a world away, but the shock waves from the terrible chemical accident in Bhopal, India, are still reverberating across the United States. By the end of this year, Atlanta and almost every other city, town, county and state in the nation will be experiencing some of Bhopal's social fallout.

The release of deadly methyl isocyanate gas from a Union Carbide plant in Bhopal in December 1984 — a disaster that killed more than 2,000 people and injured thousands of others — has changed the way the United States deals with accidents involving hazardous chemicals. After Bhopal, preparing for chemical accidents and controlling the release of toxic substances into the environment is no longer the exclusive responsibility of selected specialists. Now, it's clearly everybody's job.

Congress made sure of that when it passed the Emergency Planning and Community Right-to-Know Act of 1986. This law, popularly referred to as Title III, mandates the public availability of information about which risky chemicals are in the community, how much of those chemicals can be found at any particular location, when they are spilled or otherwise accidentally released into the environment and how they might affect human health or the environment if they do escape. For certain toxic chemicals, companies must also disclose, beginning on July 1, the amounts they routinely release annually into the community's air, water and soil.

Having access to this information is new — not only to citizens and government agencies, but to chemical manufacturers and users as well. Nationally, this information already has led to safety improvements as industries begin to think twice about storing large amounts of hazardous substances in heavily populated areas.

Under the new law, state and local organizations must be established to receive and process the information provided by industry and to make it available to the public.

These bodies, known as Local Emergency Planning Committees, must prepare contingency plans for their communities' response in the event of a chemical accident, and must involve industry, local emergency response and elected officials, the news media, environmental and citizens' groups, and others in that effort. The contingency plans must be ready by October. Through this process, a powerful dialogue between industry and the public on the risks associated with chemicals in the community can begin.

It is local citizens, dealing with local problems, who will ultimately make the most effective use of the information provided under Title III. Firefighters, town administrators and county officials will be able to better protect their communities by knowing where chemical hazards are located and how to deal with them. Citizens will be able to use information about risks in their community to ensure that those risks are no greater than what is acceptable to a majority of their neighbors.

How can individual citizens participate in this process? They can check to see if a state or local planning committee has been formed. The law also entitles citizens to sue if the established mechanisms fail to provide the required information.

Citizens can also review and comment on the community's emergency response plan. They can ask for information about local industrial facilities. They can visit facilities and ask if they have complied with the reporting requirements, and what they are doing to reduce hazards, prepare for accidents and cut back on the amount of toxic substances they produce.

The Emergency Planning and Community Right-to-Know Law means exactly what it says. As citizens, we have the right to know about the chemicals in our community and to make our own informed decision as to whether these chemicals are a threat to our health and environment. The more each of us learns about, understands and participates in the Title III process, the safer our communities will be for everyone. Together we may save some lives.

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United States
Environmental Protection
Agency

Office of Toxic
Substances
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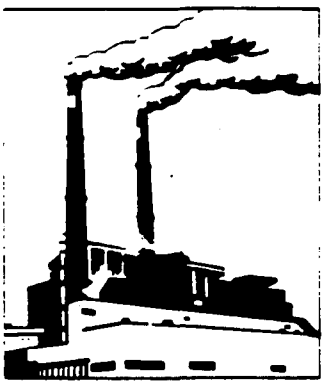
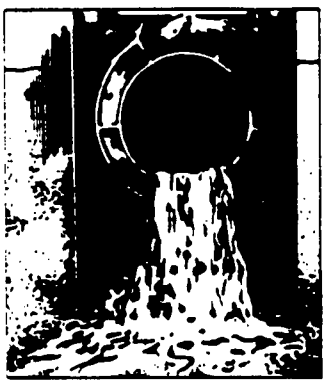
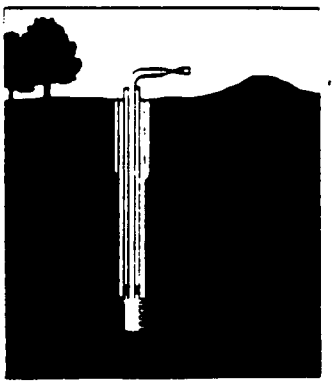
EPA

Toxic Chemical Release Inventory Questions and Answers

Section 313 of the Emergency Planning and Community Right-to-Know Act
(Title III of the Superfund Amendments and Reauthorization Act of 1986)



INTRODUCTION

This Questions and Answers document deals with section 313 of the Emergency Planning and Community Right-to-Know Act (Title III of the Superfund Amendments and Reauthorization Act of 1986, Public Law 99-499). Under section 313, facilities that meet all three of the following criteria are required to report releases to the air, water, and land of any specifically listed toxic chemicals:

- The facility has 10 or more full-time employees;
- The facility is included in Standard Industrial Classification (SIC) Codes 20 through 39; and
- The facility manufactured (defined to include imported), processed, or otherwise used in the course of a calendar year any specified chemical in quantities greater than a set threshold.

Reports under section 313 (EPA Form R) must be submitted annually to EPA and designated State agencies. The first reports, covering the 1987 calendar year, are due by July 1, 1988.

This document has been developed to expedite facility reporting and to provide additional explanation of the reporting requirements. It supplements the instructions for completing Form R. Copies of EPA Form R, instructions for completing the form, and related guidance documents are available from the Emergency Planning and Community Right-to-Know Information Hotline, U.S. Environmental Protection Agency, WH-562A, 401 M Street, S.W., Washington, D.C. 20460, (800) 535-0202 (or (202) 479-2449 Washington, DC and Alaska). (A request form is provided at the end of this document for use in obtaining copies of these documents.)

The questions and answers in this document are organized in sections corresponding to the organization of the data in Form R. Preceding the questions and answers is an introductory discussion of the facility identification information required by Part I of Form R.

To remain responsive to section 313 issues that may arise in the future, this Questions and Answers document will be updated periodically. If you have comments or possible additions to this document, please send them to the Emergency Planning and Community Right-to-Know Information Hotline at the address above.

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DEFINITIONS

Trade Secret Information.

If a trade secret claim is being made (see Part III, Section 1 of the form), the "yes" box in Part I, Section 1.1 of the form must be checked.

Sanitized Copy.

Whenever chemical identity is claimed trade secret, two versions of Form R must be submitted to EPA. One version identifies the chemical; the other version does not identify the chemical specifically, but instead, provides a generic identification. This latter version is called the "sanitized" version and is the only version which will be made publicly available.

Reporting Year.

The reporting year is the calendar year (January - December) to which the reported information applies, not the year in which you are submitting the report (i.e., information for the 1987 reporting year will be submitted in 1988).

Certification.

The facility owner or operator, or a senior official with management responsibility for the person (or persons) completing the form, must certify the accuracy and completeness of the information reported on the form by signing and dating the certification statement. Each report must contain an original signature. The name and title of the person who signs the statement should be printed or typed in the space provided. This certification statement applies to all the information supplied on the form, and should be signed only after the form has been completed.

Facility Name and Location.

Facility name (plant site name or appropriate facility designation), street address, city, county, state, and zip code must all be provided. A post office box number may not be used for this location information. The address provided should be the location where the chemicals are manufactured, processed, or otherwise used, rather than the corporate headquarters or other business office.

Full or Partial Facility Indication.

Section 313 requires reports by "facilities" defined as "all buildings, equipment, structures, and other stationary items which are located on a single site or on contiguous or adjacent sites and which are owned or operated by the same person." Threshold determinations should be made for an entire

facility.

The SIC code system defines business "establishments" as "distinct and separate economic activities [which] are performed at a single physical location." Under section 372.30(c) of the reporting rule, a separate Form R may be submitted for each establishment, or for groups of establishments, in a covered facility. This provides the facility with the option of reporting separately on the activities involving a toxic chemical at each establishment, or group of establishments (i.e., part of a covered facility), rather than submitting a single Form R for that chemical for the entire facility. All releases of the toxic chemicals from the covered facility must be reported. However, if an establishment or group of establishments in the facility does not manufacture, process, otherwise use, or release a toxic chemical, then a report on that chemical from that establishment or group of establishments is not required.

Technical Contact.

The "technical contact" is someone whom EPA or State officials may contact for clarification of the information reported on the form. This person does not have to be the person who prepares the report or signs the certification statement. This person, however, must have detailed knowledge of the report to be able to respond to questions. Different technical contact personnel may be designated based on the specific chemical.

Public Contact.

The "public contact" is someone who can respond to questions from the public about the report. The same person may be designated as both the technical and the public contact. If no public contact is designated in Section 3.4, EPA will treat the technical contact as the public contact.

Standard Industrial Classification (SIC) Code.

The appropriate 4-digit primary Standard Industrial Classification (SIC) code must be reported for covered facilities. If the report covers more than one establishment within the facility, the primary 4 digit SIC code for each establishment that falls within SIC codes 20 to 39 is required to be reported. The statute uses the two-digit range of 20-39 to define eligibility for reporting. The corresponding four-digit range is from 2000-3999. Thus, a facility in SIC code 0028 does not need to report under section 313.

Latitude and Longitude.

Latitude and longitude for calendar year 1987 reports must be supplied if the information is readily available. Sources of these data include EPA permits (e.g., NPDES permits), county property records, facility blueprints, and site plans. If these geographic coordinates are not readily available for calendar year 1987 reports, they do not have to be reported. All facilities are required to provide this information in reports submitted for calendar year 1988 and subsequent years.

Facility Dun and Bradstreet Number.

The number assigned by Dun and Bradstreet for covered facilities or establishments within facilities must be reported. It may be available from the facility's treasurer or financial officer. If the facility does not have a Dun and Bradstreet number, "N/A" should be entered in the space provided.

EPA Identification Number.

The EPA I.D. Number is a 12-digit number assigned to facilities covered by hazardous waste regulations under the Resource Conservation and Recovery Act (RCRA). Facilities not covered by RCRA are not likely to have an assigned EPA I.D. Number. If the facility does not have an EPA I.D. Number, "N/A" should be entered in the space provided.

NPDES Permit Numbers.

The numbers of any permits a facility holds under the National Pollutant Discharge Elimination System (NPDES) must be reported. This 9-digit permit number is assigned to a facility by EPA or the State under the authority of the Clean Water Act. The permit number must be reported even if the facility does not discharge any listed toxic chemicals to surface waters.

Name of Receiving Stream or Water Body.

Each surface water body or receiving stream to which a chemical being reported is directly discharged must be identified. The name of each receiving stream or water body (not POTW), as it appears on the NPDES permit for the facility, should be used. If a facility does not have an NPDES permit, the commonly used name of the streams or water bodies should be reported to allow for the evaluation of watersheds.

Underground Injection Well Code (UIC) Identification Number.

Facilities that have permits to inject chemical-containing waste into Class 1 deep wells must report the Underground Injection Control (UIC) 12-digit identification number assigned by EPA or by the State under the authority of the Safe Drinking Water Act.

Parent Company Information.

Information on the parent companies of reporting facilities must be provided. For purposes of section 313, a parent company is defined as a corporation or other business entity that directly owns at least 50 percent of the voting stock of another company.

I. DETERMINING WHETHER OR NOT TO REPORT: FACILITY

1. Which facilities are required to report under section 313?

A facility is required to report if it has 10 or more full-time employees; it is included in SIC codes 20-39; and it manufactured (including imported), processed, or otherwise used any listed toxic chemical in quantities exceeding an established threshold during a calendar year.

2. Must an annual report be submitted by July 1, 1988 for facilities which were in operation part of 1987 but which were closed (i.e., shutdown or out of business) on December 31, 1987?

Yes. A facility that operated during any part of a reporting year must report if it meets the reporting criteria.

3. Section 313 covers facilities with 10 or more full-time employees. Would a facility with 9 full-time employees and 4 part-time employees be required to report under section 313?

The total hours worked by all employees should be reviewed. A "full-time employee" is defined on a full-time equivalent basis of 2000 labor hours per year. If the total hours worked by all employees at a facility, including contractors, is 20,000 or more, the criterion for number of employees has been met.

4. Is an "employee" a group of people who works 2000 hours per year (such as three people who work 1/3 time) or is it one person who works full-time?

An "employee" can be either a single person or a group of people. The regulatory criterion is whether the total hours worked by all employees is equal to or greater than 20,000 for that calendar year at the facility.

5. In determining the number of full-time employees at a facility, are the hours of employment of sales personnel who are not connected with the production facility in any way included in the total hours worked?

Yes. All employees at a facility, regardless of function or location within the facility, must be included in the employee threshold determination.

6. What is the definition of primary SIC code? How can there be more than one primary SIC code for a facility?

A primary SIC code generally represents those goods produced or services performed by an establishment that have the highest value of production or produce the most revenues for the establishment. The form provides space for more than one primary SIC code because a facility may be made up of several establishments, each of which may have a different primary SIC code.

7. Please clarify the distinction between a "facility" versus an "establishment."

The SIC code system classifies business locations on the basis of an "establishment," which is generally a single business unit at one location. In many cases, a facility covered under section 313 will be the equivalent of an establishment. However, the definition of "facility" in the statute is quite broad. A facility which is required to report can encompass several establishments located within a physical property boundary that is owned or operated by same "person." Therefore, a facility can be a multi-establishment complex.

8. For reporting year 1987, if a company has a plant in one state which processes 52,000 pounds of methanol and a plant which processes the same amount of methanol in another state, do both plants have to report as "establishments" of a "facility"?

No. The two processing plants are considered separate facilities under section 313, even though they are owned by the same company, because they are not located within the same contiguous physical boundary. Thus, their activities are not additive, and neither would report methanol for 1987 but both would report for 1988.

9. M and P Plastics is a wholly owned subsidiary of a major chemical company which is itself a wholly owned subsidiary of B&O Corporation. Which company is the parent company?

B&O Corporation is the parent company for purposes of section 313 reporting.

10. Who is the parent company for a 50/50 joint venture?

The 50/50 joint venture is its own parent company.

11. If two plants are separate establishments under the same site management, must they have separate Dun & Bradstreet numbers?

They may have separate Dun & Bradstreet numbers, especially if they are distinctly separate business units. However, different divisions of a company located in the same facility usually do not have separate Dun & Bradstreet numbers.

12. If a facility does not have a Dun & Bradstreet number but the parent corporation does, is this number required to be reported?

The Dun and Bradstreet number for the facility that is reporting should be entered. If a facility does not have a Dun and Bradstreet number, "N/A" should be entered in Part I, Section 3.7. The parent corporation Dun and Bradstreet number should be entered in Part I., Section 4.2.

13. Are pipelines for a feedstock or product covered if they go to or from a "facility" (i.e., contiguous to a covered facility owned by the facility's parent company)?

No. The portion of a pipeline exterior to the property boundary of the facility carrying feedstock into or product away from the facility would not be covered for purposes of release reporting. However, releases from loading or unloading activities or leaks from a pipeline within the facility would be covered.

14. How are warehouses and trucking companies affected by section 313?

A warehouse located within the physical boundary of a "covered facility" would be covered for purposes of estimating releases of a toxic chemical. The contents of a warehouse are not included in threshold determinations, however, because thresholds are based on the amount of a chemical manufactured, processed, or used (i.e., throughput rather than storage volume). If, however, the warehouse is repackaging the chemical (i.e., processing), then those quantities would have to be factored into facility threshold determinations.

Generally, a "stand alone" warehouse does not fall into the covered SIC codes. However, a warehouse may take on a covered SIC code if it's primary function is to support a SIC code 20-39 operation. Under the provisions of the SIC code system the owner or operator would consider that the warehouse is an "auxiliary" facility to a manufacturing establishment. Even if the warehouse does carry a covered SIC code it would still have to meet the employee threshold and be engaged in manufacturing, processing or use of listed chemicals above applicable thresholds before reporting would be required.

Trucking companies are not likely to be subject because they are not within the covered SIC codes. Of course, it is possible that a trucking company could own or operate a covered facility and thereby be potentially responsible for reporting for that facility.

15. If pilot plants are within the SIC codes 20-39, are they required to report?

A pilot plant that falls within the appropriate SIC codes would be a covered facility, provided it meets the employee and threshold criteria.

16. Suppose a facility is comprised of several establishments some of which have primary SIC codes within the 20-39 range, and some of which have primary SIC codes outside that range. How would this facility determine if it needs to report?

The facili[illegible] a whole is subject to reporting if those establishments that are in SIC codes 20-39 have a combined value of more than 50 percent of the total value of products shipped or produced by the whole facility, or one of those SIC code 20-39 establishments has a value of products shipped or produced that is greater than any other establishment in the facility.

17. Are "auxiliary" facilities associated with manufacturing operations in SIC codes 20 through 39 exempt from reporting under section 313?

No. An "auxiliary facility" is one that directly supports another

establishment's activities and can therefore take on the SIC code of the facility which is being supported. Auxiliary facilities that are separate operations located on separate property are required to report if they meet the employee and chemical thresholds. Auxiliary establishments that are part of multi-establishment facilities should be included in making threshold determinations for the facility as a whole. Examples include warehouses, storage facilities, and waste treatment facilities.

II. DETERMINING WHETHER OR NOT TO REPORT: LISTED CHEMICALS

18. What list of chemicals is subject to reporting under section 313?

The law defined the list of toxic chemicals. The initial list (with certain technical modifications) appears in the final rule and in the instruction booklet for completing EPA Form R.

19. What is the difference between the section 313 list and other Title III lists?

Some overlaps exist between the lists of chemicals covered by different sections of the law. Section 313 focuses primarily on chemicals that may cause chronic health and environmental effects. Other chemicals listed under Title III must be reported if there are accidental, emergency type releases. EPA has prepared a document (the "List of Lists") identifying every chemical regulated under Title III, CERCLA, and RCRA, identifying the overlaps between the lists.

20. When will the titanium dioxide petition for removal from the section 313 toxic chemical list be finalized?

The Agency published a proposed rule to delist titanium dioxide. The present schedule calls for a final rule by June of 1988.

21. If an item on the section 313 list covers chemicals with multiple CAS numbers (e.g., nickel compounds), how is the CAS number of the item described?

A CAS number should not be identified in such cases. Instead, "N/A" is entered in the space for the CAS number on Form R. The individual chemical members of a listed category are not required to be identified in the report.

22. Is asbestos removal from a site covered by section 313 reporting requirements?

If a facility manufactures, processes, or otherwise uses friable asbestos in excess of an applicable threshold, then the facility would be required to report removal of any quantity of such asbestos in waste from their facility. For example, if the facility transferred previously accumulated asbestos wastes from a waste pile, the amount transferred in the reporting year must be included in Part III, Section 6 of the form. However, if the only "use" of asbestos at the facility was as a structural component (e.g., as insulation), then the removal of that material from the facility would not trigger reporting. This is because the "use" of asbestos in structural components (e.g., buildings and pipes) is not a use covered by the rule.

23. Are releases of asbestos resulting from demolition of an old plant covered by section 313 reporting?

Releases of asbestos are not reportable due to the demolition of a plant with asbestos as a structural component.

24. Is there a particle size associated with the qualifier "fume or dust" for aluminum, vanadium, and zinc?

No.

25. Would a listed chemical present in compressed air rather than in boiler emission air be exempt from consideration?

A listed chemical present in compressed air would not have to be counted toward a threshold determination. If that same chemical is present in the boiler emission air as a result of being in the compressed air fed to the boiler, then it would remain an exempt use. However, if the chemical is created as a result of combustion, the chemical has been coincidentally manufactured and must therefore be considered for reporting.

26. Is steel in inventory covered by section 313?

For a reportable metal in steel, consider whether the steel is an article and therefore exempt (see rule for the definition of article). If it is an article, the steel does not count in thresholds, amount on-site, or in any other way. However, if processing or use of the steel releases the reportable metal other than as solid scrap, the steel is not an article and its metal content must be counted toward thresholds and releases determinations. Note that the steel actually processed or used, rather than in inventory, is what is counted in the threshold determination.

27. Are materials in inventory (i.e., amounts on hand at year end) included in threshold determinations?

No. Only quantities of a chemical actually manufactured (including any amount that is imported), processed, or used during the calendar year are to be counted toward a threshold determination.

28. Are the thresholds for manufacture and process considered separately? For example, if a facility manufacturers 74,000 pounds of chemical A and processes 74,000 pounds of a chemical A, does chemical A need to be reported?

Thresholds are considered separately for manufacture, process, and use of the same chemical. Therefore, chemical A would not have to be reported for the 1987 reporting year. However, reporting would be required for 1988.

29. If a facility manufacturers 53,000 pounds, processes 28,000 pounds, and imports 6,000 pounds of chemical "X" during 1987, is it required to report for chemical X?

Reporting would not be required for 1987. However, for 1988 the facility would have to report chemical X because it would have exceeded the manufactu threshold of 50,000 pounds. Note that importing is the equivalent of manufacturing and therefore the amounts must be added together for threshold

determinations.

30. If a chemical falls into a group or class of metal compounds under section 313, (e.g., zinc compounds or cobalt compounds), is only the parent metal portion of the chemical or the whole compound counted when calculating thresholds?

Threshold determinations for metal-containing compounds must be made separately from threshold determinations for the parent metal because they are listed separately under section 313. For example, if a facility processes both zinc and zinc compounds, separate threshold determinations would be made for each. To determine if thresholds for a category (e.g., zinc compounds) have been exceeded, the total weight of each individual compound in that category (not just the metal portion) which the facility manufactures, processes, or uses is determined. When estimating quantities released, the weight of the parent metal only, not the total weight of the metal compounds released, is reported. For example, once the threshold for processing of zinc compounds has been exceeded, releases are reported as releases of zinc.

31. When a company has a mixture on-site which does not have its own CAS number, what CAS number should be used?

In the case of mixtures, the company should attempt to determine what listed section 313 chemicals are present and the weight percentage of those chemicals in the mixture. The preamble to the rule goes into considerable detail on the topic of determining mixture, trade name, and product composition. Basically, if it is determined that a mixture contains one or more covered toxic chemicals, a separate report for each chemical must be submitted. That is, if the fraction of the chemical in the mixture multiplied by the total weight of the mixture used or processed exceeds the applicable threshold, then the chemicals are treated as if they were present in pure form.

32. Are facilities required to know what toxic chemicals are in mixtures supplied to them, and if so, how is the information obtained?

Facilities are required to use the best available data for reporting years 1987 and 1988 to determine whether the components of a mixture or trade name product are listed under section 313. For reporting year 1989 and thereafter, however, suppliers will be required to develop and distribute a notice if the mixtures or trade name products they manufacture or process, and subsequently distribute, contain listed toxic chemicals.

33. If a mixture is claimed trade secret, how does a facility that uses or processes the mixture comply with 313 reports?

Beginning with the first shipment in 1989, suppliers must notify their customers that a section 313 chemical is present in any mixtures or trade name products. If a supplier claims that a chemical identity is a trade secret, a generic chemical identity that is structurally descriptive must be supplied in the notice. Similarly, if the specific composition of the mixture is a trade secret, the supplier must indicate an upper bound concentration for the amount of the listed chemical in the product. In figuring out whether to report, the

facility would use the upper bound concentration to determine whether it exceeded the applicable threshold for that substance.

34. By what date in 1989 must suppliers notify customers of mixture and trade name content?

Suppliers must notify customers with at least the first shipment of the mixture or trade name product in a calendar year. There is no fixed date by which notification must occur.

35. The section 313 list of chemicals includes sodium hydroxide (solution) but not solid sodium hydroxide. Should solid sodium hydroxide (i.e., pellets) be included in threshold calculations?

No. Solid forms of chemicals which are listed as solutions should not be included in threshold and release calculations. However, if the solid is made into a solution at any point in the process, then it becomes reportable.

36. Sodium sulfate (solution) is a listed chemical. If sodium sulfate in solution is used at a facility, should the quantity of the entire solution be considered or just the weight fraction of sodium sulfate?

Only the actual quantity of the chemical in a listed solution (i.e., sodium sulfate) should be considered for threshold, maximum quantity, and release determinations.

37. How is ammonium hydroxide in solutions (i.e., "aqua ammonia") counted?

Ammonia is the listed section 313 chemical. Technically the chemical ammonium hydroxide is not a listed section 313 chemical. It has a different CAS number from ammonia. However, commercial products such as "aqua ammonia" or "ammonium hydroxide" solutions are actually solutions of ammonia in water, containing approximately 30 percent ammonia. Therefore, these products are to be considered as mixtures of the reportable chemical ammonia in water for purposes of section 313 threshold determinations and release reporting.

38. If sodium hydroxide (solution) is spilled, but neutralized before leaving plant boundaries, should the quantity spilled be included in the facility's release report?

No.

III. EXEMPTIONS

39. Please explain the de minimis limitation for mixtures and trade name products.

Listed toxic chemicals present in mixtures or trade name products at concentrations below the de minimis level of 1.0 percent, or 0.1 percent for OSHA-defined carcinogens, do not have to be factored into threshold or release determinations. This de minimis level is consistent with the OSHA Hazard Communication Standard requirements for development of Material Safety Data Sheets (MSDSs).

40. Is there a de minimis exclusion for the solutions on the 313 chemical list?

Yes, the 1 percent or 0.1 percent exclusions apply, as appropriate.

41. Does a supplier have to tell a customer that a section 313 chemical is present below the de minimis level (1.0 percent, or 0.1 percent for OSHA carcinogens)?

No. Such information is not required to be provided under section 313.

42. Is there a list of OSHA carcinogens covered by the section 313 list of toxic chemicals to help facilities determine whether the de minimis cutoff should be 1 percent or 0.1 percent for specific chemicals?

EPA will be publishing such a list in the near future. It will be available through the Hotline. In the meantime, facilities should be aware that this determination must also be made for the purpose of preparing a Material Data Safety Sheet for the OSHA Hazard Communication Standard. Since the section 313 de minimis determination is based on the OSHA carcinogen definition, personnel at facilities responsible for MSDS development and use may be able to help with this determination.

43. Unit A uses a chemical mixture that is de minimis but the same chemical is not de minimis in a mixture used by unit B. In determining total facility releases, are releases of unit A reported?

Releases from unit A do not have to be reported. However, it should be noted that in some instances the information readily available to the facility may include releases for both units. For example, if both units discharge to the same treatment facility, and release estimates are based upon measured concentrations in the effluent from that facility, it would not be easy to "subtract out" the contribution from unit A. In such instances, it is permissible to report total releases, which would include the releases contributed by unit A.

44. If a facility has process streams with less than 1 percent (0.1 percent) of a listed chemical, do fugitive releases from these streams have to be included in release estimates?

First of all, the de minimis exclusion does not apply to a wastestream that results from a facility process stream. In addition, the Agency intends that the de minimis exclusion only apply to process streams in cases where a "starting material" for a process is a mixture that contains less than 1 percent or .1 percent of a covered chemical. EPA did not intend to exclude from consideration releases from process streams in which, for example, the chemical at some point falls below the de minimis level because it is converted to another chemical or "exhausted" (such as in a dye bath). Also, the Agency did not intend that the act of dilution should exempt a process stream from consideration if the mixture being diluted contains a covered chemical above the de minimis level. The Agency realizes that a strict reading of section 372.38(a) of the rule could exclude a process stream that contains a chemical below the de minimis level because the phrase "...present in a mixture of chemicals at a covered facility..." is not qualified. EPA will develop an amendment to qualify that, for the purposes of the de minimis exemption, the term mixture applies to products or other "starting materials" that may be further processed at the facility.

45. If a facility manufactures 900,000 gallons per day of Na_2SO_4 at a 0.5 percent concentration in a wastewater treatment system, is this quantity to be considered for threshold and release determinations?

Since the chemical is manufactured at the facility as part of a waste treatment process, the de minimis exemption does not apply and the sodium sulfate must be considered for both threshold and release determinations.

46. Does the de minimis exemption apply regardless of whether a chemical is an ingredient, an impurity in a mixture or product, or a waste stream constituent?

The de minimis exemption applies to ingredients of mixtures or to impurities present in products. It does not apply to waste streams.

47. The Agency has said that the de minimis concentration exemption does not apply to release estimates. Where is this discussed in the final rule?

The preamble to the final regulation discusses the application of the de minimis concept in Section IV.A., Definition of Manufacture, and Section VI.A., De Minimis Concentration Limit. There is no de minimis level applicable to the wastestream itself for determination of the amount of chemical released from a facility. Also, the manufacture of a section 313 chemical as part of a waste treatment process is not covered by the de minimis exemption. However, the de minimis exemption may eliminate the need to consider a certain release. For example, if a section 313 toxic chemical is present at less than the de minimis level in a product that is stored on site, evaporative emissions of the chemical would not have to be estimated from that storage activity.

48. Is the article exemption stated explicitly or is the OSHA definition cited?

The section 313 rule contains an explicit definition of "article", similar in some respects to the OSHA definition.

49. Are colored plastic pellets considered articles? For example, the pigment (a listed toxic chemical) incorporated in plastic pellets is not released when the pellets are processed.

A colored plastic pellet would not meet the definition of an article if it does not have an end use function dependent in whole or in part upon its shape or design. A plastic pellet's shape or design is only a convenient form of a material that is intended to be further processed.

50. Are PCB-containing transformers included under the article use exemption?

If no release of PCBs occurs during the normal use of the transformer, then the transformer remains an article and the PCBs within it do not have to be factored into a threshold determination. If, however, the transformers are serviced by replacing the PCB-containing fluid, a threshold determination must be made.

51. Does material contained in the structure of a building need to be reported?

No. Structural materials are exempt from reporting. That means they do not have to be included when determining whether a threshold is exceeded, and they do not have to be included in calculating the maximum quantity on site. Similarly exempted are listed chemicals used for routine janitorial or facility grounds maintenance; personal uses by employees or other persons; use of products containing toxic chemicals for the purpose of maintaining motor vehicles operated by the facility; and toxic chemicals present in intake water used for non-contact cooling. Painting of equipment and buildings is a type of maintenance that is exempt because the chemical is incorporated into the structure of the facility.

52. Does the "structural component" exemption cover the small amounts of abraded or corroded metals from pipes and other equipment that become part of process streams?

Yes.

53. Are solvents in paint used to maintain the facility exempt?

Yes. Painting to maintain the physical integrity of the facility is consistent with the "structure component" exemptions, even though the solvents in the paint don't become part of this structure.

54. How is routine maintenance, a listed exemption, defined?

The routine maintenance exemption is intended to cover janitorial, other

custodial, or plant grounds maintenance activities which use chemicals in the concentration and form commonly distributed to consumers. These include bathroom cleaning, or use of fertilizers and pesticides to maintain lawns.

55. Are pesticides which are used to control algae in cooling water towers exempt?

No. Such pesticides would not fit the routine maintenance exemption.

56. Is equipment maintenance included in the routine maintenance exemption?

No. Equipment maintenance is not considered a routine janitorial or custodial activity. For example, degreasers used in a manufacturing maintenance shop are not exempt.

57. It appears that janitorial type chemicals are exempt. Does this mean that if formaldehyde is used as a disinfectant of a sterile area in excess of the threshold, it is exempt?

No. The disinfectant described in the question does not appear to be similar in type to a consumer product.

58. Does section 313 reporting include laboratory chemicals?

The quantity of a listed chemical manufactured, processed or used in a laboratory under the supervision of a technically qualified person is exempt from threshold and release calculations. This exemption includes laboratories performing quality control activities and those located in manufacturing facilities.

59. What is meant by "specialty chemical production" as an exception to the laboratory activities exemption?

Specialty chemical production includes chemicals produced in a laboratory setting that are distributed in commerce.

60. If a pilot plant is contained within a laboratory, assuming the rest of the lab deals with research and quality control, must the facility calculate the threshold based on the entire lab, or just on the chemicals used for the pilot plant?

The facility would only be required to consider the pilot plant portion of the laboratory.

61. What is a bench scale or pilot scale reactor? Is this type of equipment exempt?

A bench scale reactor would not be covered as part of the pilot plant unless it was used for specialty chemical production.

62. Assume that a quality control laboratory, or area control laboratory, are part of a manufacturing facility. Are they exempt from calculating threshold

quantities for listed chemicals?

Yes. Assuming that such laboratories are under the supervision of a technically qualified person and are not engaged in pilot plant scale or specialty chemical production, they would be exempt from reporting.

63. Does a facility have to report if the value of laboratory research at a facility is greater than 50 percent of the total value of goods and services produced at that facility?

If the research laboratory activity is a separate establishment within the facility from the manufacturing activity and it carries an SIC code not within the covered SIC codes, then the 50 percent test would apply for determining whether the whole facility is "in SIC codes 20-39." According to the SIC code system, however, some laboratories may be considered within SIC codes 20-39 because they are "auxiliary" facilities to manufacturing activity, (i.e., the research supports the manufacturing operation). In this case, both establishments would fall into the covered SIC codes, thus, the whole facility would be covered.

IV. ACTIVITIES AND USES OF THE CHEMICAL AT THE FACILITY

64. An aluminum material in excess of 100,000 pounds is purchased in block form to make a mold which stays on site. During the production of the mold, aluminum fumes and dust were produced as a byproduct. Is aluminum the chemical to be reported?

The aluminum related entry on the section 313 list of chemicals is "aluminum (fume or dust)." Aluminum fume or dust is not processed or used in the example. However, aluminum fume or dust is "manufactured" coincidentally as a byproduct of the mold-making operation. Therefore, if it is estimated that aluminum fume or dust is "manufactured" in excess of the applicable threshold (75,000 pounds for 1987), reporting is required.

65. The only source of chemical A is as a byproduct created in a reaction product at less than the de minimis concentration. The chemical is later removed from the product during purification and ends up in the wastewater. Is a threshold determination required?

Yes. Byproducts that are separated from the product after manufacture are not covered by the de minimis limitation.

66. How can wastewater treatment "products" be considered as manufactured from a treatment process?

The rule's definition of "manufacture" includes the coincidental generation of a listed toxic chemical as a consequence of the facility's waste treatment or disposal activities. These chemicals may not be produced for commercial purposes. They are, nevertheless, created as a result of the facilities activities and released to the environment. Therefore they must be accounted for.

67. If a facility imports a listed toxic chemical, is it required to report under section 313?

An imported chemical entering an SIC code 20-39 facility is the equivalent of a chemical manufactured at that facility.

68. Are importers/exporters responsible for reporting under section 313 for materials stored in public warehouses?

Persons who have to report are the owners or operators of covered facilities. If importers/exporters neither own nor operate the warehouse, they would not be responsible for reporting.

69. What constitutes an import broker? What is the determining criteria?

The fact that a broker is involved in an import transaction may have little

bearing on whether a facility has "imported" a covered chemical. Most import brokers may not themselves be subject to reporting because their business may not be classified under the covered SIC codes. The determining criteria is that a facility caused the chemical to be brought into the customs territory of the United States. A facility has caused it to be imported if it "controls the identity of the chemical and the amount to be imported." That is, even though a broker may be acting as an official import agent, if a facility has specified that a listed chemical (either a "pure" chemical or part of a mixture) be obtained from a foreign source and has specified the amount to be obtained, then the facility has "imported" the chemical.

70. How is process water defined?

Process water is any water drawn into a facility from environmental or municipal sources that is required for the operation of a facility.

71. Are water treating chemicals such as chlorine covered? Does chlorine in city water used have to be counted?

A facility is not required to account for amounts of a covered toxic chemical present in water that is drawn into the facility. For example, chlorine present in water taken from municipal sources does not have to be considered for threshold and release determinations. However, if a facility adds chlorine to treat water used in the facility, then that quantity of chlorine must be counted toward a threshold determination.

72. Does the placing of a bulk liquid containing a small percentage of a section 313 chemical into small bottles for consumer sale constitute a "use" of the mixture?

No, but it is a type of "processing." If the bulk liquid contains a section 313 covered chemical in excess of the de minimis level, the chemical in the liquid would have to be factored into calculations in determining whether the processing threshold is exceeded for that chemical.

73. When acids or sodium hydroxide are used as wastewater treatment chemicals for pH control (i.e., neutralization), are the amounts used required to be reported?

If the threshold for use has been exceeded, the facility would file a report indicating use of the chemical, but the report would only include the amount of the chemical discharged after treatment. If the pH of the wastestream resulting from the neutralization process is in the range of 6-9, the wastestream is considered effectively neutralized. The facility should report 100 percent treatment efficiency with a zero release of the acid or base. If, however, the pH is outside the range of 6 to 9, the facility should estimate the amount of unreacted acid or base being discharged, and report this amount as a release to the environment (i.e., discharge to surface waters) or as a transfer to an off-site facility (e.g., POTW) as appropriate.

74. How is a solvent sent off-site for distillation and returned to a facility for use treated for reporting purposes?

The amount of the solvent sent to another facility for distillation is not to be reported as a transfer of the chemical to an off-site location (i.e., it should not be reported in Part III, Section 6 of the form). In addition, the quantity of the solvent returned must be treated as if it were a quantity of the chemical purchased from any other supplier.

75. If a substance is "used" but does not become part of the final product, is the substance covered for reporting purposes? Specifically, are "process solvents" (i.e., solvents that are used in many processes but do not become part of final products) excluded?

If a "process solvent" is not incorporated into a product distributed in commerce, then for the purposes of section 313, it would be considered "otherwise used." It would be subject to reporting if used in quantities exceeding 10,000 pounds per year.

76. Are uses of listed chemicals as fumigants required to be reported?

If the use occurs at a covered facility in excess of 10,000 pounds per year, then reporting would be required.

77. Would a facility which is "tented" to exterminate insects need to report that pesticide?

The use of listed toxic chemicals such as pesticides (except for lawn maintenance) in excess of the threshold in a facility meeting employee and SIC code criteria would require reporting.

78. Is the combustion of gasoline in motor vehicles at the facility exempt?

Yes. Gasoline used to operate motor vehicles owned by the facility is considered to be the equivalent of other mixtures or chemicals used to maintain motor vehicles.

79. Do chemicals produced coincidentally to manufacturing, processing, or using other chemical substances have to be reported?

Chemicals produced coincidentally are subject to reporting. In the case of coincidental production of an impurity, however, the de minimis limitation applies. An impurity is the residual amount of chemical remaining in a final product for distribution in commerce.

80. Paint containing listed chemicals is applied to a product. Most of the coating becomes part of the article. Does the 75,000 pound threshold apply to the coating constituents? Are the volatile chemicals from the painting operation otherwise used, and therefore subject to the 10,000 pound threshold?

Yes to both questions. This is a case in which listed chemicals in the same mixture may have different thresholds. The listed chemicals that remain as part of the coating are "processed" whereas the volatile solvents in the paint are "used" because they are not intended to be incorporated into the article.

81. Are chemicals bought and sold as is exempt? Does adding additional labels or changing labels in a warehouse constitute repackaging?

Listed chemicals that are repackaged are considered to have been processed. However, simple relabeling of a container where no repackaging occurs is not considered to be either processing or use covered by this rule.

82. In calculating the threshold for "otherwise used" for a closed system such as a chilled H_2O system using dichromate, is the total amount of the chemical in the closed system or the actual amount of the chemical "used" or "added" during the year considered?

In a recycle or reuse operation such as this, only the amount of the listed chemical added to the system during the year must be considered in calculating thresholds.

V. TRADE SECRETS

83. How can the identity of a listed toxic chemical be protected from disclosure for trade secrecy purposes?

Section 313 allows facilities to claim trade secrecy, but only for the specific identity of a chemical. The rest of the reporting form must be completed. Thus, releases of chemicals whose identity is trade secret must be reported. If a trade secret claim is being made, two versions of the form must be completed: one which identifies the chemical, and one which contains only a generic chemical identity. In addition, a trade secret substantiation form must be completed. The instructions should be consulted for further information.

84. How will trade secret data be protected when EPA publishes health effects notices for the public?

The health effects notices will be presented in the form of a toxicity effects matrix. The matrix has been structured so that no single chemical can be uniquely associated with any specific pattern of effects. Consequently, the health effects information will not reveal the identity of a chemical and jeopardize trade secrecy. The information in the toxicity matrix, however, should be sufficiently detailed to enable the public to understand the potential effects of exposure to released toxic chemicals.

85. How can competitors find out what has been reported to EPA?

Any person, including a competitor, can gain access to the non-trade secret reports received under section 313. All information received under section 313 is public information except the specific identity of the reported chemical that is claimed trade secret. All non-trade secret information reported will be available in a computer data base.

86. When will trade secrets rule be published?

The final trade secret rule is scheduled to be published by June 1988.

VI. RELEASES OF THE CHEMICAL

87. What is the definition of a chemical "release" under section 313?

The law defines a release as any "spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing to the environment". Under section 313, facilities are required to take into account in their reports both "routine" and "accidental" releases to any environmental medium.

88. What is the difference between a release under section 304 of Title III and a release under section 313? Would accidental releases reported under section 304 have to be included in the section 313 report?

Section 304 releases are accidental releases of certain chemicals listed under section 302 of Title III or section 103 of CERCLA. A report under section 304 is an emergency notification. The Agency interprets reporting under section 313 to include the total amount of toxic chemicals entering each environmental medium from the facility as a result of both routine operational and accidental releases. Thus, section 304 releases of listed section 313 chemicals must be factored into releases reported under section 313.

89. Is it true that the facility need not make any special effort to measure or monitor releases for section 313 reporting and may use information that is on hand? If this is true, how will section 313 reporting produce complete data for the public on environmental releases?

The law states that covered facilities need not conduct monitoring or other activities beyond that required by other statutory or regulatory requirements. Congress included this language to limit the burden on the affected industry for development of release and other required data. In the absence of measurement or monitoring data, the facility is required to make reasonable estimates. EPA has developed a technical guidance document that suggests methods for developing such reasonable estimates.

90. Section 313(g)(2) of the statute states that the owner or operator of a facility may use readily available data. In some cases, the available monitoring data may be known to be non-representative and reasonable estimates offer more accurate release information. Would EPA, in this instance, favor use of the estimates rather than data?

Yes. It is preferable to use reasonable estimates if monitoring data are known to be non-representative.

91. Don't the section 313 reporting requirements overlook the possibility that a substance can lose its identity as a side product in a reaction, and that the difference between "input and output" volumes may not always be due to a release?

The section 313 rule does recognize that a chemical can lose its identity in a reaction. The rule does not require a total mass balance accounting of the reported chemical. If the facility manufactures, processes, or otherwise uses a chemical in excess of the applicable threshold quantity, then it would be obligated to report. The reporting form does not require the facility to report the total amount of annual production, the total amount on hand at the beginning of the year, or the amount processed or used. It requires an estimate of the total annual amount of a chemical released to the environment and the maximum quantity on-site at any time during the year. If (in the most extreme case) all of that chemical processed at the facility is consumed in a reaction and none is estimated to be lost in any other fashion, then the facility would report a zero quantity released.

92. Is there any recommended approach for estimating emissions from facilities whose raw material is of a constantly varying and unknown composition. For example, tar plants receive crude coal tar in batches. No analysis is done on incoming raw materials or on products (or on intermediates) at such facilities.

If available, data on the average composition for the specific material or published data on similar substances should be used.

93. Why are the range codes grouped together in logarithmic scale?

For quantities on-site the ranges were patterned after TSCA inventory reporting, as suggested by Congress.

94. Please clarify the "2 significant figures" reporting guideline.

Estimates should be rounded to no greater than two significant figures (i.e., 4224 should be entered as 4200). The number of "significant figures" is the number of non-zero digits. One significant digit should be reported if the estimation techniques used do not support the two digit accuracy.

95. In the instructions for Form R what does "use leading placeholding zeros" mean?

An example of the use of leading placeholding zeros would be the entry of the CAS Registry number (Part III, Section 1.2.). Space is provided on the form for the longest possible CAS number (currently 9 digits). However, many CAS numbers have fewer than the maximum digits. Therefore, the number should be "right justified" when entered, and any blank spaces to the left of the last number should be filled with zeros. For example, the CAS Registry number for chromium is 7440-47-9. On Form R it should appear as 007440-47-9. EPA requires this in order to promote accuracy of data entry.

96. If total releases are obtained using a combination of several bases, what "Basis of Estimate" is used?

Report the principle means used to estimate releases. Examples in the instructions for the form provide further clarification.

97. Since EPA's fugitive emission factors for equipment leaks for the Synthetic Organic Chemical Manufacturing Industry (SOCMI) and some air emissions factors listed in EPA's document AP-42, "Compilation of Air Pollutant Emission Factors," are not chemical specific, is the code "E" or "O"?

Use "O" for non-chemical-specific emission factors.

98. Do estimates of releases, if over CERCLA Reportable Quantities, obligate facilities to report a continuous release (even though only an estimate)?

Questions relating to CERCLA reportable quantities (RQ) and continuous release provisions should be directed to the RCRA/Superfund Hotline (800)424-9346 (in Washington DC 382-3000).

99. Will EPA be calculating or monitoring concentrations of toxics in ambient air?

The Agency plans to use the TRI data for the purposes of screening and identifying potential environmental problems. To date no decision has been made regarding how the EPA program offices will utilize the TRI data.

100. Is the composition of rainfall as it falls from the sky or its composition once it has run onto and off soil reported for release to stormwater and threshold calculations?

The composition once the rainwater has run onto and off the soil, equipment, and concrete pads is reported.

101. If a facility has an NPDES permit, but does not discharge any listed toxic chemicals to surface water, must Section 3.10 be completed?

Yes. This information element is part of the facility identification section and is intended to be used as a pointer to other existing information relative to the facility.

102. Are groundwater releases required to be reported? If so, what if a facility has a surface impoundment which it suspects is leaking? How is the amount being released calculated?

Releases to underground injection or landfill should be reported. Estimates of amounts leaking from such disposal and possibly reaching groundwater should not be reported. EPA may model the potential for such leaks or migration, but does not require facilities to estimate such further migrations.

103. Where are routine leaks from underground pipes reported? Would such leaks be reported as disposal to land or as underground injection?

When reporting leaks from pipes, where the released material goes must be considered. A volatile organic would evaporate and be reported as a fugitive air emission. A nonvolatile material leaking onto land or any material leaking from an underground pipe would be reported as a release to land, and a

code of D99 for "other disposal" would be used. If the material were cleaned up in some way, the "leaked" material might then be reported as a release to water or an off-site transfer. Underground injection should be reported only for intentional injection of wastes or materials into a well designed for that purpose.

104. Does a facility need to report leaking abandoned landfills?

Leaks from landfills are not required to be reported regardless of whether the landfill is in use or has been abandoned. EPA does require, however, reporting of the amount of a chemical placed in an on-site landfill or transferred to an off-site landfill during the year.

105. On-site wastewater treatment plant sludges which may contain trace amounts of section 313 chemicals are composted on-site. The finished compost is then used as daily cover for the on-site sanitary landfill and for landscaping around the site. Is this considered land treatment, land impoundment, or not a release?

In this case, the code D03 for Land Treatment/Application/Farming should be entered in Part III, Section 7B of the form.

106. If a treatment plant is operated as part of remediating a Superfund site at a facility, do contaminants which are already present have to be included in calculating thresholds and releases?

Such material need not be included in threshold determinations because it is not being manufactured, processed, or used. However, releases would be reportable if the facility meets reporting criteria (i.e., it is in the SIC codes 20-39, has 10 or more full time employees, and exceeds a threshold). In this case, release does not mean the material that is already in a landfill, only that amount of material released to the environment or transferred off-site by the remedial activity.

107. If a company measures its own valve, flange, and pump leaks and determines a new fugitive emission factor for air releases, is the basis of estimate code "E" or "M" or "O"?

If releases of the chemical are measured from individual pieces of equipment at a facility, use the code "M". Code "E" should only be used for published emission factors which are chemical specific. If leaks are measured in a general way, "O" or non-published factors developed at other facilities should be used.

108. Ten thousand pounds of a 50 percent sodium hydroxide solution is diluted on site to 20,000 pounds of a 25 percent solution. This solution is used to neutralize 25,000 pounds of acid solution producing 45,000 pounds of final solution. Because the amount of sodium hydroxide is in excess of the amount needed to neutralize the acid, the final solution contains 0.1 percent sodium hydroxide. What is the maximum amount of sodium hydroxide on site?

The maximum amount would be 10,000 x .5 = 5,000 pounds. The amount remaining

after the neutralization (45,000 x 0.001 = 45 pounds) is part of this original amount and does not have to be added to the 5000 pounds to determine the maximum amount present at the site.

109. Are amounts of acids and sodium hydroxide used in a wastewater treatment facility for pH control that are "neutralized" required to be reported? Are spills of these materials treated and neutralized at the facility covered under section 313?

Materials used in wastewater treatment at the facility are considered in determining whether the thresholds for use of a chemical have been exceeded. To the degree that the treated wastestream is in pH range 6-9, releases of the acids and NaOH would be reported as zero. If spills are neutralized at an on-site wastewater treatment facility, then releases would not be considered for reporting if the pH is within the 6-9 range after treatment. If the treatment facility is off-site, then the quantities of acid or NaOH must be reported as transfers to off-site facilities for treatment.

VII. TRANSFERS TO OFF-SITE LOCATIONS

110. If a POTW has no current estimate of treatment efficiency for each section 313 chemical, is "N/A" acceptable?

The treatment efficiency for any off-site facility to which transfers of toxic chemicals occur does not have to be reported. Thus, facilities must account for the annual quantity of the listed toxic chemical(s) released to a POTW but are not required to estimate the treatment efficiency of the POTW.

111. Why does the section 313 form require disclosure of off-site locations to which toxic chemicals are transferred? The Act only requires the disposal method employed.

Section 313 requires reporting releases to all environmental media. In the conference committee report, EPA was directed to require reporting of releases to the air, the water, the land, and to waste treatment and disposal facilities. In essence, the legislative history treats such facilities as an equivalent environmental medium. EPA believes that Congress intended to include the reporting of quantities transferred to off-site waste treatment and disposal facilities to provide users of the data with a total picture of how and where the listed toxic chemicals are entering the environment. That means the reports should not only report waste transfers off-site, but also the identity of the facility one location to which the wastes are transferred.

112. If off-site reclaimers are not to be included in the off-site locations which handle wastes, are emissions discharged by these reclaimers included as point emissions or are they not reported?

A facility should not report transfers for off-site recycling of the chemical or the chemical releases from such a reclaimer.

113. What RCRA ID number is listed if a <u>non</u>-hazardous waste containing a SARA section 313 chemical is sent to a solid waste landfill?

If an off-site location such as a solid waste landfill does not have a RCRA ID number, "N/A" would be entered in the space provided. If the facility does have such an ID number, it must be listed if known, even though the waste being transferred may not be a listed RCRA hazardous waste.

114. What about shipment for recycle (e.g., "empty" drums containing a residue of a toxic chemical that are sent for drum remediation)? This is not a treatment, storage or disposal (TSD) facility. The chemical is not being recycled, but the carrier, that is, the container, is being recycled. Are these types of facilities listed as off-site TSD facilities?

Shipments for recycle of the chemical should not be reported. However, recycle of drums or recycle of other constituents of a waste does not qualify

as recycle of the chemical and such transfers should be reported. The example cited should be reported as an off-site transfer with appropriate code such as M99 (unknown). If it is known that the drums are washed with water and the wastewater is treated, code M61 (wastewater treatment) should be reported.

VIII. WASTE TREATMENT METHODS AND EFFICIENCY

115. When multiple waste sources are combined for treatment, should each source be listed in the treatment efficiencies section and a common efficiency shown or should only the combined stream be shown?

Report only the combined (or aggregate) wastestream and report the aggregate efficiency for each treatment method used. See instructions for reporting sequential treatment. A wastestream which is treated before combination with other wastes, then subsequently treated as a combined stream, should be reported on a separate line on the form.

116. How is the treatment efficiency of a crystallization unit that completely evaporates a wastewater stream reported?

A treatment step that completely eliminates a wastestream has an efficiency of 100 percent. The crystallization unit generates a new solid waste stream (the solid crystals). The disposition of this new wastestream, including any additional treatment performed on it, must be reported on the form. Note that any on-site treatment of the solid wastestream is not considered "sequential" treatment of the wastewater stream and must be listed with its treatment efficiency on a separate line.

117. How is an auxiliary scrubber that is designed and used only to mitigate emergency releases reported?

The influent concentration and treatment efficiency of the scrubber as it operates during an emergency event should be reported. The emergency scrubber is not considered to be "sequential" treatment with a scrubber which treats routine emissions from the same process, unless the two units function in a series on a single wastestream.

118. If a wastewater treatment system contains an oil skimmer or other phase separation treatment, is this reported as a sequential treatment step for each of the separated phases, or just for one phase?

The separation step is a sequential treatment step for one liquid phase (the one with the larger volume, in this case, water). The other phase must be considered a new wastestream and must be listed separately on the form.

9. If a facility has wastewater analysis for a chemical to be reported as being "Non-Detected" with a detection limit of 1 ppb., is a discharge of "0" (zero) reported is the discharge calculated based on the detection limit?

Use one-half of the detection limit if the facility believes that the chemical may actually be present. Use "zero" if it is determined that the wastewater does not contain the chemical, for example, because neither routine or accidental contact with water occurs.

120. Does the waste treatment section apply only to the facility completing the report?

Yes.

121. If the calculated threshold of sodium hydroxide, for example, is based on the mass utilization of the solution, would the emission of a wastewater stream containing 1 ppm of NaOH be the actual mass of NaOH or the mass of wastewater?

Only the actual mass of the toxic chemical being released should be reported, in this case the mass of sodium hydroxide. Note, however, that in this specific case, if the wastestream has been neutralized so that the pH is in the range 6-9, the release of sodium hydroxide would be considered zero for reporting purposes.

IX. WASTE MINIMIZATION

122. What is included in waste minimization? Are solid wastes as well as hazardous wastes included?

Waste minimization means reduction of the generation of toxic chemicals in wastes. Waste minimization reporting applies to air emissions, solid wastes, wastewater and liquid materials that are released, disposed, or treated.

123. If a facility modifies a process for economic reasons resulting in a waste reduction, should this be reported as minimization?

Yes. Any changes that result in less waste being generated may be included. Codes are provided to identify changes such as equipment and technology modifications, as well as process changes, procedure modifications, and improved housekeeping.

124. What do facilities that have not performed any waste minimization include in the report?

The waste minimization portion of the reporting form is optional.

125. Would RCRA permitted incineration of waste count as waste minimization under M8 (other treatment methods)?

Treatment or disposal can not be reported as waste minimization under the TRI form. The emphasis is placed on facility activities that reduce generation of wastes and not on activities that allow for treatment of wastes.

126. Where can facilities obtain figures from previous year?

Companies can obtain waste minimization information about the year prior to reporting from various sources including but not limited to inventory data, recycle/reuse data, engineering reports on process modification and product development studies.

127. Please elaborate on the waste minimization section with respect to the proposed legislation regarding unit-based reduction measurement?

Congressman Wolpe has introduced a bill HR 2800 that, if enacted into a law, will expand the section 313 optional waste minimization reporting requirements and make such reporting mandatory.

X. CERTIFICATION AND SUBMISSION

128. Must a separate Form R be filled out for each reportable chemical?

Yes. As described in the instructions, however, only one version of Part I (page 1) of the form needs to be completed for any facility. That page can then be photocopied and attached to each chemical-specific report. Each copy, however, must contain an original signature on the certification statement. Similarly, Part II (Off-Site Locations) may be filled out for all chemicals being reported and then photocopied for each submission.

129. Are facilities required to include an original signature on forms going to the State as well as EPA?

An original signature on the certification statement is not required under EPA's rule for the copy that is sent to the State.

130. Is the owner or operator responsible for submitting the chemical release inventory form?

Either person (i.e., either the owner or operator) is subject to the section 313 reporting requirements. Therefore, if no report is received from a covered facility, both persons are liable for penalties. As a practical matter, EPA believes that the operator is more likely to have the information necessary for making the reporting determinations.

131. Would an owner of a facility who has no knowledge of any operations taking place in the facility be responsible for reporting under section 313?

If the owner has any business interest in the facility beyond owning the real estate on which the covered facility is located, he would be subject to reporting requirements. Neither owners who are part of the same business organization as the operators, nor owners of businesses that contract out the operation of a particular site, are exempt from reporting.

132. Can a plant manager of a facility or a designee sign the certification statement on the form? That is, can a plant manager count as a "senior management official"?

Section 313 requires that a senior official with management authority over the person or persons filling out the form certify the accuracy and completeness of the form. This person could be a plant or facility manager rather than a senior corporate executive and should be the senior person in a position to attest to the accuracy of the information provided.

133. If a facility has a manager who is the originator of the data in the form report would he/she sign the form or would it be the facility manager to whom this manager reports?

Each facility must make the determination regarding who meets the definition in the rule of a "senior management official."

134. If a facility has been sold or otherwise changed hands during the year, who is responsible for completing the report?

The last owner or operator of the facility during a reporting year is the person responsible for reporting unless the sales or transfer agreement contains language that the seller will assume this reporting responsibility. In any event, only one report must be submitted for the entire reporting year.

135. What is the status of magnetic media submission (e.g., on tape or floppy disk) for the July 1, 1988, section 313 reports?

Data submission by magnetic tape or disk should be possible for July 1, 1988, reporting cycle. The Agency is publishing instructions for magnetic media submission. Contact the Emergency Planning and Community Right-To-Know Information Hotline.

136. Who is responsible for errors if a consultant is contracted to help with compliance for section 313?

The owner or operator of the facility is responsible for complying with section 313 and for any errors in reporting. The certification statement which is signed by an official of the reporting facility states that the information is complete and accurate.

137. If the public contact item (Part I, Section 3.4) is left blank, can the facility later use a public contact to speak to the news media on behalf of the technical contact, who may not be publicly conversant?

If a public contact is not identified, EPA will enter the technical contact into this information element in the database. Thus this person would receive public inquiries. A facility may, of course, use any other person it chooses to deal with the public in response to such inquiries.

138. Can the technical contact be a <u>different</u> person for each chemical and each separate part of a facility?

Yes. It is allowable to have different technical contacts for different chemicals or different establishments within the facility provided that only one "technical contact" is listed on each form.

139. Can a facility submit one original copy each of Parts I (Facility Identification Information) and II (Off-Site Locations) with several copies of Part III (Chemical Specific Information) for different listed chemicals?

No. The final rule clearly requires that each completed submission contains all parts of Form R (including Part IV). Submission of multiple copies of Part III, with only one copy of Parts I and II, would be considered non-compliance.

140. The instructions state that photocopied versions of Part I may be submitted. Does that mean that the senior official at a facility certifying the validity of the forms only has to sign one submission?

No. The final rule states that each unique chemical submission must contain an original signature. The purpose of this requirement is to ensure that the certifying official has reviewed each chemical submission. A photocopied signature does not fulfill this purpose and would be considered non-compliance.

141. Can common or trade names other than those listed in the rule be used for submissions?

No. EPA has provided a list of standard chemical names and CAS numbers for all of the chemicals which must be reported under section 313. The rule requires that use of these standard names.

142. In some sections of Form R, facilities are asked to report "N/A" if that section does not apply to a submission. Are blank spaces left on the form the equivalent of "N/A"?

No. The rule requires "N/A" to be entered to inform the Agency that the submitter has not just overlooked a section of the form. Leaving blanks would be considered non-compliance with the rule.

143. Are facilities allowed to use the proposed form in their submissions?

No. The final Form R was published in the Federal Register on February 16, 1988. The information content of the form published with the final rule is different from that of the proposed form. Thus, submissions using the proposed form are unacceptable. For copies of the form and instructions, contact the Emergency Planning and Community Right-to-Know Hotline (See p. i).

144. How can a facility be assured that the Agency has received a submitted form?

To be acknowledged of receipt of submissions, facilities should send forms using the U.S. Post Office "Return Receipt Requested" mail service. The Agency will not respond to cover letters requesting acknowledgement.

XI. EPA'S SECTION 313 PROGRAM

145. What type of quality control check will EPA make on each form it receives?

EPA plans to incorporate edit checks in the database to identify missing, incomplete, incorrect and suspect data elements in the TRI forms.

146. How will questionable data be identified by EPA?

OTS is developing checks of completeness and, for some types of data, reasonableness of an entry. For example, zero air emissions of a volatile chemical would be flagged. OTS envisions contacting the facility for clarification of such "questionable" data.

147. Does the Agency plan to investigate non-reporters before "auditing" reports from complying facilities?

The Agency will focus enforcement efforts to identify non-reporters. At the same time, however, EPA is planning to issue notices of non-compliance in connection with forms that contain errors or omissions. A fixed period of time will be allowed for corrections before penalties are assessed. EPA also intends to investigate submissions with questionable technical entries. However, the purpose of such technical audits will not be purely as an enforcement action. A further benefit will be to identify where problems exist in calculating releases so that the Agency can improve its guidance and instruction documents.

148. Are specific audit provisions written into regulations? Will audit results be made public? Can released information be changed? What about resolving differences of opinion, (i.e., does the auditor have final judgement)?

Specific audit provisions are not written into regulations. The Agency, however, has the responsibility to assure that the data submitted is based on reasonable estimates, and audits may be conducted. Audit results will be utilized to identify where problems exist with calculating releases. In resolving difference of opinion we hope that final judgement will rely on consensus formed by the Agency auditor and company's technical staff.

149. When will the "fact sheets" for each of the 328 chemicals be available?

The Agency plans to finalize the majority of the fact sheets by the end of 1988. The N.J. fact sheets will be used directly and supplemented with additional environmental toxicity data where appropriate.

150. Will the public be able to review the chemical fact sheets before they are final and provide comments to EPA?

No. The State of New Jersey has conducted an extensive review of the literature to produce these factsheets and has had expert panels review them. EPA has not yet decided whether to develop separate health fact sheets on the section 313 chemicals to replace the New Jersey factsheets.

151. Will there be data on half life (i.e., decomposition rate) of chemicals in the air included in the fact sheets?

The fact sheets will contain some data on persistence of chemicals in the environment where available or applicable.

152. Will the public be able to browse through all of the reports filed, or will it have to request individual reports? Will some sort of log be kept noting users of the data?

The public will be able to access the computerized public data base by spring of 1989. During summer of 1988 copies of the TRI forms will be available through the states. Each state will have to decide how the public will access the copies and what records the state will keep as result of public inquires. Prior to the public data base availability, EPA headquarters can also provide for review of a reasonable number of these forms on an appointment basis.

153. How can copies of the technical guidance documents be obtained?

You can get copies of the technical guidance document by writing the Emergency Planning and Community-Right-To-Know Information Service.

154. What are the specific industries for technical guidance manuals?

These are guidance documents developed for a specific industry or industrial operation to help them determine reporting requirements and estimate releases. Industries covered are:

Electroplating Operations
Primary Lead, Zinc, and Cadmium Smelting
Presswood and Laminated Wood Products Manufacturing
Wood Preserving
Roller, Knife and Gravure Coatings Operations
Spray Application of Organic Coatings
Electrodeposition of Organic Coatings
Rubber Production and Compounding
Paper and Paperboard Production
Primary Aluminum Smelting
Primary Copper Smelting
Leather Tanning and Finishing Processes
Semiconductor Manufacture
Printing Operations
Monofilament Fiber Manufacture
Textile Dyeing
Formulating Aqueous Solutions

Form Approved OMB No.: 2070-0093
Approval Expires: 01/91

(Important: Type or print; read instructions before completing form.)

U.S. Environmental Protection Agency

EPA

TOXIC CHEMICAL RELEASE INVENTORY REPORTING FORM

EPA FORM **R**

Section 313, Title III of The Superfund Amendments and Reauthorization Act of 1986

PART I. FACILITY IDENTIFICATION INFORMATION

(This space for EPA use only.)

1.	1.1 Is this report contain trade secret information? ☐ Yes (Answer 1.2) ☐ No (Do not answer 1.2)	1.2 Is this a sanitized copy? ☐ Yes ☐ No	1.3 Reporting Year

2. CERTIFICATION (Read and sign after completing all sections.)

I hereby certify that I have reviewed the attached documents and that, to the best of my knowledge and belief, the submitted information is true and complete and that the amounts and values in this report are accurate based on reasonable estimates using data available to the preparers of this report.

Name and official title of owner/operator or senior management official

Signature | Date signed

3. FACILITY IDENTIFICATION

3.1	Facility or Establishment Name		3.2 This report contains information for: (check one) a. ☐ An entire covered facility. b. ☐ Part of a covered facility.
	Street Address		
	City	County	
	State	Zip Code	
3.3	Technical Contact		Telephone Number (include area code) ( ) -
3.4	Public Contact		Telephone Number (include area code) ( ) -
3.5	a. SIC Code	b.	c.
3.6	Latitude Deg. Min. Sec.	Longitude Deg. Min. Sec.	
3.7	Dun & Bradstreet Number(s) a.	b.	
3.8	EPA Identification Number (RCRA I.D. No.) a.	b.	
3.9	NPDES Permit Number(s) a.	b.	
3.10	Name of Receiving Stream(s) or Water Body(s) a.		
	b.		
	c.		
3.11	Underground Injection Well Code (UIC) Identification No.		

Where to send completed forms:

U.S. Environmental Protection Agency
P.O. Box 70266
Washington, DC 20024-0266
Attn: Toxic Chemical Release Inventory

PARENT COMPANY INFORMATION

4.1	Name of Parent Company
4.2	Parent Company's Dun & Bradstreet No.

(Important: Type or print; read instructions before completing form.)

(This space for EPA use only.)

EPA FORM R
PART II. OFF-SITE LOCATIONS TO WHICH TOXIC CHEMICALS ARE TRANSFERRED IN WASTES

1. PUBLICLY OWNED TREATMENT WORKS (POTW)

Facility Name

Street Address

City | County

State | Zip

2. OTHER OFF-SITE LOCATIONS - Number these locations sequentially on this and any additional page of this form you use.

☐ **Other off-site location**

EPA Identification Number (RCRA ID. No.)

Facility Name

Street Address

City | County

State | Zip

's location under control of reporting facility or parent company? ☐ Yes ☐ No

☐ **Other off-site location**

EPA Identification Number (RCRA ID. No.)

Facility Name

Street Address

City | County

State | Zip

Is location under control of reporting facility or parent company? ☐ Yes ☐ No

☐ **Other off-site location**

EPA Identification Number (RCRA ID. No.)

Facility Name

Street Address

City | County

State | Zip

s location under control of reporting facility or parent company? ☐ Yes ☐ No

☐ Check if additional pages of Part II are attached.

(Important: Type or print; read instructions before completing form.)

(This space for EPA use only.)

EPA FORM R
PART III. CHEMICAL SPECIFIC INFORMATION

1. CHEMICAL IDENTITY

1.1	☐ Trade Secret (Provide a generic name in 1.4 below. Attach substantiation form to this submission.)
1.2	CAS # ☐☐☐☐☐☐ - ☐☐ - ☐ (Use leading zeros if CAS number does not fill space provided.)
1.3	Chemical or Chemical Category Name
1.4	Generic Chemical Name (Complete only if 1.1 is checked.)

2. MIXTURE COMPONENT IDENTITY (Do not complete this section if you have completed Section 1.)

Generic Chemical Name Provided by Supplier (Limit the name to a maximum of 70 characters (e.g., numbers, letters, spaces, punctuation)).

3. ACTIVITIES AND USES OF THE CHEMICAL AT THE FACILITY (Check all that apply.)

3.1	Manufacture:	a. ☐ Produce	b. ☐ Import	c. ☐ For on-site use/processing
		d. ☐ For sale/ distribution	e. ☐ As a byproduct	f. ☐ As an impurity
3.2	Process:	a. ☐ As a reactant	b. ☐ As a formulation component	c. ☐ As an article component
		d. ☐ Repackaging only		
	Otherwise Used:	a. ☐ As a chemical processing aid	b. ☐ As a manufacturing aid	c. ☐ Ancillary or other use

4. MAXIMUM AMOUNT OF THE CHEMICAL ON SITE AT ANY TIME DURING THE CALENDAR YEAR

☐☐ (enter code)

5. RELEASES OF THE CHEMICAL TO THE ENVIRONMENT

You may report releases of less than 1,000 lbs. by checking ranges under A.1.		A. Total Release (lbs/yr) A.1 Reporting Ranges 0	1–499	500–999	A.2 Enter Estimate	B. Basis of Estimate (enter code)	C. % From Stormwater
5.1 Fugitive or non-point air emissions	5.1a					5.1b ☐	
5.2 Stack or point air emissions	5.2a					5.2b ☐	
5.3 Discharges to water (Enter letter code from Part I Section 3.10 for streams(s).) 5.3.1 ☐	5.3.1a					5.3.1b ☐	5.3.1c
5.3.2 ☐	5.3.2a					5.3.2b ☐	5.3.2c
5.3.3 ☐	5.3.3a					5.3.3b ☐	5.3.3c
5.4 Underground injection	5.4a					5.4b ☐	
5.5 Releases to land 5.5.1 ☐☐☐ (enter code)	5.5.1a					5.5.1b ☐	
5.5.2 ☐☐☐ (enter code)	5.5.2a					5.5.2b ☐	
5.5.3 ☐☐☐ (enter code)	5.5.3a					5.5.3b ☐	

☐ (Check if additional information is provided on Part IV-Supplemental Information.)

6. TRANSFERS OF THE CHEMICAL IN WASTE TO OFF-SITE LOCATIONS

You may report transfers of less than 1,000 lbs. by checking ranges under A.1.	A. Total Transfers (lbs/yr) A.1 Reporting Ranges 0	1-499	500-999	A.2 Enter Estimate	B. Basis of Estimate (enter code)	C. Type of Treatment/ Disposal (enter code)
6.1 Discharge to POTW					6.1b	
6.2 Other off-site location (Enter block number from Part II, Section 2.)					6.2b	6.2c
6.3 Other off-site location (Enter block number from Part II, Section 2.)					6.3b	6.3c
6.4 Other off-site location (Enter block number from Part II, Section 2.)					6.4b	6.4c

(Check if additional information is provided on Part IV-Supplemental Information)

7. WASTE TREATMENT METHODS AND EFFICIENCY

A. General Wastestream (enter code)	B. Treatment Method (enter code)	C. Range of Influent Concentration (enter code)	D. Sequential Treatment? (check if applicable)	E. Treatment Efficiency Estimate	F. Based on Operating Data? Yes	No
7.1a	7.1b	7.1c	7.1d	7.1e %	7.1f	
7.2a	7.2b	7.2c	7.2d	7.2e %	7.2f	
7.3a	7.3b	7.3c	7.3d	7.3e %	7.3f	
7.4a	7.4b	7.4c	7.4d	7.4e %	7.4f	
a	7.5b	7.5c	7.5d	7.5e %	7.5f	
7.6a	7.6b	7.6c	7.6d	7.6e %	7.6f	
7.7a	7.7b	7.7c	7.7d	7.7e %	7.7f	
7.8a	7.8b	7.8c	7.8d	7.8e %	7.8f	
7.9a	7.9b	7.9c	7.9d	7.9e %	7.9f	
7.10a	7.10b	7.10c	7.10d	7.10e %	7.10f	
7.11a	7.11b	7.11c	7.11d	7.11e %	7.11f	
7.12a	7.12b	7.12c	7.12d	7.12e %	7.12f	
7.13a	7.13b	7.13c	7.13d	7.13e %	7.13f	
7.14a	7.14b	7.14c	7.14d	7.14e %	7.14f	

(Check if additional information is provided on Part IV-Supplemental Information.)

8. OPTIONAL INFORMATION ON WASTE MINIMIZATION

(Indicate actions taken to reduce the amount of the chemical being released from the facility. See the instructions for coded items and an explanation of what information to include.)

A. Type of modification (enter code)	B. Quantity of the chemical in the wastestream prior to treatment/disposal: Current reporting year (lbs/yr)	Prior year (lbs/yr)	Or percent change	C. Index	D. Reason for action (enter code)
			%		

(This space for EPA use only.)

EPA FORM R
PART IV. SUPPLEMENTAL INFORMATION

Use this section if you need additional space for answers to questions in Parts I and III. Number or letter this information sequentially from prior sections (e.g., D.E, F, or 5.54, 5.55).

ADDITIONAL INFORMATION ON FACILITY IDENTIFICATION (Part I - Section 3)

3.5	SIC Code		
3.7	Dun & Bradstreet Number(s)		
3.8	EPA Identification Number(s) RCRA I.D. No.)		
3.9	NPDES Permit Number(s)		
3.10	Name of Receiving Stream(s) or Water Body(s)		

ADDITIONAL INFORMATION ON RELEASES TO LAND (Part III - Section 5.5)

Releases to Land	A. Total Release (lbs/yr)	A.1 Reporting Ranges 0	1-499	500-999	A.2 Enter Estimate	B. Basis of Estimate (enter code)
5.5___ (enter code)	5.5___a					5.5___b
___ (enter code)	5.5___a					5.5___b
5.5___ (enter code)	5.5___a					5.5___b

ADDITIONAL INFORMATION ON OFF-SITE TRANSFER (Part III - Section 6)

	A. Total Transfers (lbs/yr)	A.1 Reporting Ranges 0	1-499	500-999	A.2 Enter Estimate	B. Basis of Estimate (enter code)	C. Type of Treatment/ Disposal (enter code)
6.___ Discharge to POTW	6.___a					6.___b	
6.___ Other off-site location (Enter block number from Part II, Section 2.)	6.___a					6.___b	6.___c.
6.___ Other off-site location (Enter block number from Part II, Section 2.)	6.___a					6.___b	6.___c.

ADDITIONAL INFORMATION ON WASTE TREATMENT (Part III - Section 7)

A. General Wastestream (enter code)	B. Treatment Method (enter code)	C. Range of Influent Concentration (enter code)	D. Sequential Treatment? (check if applicable)	E. Treatment Efficiency Estimate	F. Based on Operating Data? Yes	No
7.___a	7.___b	7.___c	7.___d	7.___e %	7.___f	
7.___a	7.___b	7.___c	7.___d	7.___e %	7.___f	
___a	7.___b	7.___c	7.___d	7.___e %	7.___f	
7.___a	7.___b	7.___c	7.___d	7.___e %	7.___f	
7.___a	7.___b	7.___c	7.___d	7.___e %	7.___f	

ADDITIONAL MATERIALS AVAILABLE ON SECTION 313:

※ Section 313 rule (FR reprint)

A reprint of the final section 313 rule (including Form R and instructions) as it appeared in the Federal Register (FR).

※ Trade secrets rule and form (Section 322 of Title III)

A reprint of the current rule to implement the trade secrets provision of the Emergency Planning and Community Right-to-Know Act (Section 322) and a copy of the trade secret substantiation form.

※ Estimating Releases and Waste Treatment Efficiencies for the Toxic Chemical Release Inventory Form

Suggested methods on the development of release estimates and waste treatment efficiency calculations required on Form R.

※ List of Lists (January 1988)

A consolidated list of specific chemicals covered by the Emergency Planning and Community Right-to-Know Act. The list contains the chemical name, CAS Registry Number, and provides specific information on what reporting requirement(s) the chemical is subject to.

※ Synonyms Document

This document contains common synonyms for the specifically listed section 313 chemicals (synonyms for chemicals in covered categories are not included).

※ Questions and Answer Document

Answers to frequently asked questions about the section 313 rule, organised by subject area.

※ TRI Magneti Iedia Submission Guidance Package

Reports under section 313 may be submitted by computer tape or floppy disk. This guidance package gives the format requirements and other details for such submissions.

※ Industry Specific Technical Guidance Documents

The Agency has developed a group of smaller, individual guidance documents that target activities in industries who primarily process or use the listed toxic chemicals.

For copies of these materials, send in the request form included in the booklet or write to:

Emergency Planning and Community Right-to-Know Information Hotline
U.S. Environmental Protection Agency
WH - 562 A
401 M Street, S.W.
Washington, D.C. 20460

Please send information on: *(Please indicate the quantities you are requesting.)*

___ Section 313 Rule (FR Document)

___ Additional copies of Form R

___ Section 322 Rule and Form (Trade Secrets)

___ Estimating Releases

___ Title III List of Lists

___ Synonyms Document

___ TRI Magnetic Submission Media Guidance Package

_____
CONTACT

_____
NAME

_____
STREET

_____
STATE ZIP CODE

Industry Specific Technical Guidance

___ Electroplating Operations

___ Primary Lead, Zinc, and Cadmium Smelting

___ Presswood and Laminated Wood Products Manufacturing

___ Wood Preserving

___ Roller, Knife, and Gravure Coating Operations

___ Spray Application of Organic Coatings

___ Electrodeposition of Organic Coatings

___ Rubber Production and Compounding

___ Paper and Paperboard Production

___ Primary Aluminum Smelting

___ Primary Copper Smelting

___ Leather Tanning and Finishing Processes

___ Semiconductor Manufacture

___ Printing Operations

___ Monofilament and Textile Fiber Manufacture

___ Textile Dyeing and Finishing

___ Formulating Aqueous Solutions

Staple Here

Fold

FACILITY NAME

STREET

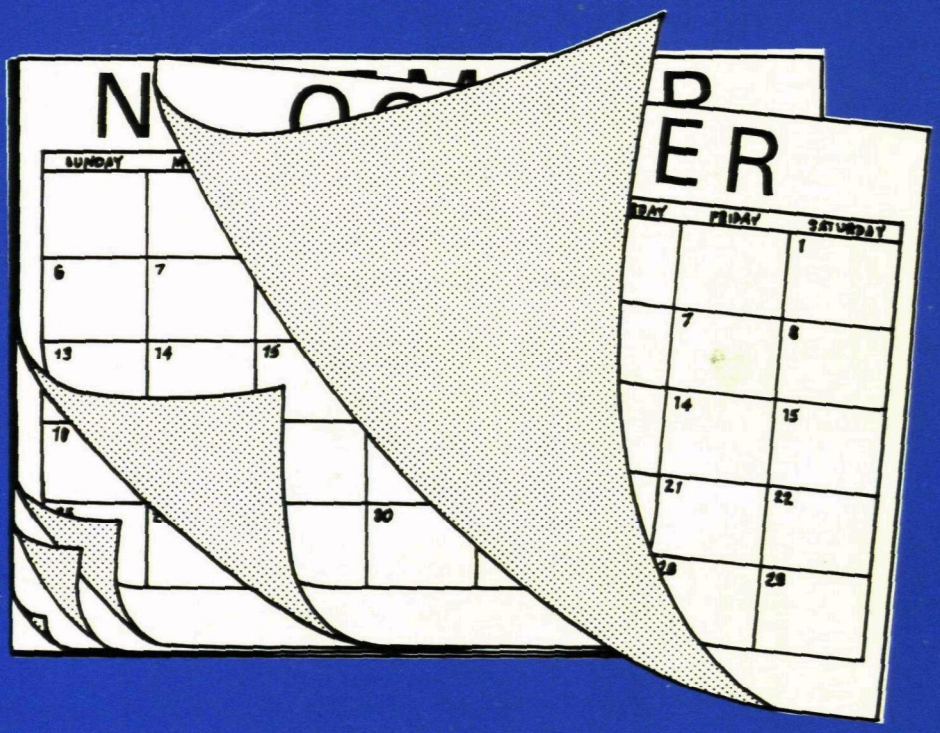
STATE ZIP CODE

Place Stamp Here

Emergency Planning and Community
Right-to-Know Information Hotline
U.S. Environmental Protection Agency
WH-562 A
401 M Street, S.W.
Washington, D. C. 20460

IT'S NOT OVER IN OCTOBER!

A Guide for Local Emergency Planning Committees



Implementing the Emergency Planning and Community Right-To-Know Act (SARA Title III)

The purpose of this booklet is to offer suggestions to Local Emergency Planning Committees (LEPCs) to help them implement Title III; it is not a comprehensive guide to running an LEPC. This booklet draws on the experience of those LEPCs that have developed comprehensive plans as well as on the experience of the U.S. Environmental Protection Agency (EPA), the Federal Emergency Management Agency (FEMA), the states, the Chemical Manufacturers Association (CMA), other industry and trade associations, and public interest groups. It is intended to help LEPCs establish and maintain their momentum in meeting the Title III mandate and to address some possible implementation problems.

About This Booklet

The following organizations developed this booklet:

American Red Cross
Chemical Manufacturers Association
Environmental Policy Institute
Federal Emergency Management Agency
International City Management Assocation
International Association of Fire Chiefs
National Association of Counties
National Coordinating Council on Emergency Management
National League of Cities
National Safety Council
National Wildlife Federation
U.S. Chamber of Commerce
U.S. Environmental Protection Agency

The following organizations supported this booklet:

Adhesive and Sealant Council, Inc.
Advocacy Institute
American Coke and Coal Chemicals Institute
American Library Association
Association of New Jersey Environmental Commissions
The Chlorine Institute, Inc.
Citizen Action
Citizens Commission on Bhopal
Cleveland Council on Hazardous Materials
The Cosmetic, Toiletry, and Fragrance Association, Inc.
Dry Color Manufacturers' Association
Environmental Action Foundation
Environmental Defense Fund
The Formaldehyde Institute, Inc.
Michigan State Fire Fighters' Union
National Association of Chemical Distributors
National Association of Printing Ink Manufacturers
National Association of Solvent Recyclers
National Association of Towns and Townships
National Solid Waste Management Association
Ohio Public Interest Campaign
OMB Watch
The Rubber Manufacturers Association
Society of American Wood Preservers, Inc.
Synthetic Organic Chemical Manufacturers Association
U.S. Public Interest Research Group
Workplace Health Fund

The review and comments from individuals associated with LEPCs and SERCs are appreciated.

About Title III

In 1986 Congress passed the **Emergency Planning and Community Right to Know Act** as **Title III** of the Superfund Amendments and Reauthorization Act (SARA). Congress enacted this law to help local communities protect public health and safety and the environment from chemical hazards.

To implement Title III, Congress required each state to appoint a State Emergency Response Commission (SERC). The SERCs, in turn, were required to divide their states into emergency planning districts and name a Local Emergency Planning Committee (LEPC) for each district. The expertise (e.g., fire fighting, health, local officials, community groups, media, facility representatives, emergency management) of the required LEPC members ensures that all the necessary elements of the planning process are represented.

The LEPC is the focal point for Title III activities in the community. The performance of the LEPC is critical to ensuring that the public benefits from the opportunities and information provided for under the law.

The responsibilities of the LEPCs are stated in the law: each LEPC must develop an emergency plan, collect and store information provided by facilities, and make that information available to the public. Other LEPC activities can be anticipated and are important to carrying out the spirit of the law. For example, LEPCs will provide a continuing forum in which the local community and facilities can discuss issues related to hazardous substances.

Two of the main goals of Title III are to:

- *Provide a basis for each community to develop a chemical emergency preparedness and planning program that suits its individual needs, and*
- *Provide the public with the identity, quantity, location, and properties of hazardous substances in the community as well as data on annual releases of certain chemicals into the environment.*

"It's not over in October."

Title III sets October 17, 1988, as the deadline for each LEPC to complete a comprehensive emergency plan. However, October 17 is not the end of the planning process; it is the first step. Each plan must be revised and updated annually. The SERCs must review and make recommendations for any revisions. Other LEPC activities such as managing the information collected from facilities and making it available to the public, coordinating response activities with other planning districts, conducting exercises based on the plan, training, and maintaining the dialogue with the community and industry to improve the safety of facilities and preparedness for accidents are ongoing. In short, as far as LEPCs and the law are concerned, ***it's not over in October.***

Getting Off to the Right Start: Outreach Makes It Work

Title III introduced a new relationship among governments at all levels, the private sector, public organizations, and the general public. Each group has a different, but equally important role in making emergency planning and community right-to-know work. The goal is national chemical safety and the value to a community can be very real.

The need for outreach -- establishing and maintaining two-way communication -- is a responsibility everyone shares. The need for outreach in this program is unprecedented because the audience is so diverse. For example, states and localities need support to implement the law; industry needs to understand how and when to comply; the public needs to be aware of the kinds of information available and what it might mean to them. Everyone has a role and the LEPC is critical to the success of the program.

A Role for Everyone

- The **federal** role is to provide national leadership, guidance, technical assistance, access to data about chemical releases, and training through the states.
- The **states**, through the SERCs, provide leadership to ensure that an emergency planning and implementation structure is developed and to provide training and technical assistance to communities.
- The **local** role is to work with LEPCs in actually carrying out emergency planning, community right-to-know, and response functions.
- **Industry** complies with Title III reporting requirements and participates actively with LEPCs and SERCs to ensure that Title III works.
- The **public** can get involved by increasing their awareness and understanding of chemical risks and supporting actions to increase public safety and protection of the environment.

The LEPC Is the Key

Although EPA, FEMA, other federal agencies, state governments, and industry are cooperating with local communities to make Title III work, the ultimate responsibility for the success of the program rests with you at the local level. Because you are most familiar with your community, you are in the best position to develop plans to prevent emergency situations, to ensure appropriate responses if they occur, and to become the forum in your community for discussions and decisions on hazardous substances.

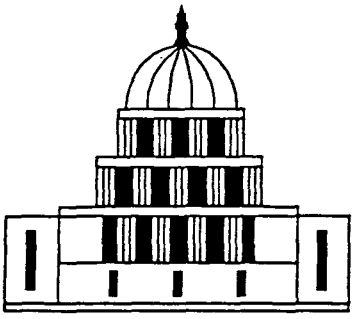
"Because you are most familiar with your community, you are in the best position to develop plans to prevent emergency situations."

The SERCs appoint LEPCs and have the responsibility for coordinating and supervising LEPC activities, but it is up to you at the local level to make the LEPC work. The mission of your LEPC is:

- To develop a comprehensive emergency plan for your community by October 17, 1988, and keep the plan up-to-date. To be effective, planning must be an ongoing activity.
- To receive information about accidental chemical releases.
- To collect, manage, and provide public access to information on hazardous chemicals in your area.
- To educate the public about risks from accidental and routine releases of chemicals and work with facilities to minimize the risks.

The first three responsibilities are mandated by Title III; the last is not included in the letter of the law, but rather in its spirit. The right-to-know provisions of the law will be of limited value to the community unless the public is given the means to understand the information and its implications. The ability of your LEPC to improve the safety of your community will be far greater if you have an informed and active citizenry to support your activities.

SERCs designated emergency planning districts for which LEPCs have been named. Thirty-five states used existing local government subdivisions (counties, municipalities, or a combination of the two). Ten states and one territory named existing regional response or planning districts. Five states designated the entire state as the planning district. Overall, an estimated 4,000 districts have been designated across the country. Some states have allowed local jurisdictions to consolidate into multi-jurisdictional districts to form their LEPC.



"The SERC should serve as your link to state agencies."

All states as well as the District of Columbia, Puerto Rico, and American territories have established SERCs. Some states, such as Nebraska and Mississippi, have named a single state agency to act as the SERC. Others, such as Montana, have drawn members from a number of state agencies. Many states have included local officials, industry representatives, and the public as well as state officials; for example, the Ohio SERC has 14 representatives of state agencies and 17 members drawn from industry, public interest groups, and local officials.

Work with Your SERC

You should look upon your **SERC as a resource** that can provide support and might save you time and money. The law requires SERCs to provide coordination and oversight of LEPCs; the SERC should serve as your link to state environmental and health agencies as well as to state law enforcement and emergency management offices. These agencies may be able to provide technical assistance and guidance. The SERC is also your link to the Regional Response Team (RRT), which is available to review plans from state priority areas and provide information on federal assistance during an emergency.

Your SERC may be able to provide you with some of the following kinds of assistance:

- Planning assistance, plan testing, and training;
- Information on sources of funding;
- A storage/retrieval location for computerized information, as well as other information management assistance;
- Contact with statewide and possibly national industry groups that can help you with information and expertise;
- Workshops that focus on Title III issues;
- Data on chemicals being transported on interstate and state highways that pass through your planning district; and
- Literature that can be used to inform the public about Title III.

Because the SERCs will be reviewing all LEPC plans, they will have information and ideas they can pass on to you. **Working with your SERC at an early stage will be to your benefit.**

Knowing the Law

Title III is a complex law that places a number of requirements on you, your SERC, facilities, and EPA. To carry out your role, it is important that you understand the law.

One part of Title III that has confused some LEPCs involves the various information reporting requirements. You will receive different kinds of information from facilities about chemicals on several lists. This information must be made available to the public through the LEPCs and SERCs. Facilities may also give you information that they are required to submit only to the SERCs and EPA. The following is a summary of the Title III reporting requirements.

- Emergency Planning (section 303). Facilities that have one or more of 366 extremely hazardous substances in quantities above limits set by EPA (threshold planning quantities) must notify you that these substances are present. Substances are included on the list of extremely hazardous substances because they are acutely toxic, that is, they can cause death or injury with a brief exposure. In addition to facilities that handle these chemicals, Title III requires you to identify any other facility that could pose a risk or be at risk (e.g., hospitals or facilities that handle explosives or flammable substances). A comprehensive plan will include all facilities and transportation routes that you judge to pose a threat even if they do not handle extremely hazardous substances.

- Emergency Notification (section 304). You and the SERC will receive emergency information (e.g., identity of the substance released, the quantity released, health effects) about accidental releases of chemicals on the extremely hazardous substances list, as well as substances covered by Superfund, the hazardous substance cleanup program. As soon as possible after an accident, the facility must submit a written follow-up notice with additional information.

A complete copy of the law is available in the United States Code (42 USC 11001 et seq.) and can be obtained from the federal and state governments, most attorney's offices, many public libraries, and all law libraries.

EPA, the states, industry, and public interest groups have published a number of fact sheets and guides to Title III requirements. Videotapes and slide shows are also available. See "Information Resources" at the end of this booklet for a list of some of the available brochures and information on how to obtain them.

If you need ideas on how to organize your LEPC, what to include in your plan, and how to arrange your plan, consult the Hazardous Materials Emergency Planning Guide (NRT-1), published by the National Response Team in March 1987. NRT-1 contains a sample plan outline as well as the key elements that should be included in your plan. (See "Information Resources" at the end of this booklet for information on obtaining NRT-1.)

Tennessee is making data submitted under Title III easier for its LEPCs to use. The Tennessee Emergency Management Agency (TEMA) has developed its own format for the MSDS information submitted under Sections 311 and 312. The reorganized data is divided into 3 general areas:

- *Baseline data (facility and contact, local fire department, TEMA region);*
- *Compliance data; and*
- *Chemical lists.*

The reorganized data is provided to the LEPCs. TEMA has also developed a tracking system for data submitted under Sections 302, 304, and 313. To help the LEPCs understand the data, how it can be obtained, and how it can be used for planning, TEMA has held workshops for LEPCs.

- Hazardous Chemical Reporting (sections 311-12). Each LEPC, SERC, and local fire department will receive information on hazardous chemicals for which the Occupational Safety and Health Administration (OSHA) requires industry to have Material Safety Data Sheets (MSDSs). MSDSs include the basic characteristics of the chemical involved; this information can be used for emergency planning, response, and other public purposes. Under section 311 facilities must submit **either** the MSDS for each chemical or a list of MSDS chemicals. Under section 312 each facility must submit an inventory form that includes general information on the quantity and location of OSHA-regulated hazardous chemicals it handles and stores.

- Toxic Release Inventory (section 313). EPA headquarters and the states will receive information about total annual releases to air, land, and water of over 300 toxic chemicals and 20 chemical categories listed under section 313 of Title III. EPA is required to make this information available to the public through a data base. In general, the chemicals on the section 313 list are those that are toxic, are suspected carcinogens, or are capable of having a significant adverse effect on the environment. Although industry is not required to submit the release information to your LEPC, some companies may provide it to you directly. You should request it from the state or facilities or access the EPA data base. This information will assist you in developing a full picture of chemical hazards for your community and for individual facilities. The public may request it and you can anticipate questions on this information.

In summary, your plan must include facilities that have extremely hazardous substances. You will receive information about other chemicals. Together these four reporting requirements provide a broad picture of hazardous chemicals present in your community. The information you receive will help your planning and make it easier for you to make decisions about the potential hazards posed by these chemicals in your community.

Get Everyone Involved

Congress required that LEPC meetings and decisions involve public participation and that you provide the public with access to the information you receive. The right-to-know provisions of Title III are meant to give the LEPC **and** the public information about chemical hazards and to involve the entire community in a process of protecting public safety and health and the environment.

LEPCs are to be broad-based and include, at a minimum, representatives of elected officials, law enforcement, emergency management, fire service, emergency medical services, health, local environmental and transportation groups, hospitals, the media, community groups, and owners and operators of the facilities covered under Title III. The average LEPC has about 15 members.

Regardless of the number of members, you must be sure that the LEPC membership **represents the entire community,** particularly those people who will have to make the plan work in an emergency. Your plan is more likely to be carried out successfully if the people who have to use it have a voice in creating it. In addition, wide-ranging community involvement will increase the credibility of the plan and improve community cooperation in an emergency.

Leadership Is Critical

The LEPC chairperson can be any LEPC member. Some LEPCs have chosen political leaders; others have appointed representatives from public safety departments, emergency management agencies, environmental agencies or groups, industry, or civic organizations. Important factors to consider are the leader's availability, credibility, management and communications skills, commitment to the process, and the degree of respect the person has from other members and the community.

Because LEPC members have diverse backgrounds and perspectives, conflicts could arise. Members should see their role as providing their particular expertise, rather than representing a specific organization. For example, the media representative does not represent a newspaper or broadcast station looking for a story, but rather is there to ensure that communications issues are addressed adequately.

"The LEPC membership represents the entire community."

The Baytown, Texas, LEPC created joint industry/non-industry co-chairs for the LEPC as a whole and for individual subcommittees. The LEPC will include representatives from the following:

Petrochemical industry
Baytown Health Department
Houston Emergency Management
Fire Department
Police Department
American Red Cross
City Safety Coordinator
City Public Works / Engineering
Office of the state senator
Baytown Emergency Management
Baytown City Manager
Baytown newspaper
Local radio station
Medical community
School district
Women's Club
Chamber of Commerce
Baytown Emergency Services
Environmental groups
Private citizens

"Subcommittees allow members to specialize and help move the process forward."

The Racine, Wisconsin, LEPC has established 7 standing subcommittees:

Medical and Community Health
Fire Service
Public Information and Media Relations
Law Enforcement
Facilities
Liaison (with SERC, EPA)
Border (for cross-county planning)

Appoint Subcommittees

Large LEPCs have found that dividing the work among **subcommittees** can facilitate planning and data management. Subcommittees allow members to specialize and help the process move forward more quickly because you can work on several areas at one time. You might appoint subcommittees for the following tasks:

- Gathering and reviewing existing community and facility plans;
- Making a list of existing response equipment available in the community;
- Identifying financial resources;
- Coordinating with neighboring LEPCs and the SERC;
- Conducting a hazards analysis;
- Managing information (e.g., MSDSs); and
- Replying to citizens' requests for information.

Encourage Compliance

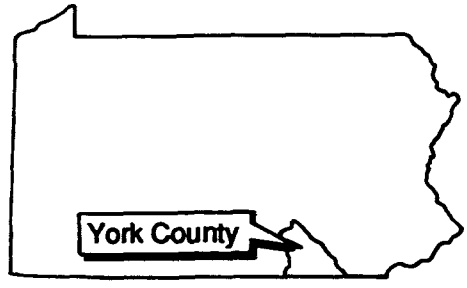
Businesses that manufacture, process, or handle any hazardous or toxic chemicals in quantities above EPA's limits must comply with Title III. However, small companies that use hazardous substances and perhaps even larger businesses that do not usually think of themselves as involved with chemicals may need your help. Because some small businesses may not be aware of Title III, let alone that they are subject to its provisions, one of your first jobs will be outreach -- **getting the message to small businesses, as well as large companies, to encourage their compliance.**

Many business owners belong to organizations such as the Chamber of Commerce, Rotary, and local manufacturers' associations. Speaking to meetings of these groups and using their newsletters can help get the message out inexpensively. If you, your SERC, local industries, or trade associations have printed brochures about Title III, you may be able to include the brochures in a newsletter mailing. Some LEPCs have sent notices to industry in utility bills. You may also want to have your SERC contact statewide trade associations and use their newsletters, meetings, and trade shows to reach particular groups of small businesses that might not be aware of Title III.

Local governments may also be covered under Title III. For example, municipal water and sewage treatment plants may use chemicals that are listed as extremely hazardous substances. Transit authorities may also handle extremely hazardous substances in sufficient quantity to be covered by Title III. You may be able to use the appropriate representatives on your LEPC to ensure that such local agencies are aware of the requirements.

"Small companies that use hazardous substances may need your help."

Reaching the back shop electroplating plant with its 5,000-gallon dip tank of sulfuric acid was the concern of Bob Straw, chairman of the York County, Pennsylvania, LEPC. Straw included a member of the county manufacturers association on the LEPC to serve as a link to these small businesses. He also appointed the county agricultural agent to help the committee contact farmers. Through these people, Straw was able to put notices about Title III requirements in newsletters from the manufacturers' association and the local Chamber of Commerce.



Title III (section 303) requires that a plan include at least the following:

1. *Facilities that have extremely hazardous substances (EHSs), routes used to transport EHSs, and other facilities contributing to or subject to risks;*
2. *Methods and procedures to be followed by facilities and responders during an incident;*
3. *Designation of community and facility emergency coordinators;*
4. *Procedures for effectively notifying the community of a release;*
5. *Methods for determining the occurrence of a release and identifying areas likely to be affected;*
6. *Emergency equipment and facilities in the community and at covered facilities;*
7. *Evacuation plans;*
8. *Training programs; and*
9. *Methods and schedules for testing the emergency plan.*

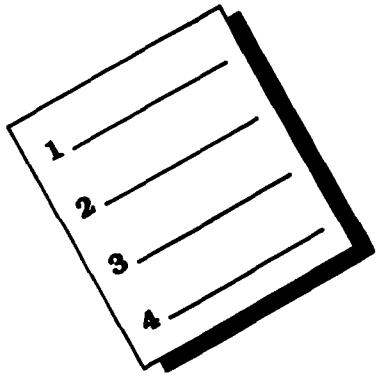
In addition, plans should clearly identify a chain of command during response actions and provide for effective communications among those who respond. See NRT-1 for a detailed discussion of elements to be included in an emergency plan.

Draw on Existing Plans

Existing plans developed specifically for your area may include information about issues, such as transportation routes, that you will need to consider. You can reduce your planning load by "**piggybacking**" on these plans; that is, you can use the information and ideas in existing plans as a basis for developing elements of your plan. Before using information from other plans, however, be sure it is up-to-date and relevant to your plan.

- If your area has an "all-hazard emergency operations plan" funded by FEMA, or other state or local plans, you may be able to integrate your Title III plan into the overall plan as an appendix (see NRT-1).
- If your area is near a nuclear power plant, check existing plans for traffic control, evacuation, or sheltering provisions; many such provisions may be applicable to planning for chemical emergencies.
- If hospitals in the area already have mass casualty plans, you can probably incorporate portions of these.
- If your fire departments have mutual aid agreements with other jurisdictions, you will probably want to integrate these into your Title III plan.
- If local facilities have plans developed under the Chemical Manufacturers Association's Community Awareness and Emergency Response program (CAER), you may be able to incorporate these.

Developing an emergency plan is time-consuming. Some possible short-cuts, such as using a "model plan," are not only contrary to the intent of Title III planning but more importantly will reduce effective local preparedness in the long run. "Model plans" have generalized language appropriate for any planning district, with blank spaces in which a LEPC can insert specific local information. Using a model plan does not encourage the active participation of all LEPC members in the planning process and does not recognize unique local issues.



Set Priorities

Title III sets October 17, 1988, as the deadline for each LEPC to complete a plan. While you must have a first plan by this date, you may not have a comprehensive plan completed by the deadline. As you work toward the October 17 deadline, you will need to **set priorities**.

To determine which facilities you should plan for first, do a hazards analysis in order to identify those that pose the greatest risk. These can be facilities that handle large quantities of extremely hazardous substances, facilities that have had serious releases in the past, or facilities that are close to highly populated areas. Then focus your planning efforts on the high priority hazards.

Technical Guidance for Hazards Analysis - Emergency Planning for Extremely Hazardous Substances (prepared by EPA, FEMA, and the U.S. Department of Transportation (DOT)) provides technical assistance to LEPCs to assess the hazards related to potential airborne releases. (See "Information Resources" at the end of this booklet for information on how to obtain this and other documents mentioned.)

You can follow the guidance to decide which hazards pose the greatest risk and develop plans for high priority hazards before the October deadline. You should then expand the plan, where needed, to cover the lower priority hazards in your area. The exercises or simulations you run to test your community's ability to respond to an emergency and your annual plan reviews will provide the basis for revising the plan and for developing standard operating procedures for responders.

"Develop plans for high priority hazards before the October deadline."

A hazards analysis is essential to developing a plan. As used in NRT-1 and in the Technical Guidance the term "hazards analysis" includes three steps:

Hazards Identification: *determining the identity, location, and quantity of hazardous chemicals, and the hazards they pose.*

Vulnerability Analysis: *determining the areas, populations, and facilities that may be vulnerable to harm if a release occurs.*

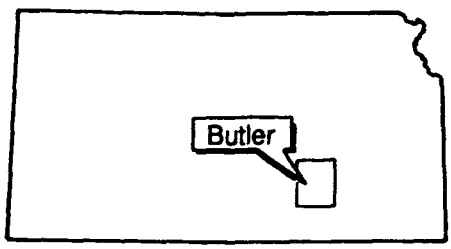
Risk Analysis: *determining the likelihood of a release and the severity of the consequences.*

A community hazards analysis should not be confused with facility risk assessments or hazard evaluations, both of which involve formal techniques requiring technical experts.

"Some of your best sources of help are the organizations in your community that deal with emergencies."

In Pampa, Texas, the fire department is expanding an existing program in which every business in the city is inspected annually for fire hazards. During the inspections, a hazardous materials response team member surveys the facility to determine reportable chemicals, informs the owner or operator about Title III, and assists with reporting procedures. This not only helps planning, but also enhances the department's relations with the public.

The Butler, Kansas, LEPC found help in an unlikely place: the state prison honor camp. A well-educated inmate was working as a file clerk in the Health Department. The LEPC got him interested in Title III and he directed the county's hazardous materials survey.



Make the Best Use of Available Resources

Because LEPC members are likely to have full-time jobs, you will need to be creative in your use of community resources to help carry out the LEPC's functions. Many LEPC members will be able to call upon their organizations' staff for some support functions. Community groups, volunteer organizations, environmental and public interest groups, and industry may be able to provide administrative and secretarial support. Technical support may be available from science and engineering faculties at local colleges or high schools, from industry, or from retired scientists and engineers.

Some of your best sources of help for planning and outreach are the organizations in your community that deal with emergencies. For example, fire departments can help analyze hazards and assess potential risks; police departments may have information about possible evacuation routes; the local emergency management agency can provide information on existing emergency procedures.

LEPC members represent a wide range of community agencies and organizations. **Maximize your capabilities by using the LEPC members** as contact points to identify people within the community who can provide you with specific help.

Talk with Neighboring Communities

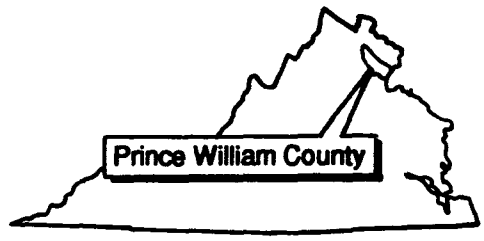
Consult with your neighboring LEPCs, especially if you have common risks and concerns. In an emergency, you may have to call on them for help or they may call you. In many cases, plans must include several communities to be effective. Consider the need to:

- Identify whom to call in other planning districts if you need help in an emergency;
- Ask them how they are funding their activities;
- Identify available response equipment and personnel;
- Negotiate procedures for mutual assistance for emergencies that cross boundary lines;
- Coordinate your hazards analyses;
- Coordinate your review of transportation routes; and
- Investigate sharing computers or other resources.

Each LEPC should consider its neighboring LEPCs as partners and resources. They share your problems; working with them may help you find common solutions.

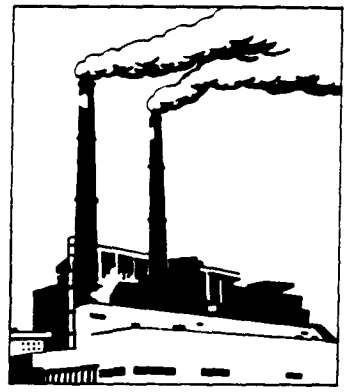
"Consider your neighboring LEPCs as partners and resources."

When the hazards analysis subcommittee of the Prince William County, Virginia, LEPC needed information on transportation routes, one subcommittee member suggested that neighboring LEPCs might have information because the types and quantities of hazardous materials transported on the interstate highway through Prince William County would be roughly the same on other segments of the highway. After he began asking other planners in the area for information on the availability of transportation data bases for the highway, it was discovered that the State of Virginia had such a data base.



The Chemical Transportation Emergency Center (CHEMTREC), operated by CMA, provides information and assistance to first responders at the scene of a chemical release. CHEMTREC contacts the shipper or producer of the material for more detailed information, including on-scene assistance when feasible. CHEMTREC provides a digital transmission of the chemical report, which includes data on the hazards, protective actions needed, mitigation techniques, and first aid. For emergencies involving chlorine, a call to CHEMTREC will activate the mutual aid program operated by the Chlorine Institute, the Chlorine Emergency Plan.

The initial process of data collection creates a dialogue between the LEPC and chemical facilities that may lead to prompt safety results. The Washington, DC, LEPC has met with an official of each industry that uses extremely hazardous substances within the city. Discussions led to immediate commitment by one industry to reduce the amount of ammonia on site. The city's sewage treatment plant will reduce its storage of chlorine by 60 percent.



Industry's Role

Title III requires each facility owner or operator with extremely hazardous substances to promptly provide you with any information you need to develop and implement the emergency plan. Title III also requires these facilities to designate a facility emergency coordinator. Experience has shown that many facility emergency coordinators will be eager to cooperate with you. They can provide:

- Technical experts;
- Community awareness programs;
- Training and safe handling instructions;
- Access to non-emergency chemical information through the Chemical Referral Center (see "Information Resources");
- Computer assistance; and
- Information about transportation routes.

Facility hazard information, safety audits, and emergency plans are a good starting point for information-gathering and planning.

The Chemical Manufacturers' Association (CMA), a trade association for chemical companies, developed the Community Awareness and Emergency Response (CAER) program to encourage chemical plant managers to take the initiative in opening a dialogue and cooperating with local communities to develop integrated hazardous materials response plans. Even if you have no CAER facilities in your distrct, CAER resources (e.g., "CAER Program Handbook") can be useful to LEPCs. See "Information Resources" at the end of this booklet for information on obtaining CMA publications.

Managing Information

Title III requires local facilities to give you information on a variety of substances. You are probably already facing the problem of how to cope with all this material. As you develop strategies to deal with the material, keep in mind that:

- You must have procedures for making the material available to the public;
- You are required to designate an information coordinator; and
- You must be able to access the information quickly in an emergency.

LEPCs are using a number of approaches to organize the Title III materials. Some LEPCs are able to manage the data manually using the LEPC members or staff. Other LEPCs manage the data using their own computers or those of other agencies with systems and information management techniques already in place.

If your LEPC wants to use a computer to handle the information but does not have the funds to buy one, you may be able to enlist the help of your local fire departments, local governments, state agencies, or local businesses. They may have computers, software, and staff who can help organize the data. In the case of fire departments, or other government agencies, they may already have data bases that can be expanded to include your information.

One method of controlling the amount of data you have to handle is to encourage facilities fulfilling MSDS requirements to supply a list of the chemicals for which MSDSs are required, rather than to supply the MSDSs themselves. You can then request MSDSs on those chemicals that are of particular concern. If you need more information on certain chemicals, you can draw on a number of data bases maintained by federal agencies (see "Information Resources") and on CMA's Chemical Referral Center (1-800-262-8200), which provides access to chemical information in non-emergency situations.

For some LEPCs, developing a system for accessing information during an emergency will be challenging. Areas having one or two facilities may be able to store files on emergency response vehicles for now. However, communities receiving large volumes of information will need other approaches. A number of communities are exploring computer systems or asking facilities to set up lock boxes on site that contain the information about the facility.

Kansas is planning to set up an integrated computerized data base to handle all Title III information submitted in the state. LEPCs will be able to use the system to gain access to chemical data and to feed it to responders. The state also hopes to make the information available on computer disks for libraries so the public will be able to check on local facilities if they wish.

"Educating the public about risks and involving them in decisions are important challenges for LEPCs."

The SERC and local industries may be able to help you with risk communication. EPA has published a short pamphlet, Explaining Environmental Risk, which can help you deal with both the public and the press, and Technical Assistance Bulletin #4, which summarizes the results of a conference on risk communications. CMA and the New Jersey Department of Environmental Protection have also published material on this subject.

Responding to Public Requests

Title III gives the public the right to obtain copies of information the facilities submit to you. You should keep this in mind when you develop methods of organizing information. For instance, you may want to file the data by facility for emergency purposes, but the public may be more interested in obtaining information on all the facilities in the area using a particular chemical. Reserve some of your LEPC resources for responding to public requests for information.

Simply providing the information may not be enough; you may also have to help the public understand the risks posed by certain substances and certain situations. Although it has often been left to technical experts, educating the public about risks and involving them in decisions about what is an "acceptable" level of risk are important challenges for LEPCs. The LEPC, as the focal point for public discussion, can help reach a common understanding of the risks in the community and can help communicate this information to the general public.

Sometimes, anger about what the public perceives as risky situations arises not so much from the actual risk, as from people's feeling that they have no control over what is happening to them. You can mitigate this by including the public in the decision-making process from the beginning.

Liability

Check with your SERC about your state law and ask about liability considerations and protection. Some LEPCs and individual LEPC members have expressed concern that they might be held legally liable if they approve an emergency response plan that proves to be inadequate during an accident. SERCs are generally considered state agencies and are, therefore, covered by the state's immunity provisions. Some states have extended this immunity to LEPCs through laws or through legal decisions. Others have provided liability coverage for LEPCs.

Virginia has obtained a commitment from the State Division of Risk Management to provide insurance coverage for LEPC members for any claims made against them as LEPC members.

Funding Your Activities

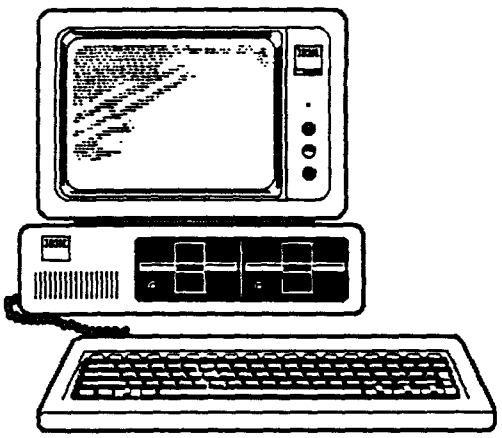
When Title III was passed, Congress did not provide funding for most of the required activities. Some states and communities have appropriated general revenue funds for LEPC activities; others are relying on implementation fees and existing state agency budgets. Because states have limited resources, each LEPC must find the means for achieving its goals. Some LEPCs will do their work with little additional money. Your LEPC members may already be donating their time.

Some LEPCs are tapping local businesses and agencies for cost-saving services and donations. Local colleges and universities may be a source of volunteer data collectors, planners, and programmers.

LEPCs and Computers

You may have decided that the right computer could help you with your LEPC tasks. Available software can provide you with a way to store information submitted by facilities, conduct hazards analyses, map hazards in your community as part of your planning process, and store information on the properties and health risks posed by chemicals in your area. Appendix K of the Technical Guidance for Hazards Analysis includes information on computer applications for emergency response planning.

EPA has made chemical data bases available to states, the public, and private sector computer firms. EPA has also collaborated with the National Oceanic and Atmospheric Administration (NOAA) to develop the Computer-Aided Management of Emergency Operations (CAMEO) program to help emergency planners .



"Maximize the impact of training programs and other information programs."

In FY 1987 Kansas received $51,000 and California $334,000 under Title III. All states received some of the federal training grant funds. Kansas added $10,000 in state funds to begin separate training seminars for LEPC members and first responders. These funds are being admisistered by FEMA. Check with your SERC to learn how to apply for federal funds and to see what state training programs may be available to you.

"LEPCs have the authority to initiate legal actions."

Training

Title III mandated federal emergency training courses to emphasize hazardous chemicals. Congress authorized $5 million a year for 1987 through 1990 for Title III training funds to help state and local governments improve emergency planning, preparedness, mitigation, and response. Over the past two years, several hundred planners from around the country have attended week-long emergency planning training sessions at FEMA's Emergency Management Institute in Emmitsburg, Maryland. These courses, sponsored by FEMA, EPA, and DOT, are designed to train planners so they will be able to return to states and communities to instruct others. Consult your EPA and FEMA Regional Office for federally sponsored training courses.

One way to maximize the impact of training programs and other information programs is to **coordinate them with other LEPCs** and with industry. For example, if your LEPC arranges a meeting with experts on transportation planning or hazards analysis, invite your neighboring LEPCs to join you. If you hear that another LEPC is setting up a seminar that interests you, ask to participate. By doing this, you will create a network of contacts and mutual aid that will benefit everyone.

Enforcement

Section 325 of Title III addresses the penalties for failure to comply with the requirements of this law. Civil and administrative penalties ranging from up to $10,000-$75,000 per violation or per day per violation can be assessed to facilities that fail to meet the emergency planning, emergency notification, community right-to-know, toxic chemical release, and trade secret reporting requirements.

Also, criminal penalties of up to $50,000 or five years in prison may be given to any person who knowingly and willfully fails to provide emergency release notification. Penalties of not more than $20,000 and/or up to one year in prison may be given to any person who knowingly and willfully discloses any information entitled to protection as a trade secret. In addition, section 326 allows citizens to initiate civil actions against EPA, SERCs, and the owner or operator of a facility for failure to meet certain requirements of Title III. LEPCs have the authority to initiate actions under the provisions for state and local suits or under the citizen suit provisions of section 326.

CHECKLIST*

- ❑ Make sure your LEPC membership is broad-based and representative of your community.
- ❑ Develop a plan for financing your LEPC.
- ❑ Organize your LEPC to use available resources such as trade and volunteer organizations.
- ❑ Develop a public education and information program to:
  - Involve the public in the planning process;
  - Respond to requests for information; and
  - Help the public understand the risks.
- ❑ Take steps to reach small businesses in your community.
- ❑ Organize your LEPC into functional subcommittees to make the tasks more manageable.
- ❑ Include all appropriate agencies, departments, or organizations in the process of developing or reviewing the emergency plan.
- ❑ Complete a hazards analysis that:
  - Identifies the types and locations of hazards;
  - Identifies the vulnerable zones and human populations at risk; and
  - Assesses the likelihood of an accident and the severity of consequences to humans.
- ❑ Identify available emergency equipment, personnel, and facilities:
  - In the community;
  - At facilities; and
  - In the region.
- ❑ Identify (by title or position) the one individual responsible for each participating organization during a response, as well as the one individual responsible for each major response function and service.
- ❑ Develop a program to:
  - Train emergency personnel to carry out your plan; and
  - Test the plan and revise it.
- ❑ Obtain the Toxic Release submissions for your area in order to develop a full picture of chemical hazards for your community and for individual facilities.
- ❑ Review all chemical information you receive for your area and work to reduce risks.

*For an extended list of criteria, see NRT-1.

INFORMATION RESOURCES

EPA has a number of brochures that you may find helpful. For technical and regulatory assistance on Title III call: (800) 535-0202 (or 202-479-2449 in Washington DC and Alaska). EPA requests that you do not call to obtain documents; write:

Emergency Planning and Community Right-to-Know Information
U.S. Environmental Protection Agency
OS 120
401 M St., SW
Washington, DC 20460.

FEMA can provide information on training. FEMA and the US Department of Transportation (DOT) sponsor the National Hazardous Materials Information Exchange (HMIX). For HMIX, call 1-800-752-6367 (in Illinois call 1-800-367-9592). For computer access, call FTS 972-3275 or 312-972-3275. A bulletin board with information from and for LEPCs will soon be available from HMIX. For information on training, write:

Federal Emergency Management Agency
Federal Center Plaza
500 C St., SW
Washington, DC 20472
(202) 646-2969.

CMA. The Chemical Manufacturers Association, a trade association for chemical companies, publishes a number of booklets which you may buy. For a list of materials available from CMA and the costs, write:

CMA
2501 M St., NW
Washington, DC 20037
(202) 887-1255.

The **Working Group on Community Right-to-Know** is a coalition of public interest and environmental groups, which provides packets of material related to Title III. The coalition requests donations to cover the cost of copying and mailing. For information, write:

Working Group on Community Right-to-Know
218 D St., SE
Washington, DC 20003
(202) 544-2600.

INFORMATION RESOURCES

The **Center for Emergency Response Planning (CERP)** is a consortium of industrial union departments, AFL-CIO, and the Workplace Health Fund. CERP is involved in planning, information dissemination, and research. CERP can provide: educational resources for workers, labor officials, and community leaders; planning assistance to worker representatives on LEPCs; and general chemical information through unions. For further information, call:

Center for Emergency Response Planning
Workplace Health Fund
815 16th St., NW
Washington, DC 20006
(202) 842-7834

The **National Response Center** provides a single, continuously staffed location that receives and refers for action or investigation, all reports of environmental incidents throughout the United States. To report an incident, call:

1-800-424-8802

INFORMATION RESOURCES

(See page 20 for information on how to contact EPA, FEMA, CMA and the Working Group on Community Right-to-Know.)

	RESOURCE	HOW DO YOU GET IT?
Title III Requirements	The law itself	SERCs, law libraries, many public libraries, EPA
	Title III Fact Sheet	EPA
	Using Community Right-to-Know: A Guide to a New Federal Law	OMB Watch 2001 O St., NW Washington, DC 20036 202-659-1711
	EPA Title III Section 313 Release Reporting Requirements	EPA
	Chemicals in Your Community	EPA
	Community Right-to-Know and Small Business	EPA
	Title III Community Awareness Workbook	CMA
	Community Guide to Title III	CMA
	What Is the Emergency Planning and Community Right-to-Know Act?	Working Group on Community Right-to-Know
	Reducing the Risk of Chemical Disaster: A Citizen's Guide to the Federal Emergency Planning and Community Right-to-Know Act	National Wildlife Federation Environmental Quality Division 1400 16th St., NW Washington, DC 20036 202-797-6800
	Understanding Title III (video)	CMA
	The Toxics Release Inventory (video)	Color Film Corp. Video Division 770 Connecticut Ave. Norwalk, CT 06854 800-882-1120

INFORMATION RESOURCES

(See page 20 for information on how to contact EPA, FEMA, CMA and the Working Group on Community Right-to-Know.)

	RESOURCE	HOW DO YOU GET IT?
Chemical Lists	Title III List of Lists	EPA
Planning	Hazardous Materials Emergency Planning Guide (NRT-1)	EPA, FEMA, SERCs
	Guide for Development of State and Local Emergency Operations Plans (CPG 1-8)	FEMA
	Community Awareness and Emergency Response Program Handbook	CMA
	Computer-Aided Management of Emergency Operations (CAMEO) (software)	CAMEO Data Base Manager NOAA/Hazardous Materials Response Branch 7600 Sand Point Way NE Seattle, WA 98115 (206) 526-6317
Hazards Analysis	Emergency Management Handbook	IAFC 1329 18th St., NW Washington, DC 20036
	Technical Guidance for Hazards Analysis (EPA, FEMA, DOT)	EPA, SERCs
	Computer-Aided Management of Emergency Operations (CAMEO) (software)	CAMEO Data Base Manager NOAA/Hazardous Materials Response Branch 7600 Sand Point Way NE Seattle, WA 98115 (206) 526-6317
	Hazard Assessments and Plume Mapping Documents for LEPCs	Working Group on Community Right-to-Know
Emergency Information	Chemical Transportation Emergency Center (CHEMTREC)	For emergencies: 800-424-9300 Other information: (202) 887-1255
	Hazard Information Transmission (HIT)	CHEMTREC/CMA (Service is free, but you must preregister; contact CMA)

INFORMATION RESOURCES

(See page 20 for information on how to contact EPA, FEMA, CMA and the Working Group on Community Right-to-Know.)

	RESOURCE	HOW DO YOU GET IT?
General Chemical Information	American Institute of Chemical Engineers (AIChE)	Call state or local chapter
	Chemical Hazards Response Information System (CHRIS)	U.S. Coast Guard (202) 267-1577
	Chemical Referral Center (CRC)	CMA 1-800-262-8200
	Integrated Risk Information System (IRIS)	IRIS User Support 513-569-7254 (Note: IRIS is designed for people with a basic understanding of toxicology and risk assessment.)
	Chemicals and Communities: Chemicals and Agriculture	Working Group on Community Right-to-Know
MSDSs	Layperson's Guide to Reading MSDSs	Massachusetts Department of Environmental Quality One Winter St. Boston, MA 02108 (617) 292-5993
Toxic Emissions	Section 313 Toxic Release Inventory Reports	Title III Reporting Center P.O. Box 70266 Washington, DC 20024-0266 Attn: TRI Public Inquiry (202) 488-1501
	Toxic Emissions	Working Group on Community Right-To-Know

INFORMATION RESOURCES

(See page 20 for information on how to contact EPA, FEMA, CMA and the Working Group on Community Right-to-Know.)

	RESOURCE	HOW DO YOU GET IT?
Training	LEPC Bulletin Board	Call HMIX (FTS 972-3275; (312) 972-3275 in Illinois).
	State Emergency Response Commissions	See list of SERCs telephone numbers following this table.
	National Emergency Training Center	FEMA
	Hazardous Materials Training Manuals	Fire Protection Publications Oklahoma State University Stillwater, OK 74078 (405) 744-5723
	Lending Library for Emergency Responders (23 videos)	CMA
Risk Communication	Explaining Environmental Risk	EPA
	Preparedness and Prevention Technical Assistance Bulletin #4	EPA
	Improving Dialogue with Communities	New Jersey Dept. of Environmental Protection Division of Science and Research Risk Communication 401 East State St., 6th Floor Trenton, NJ 08625
	Risk Communication	Working Group on Community Right-to-Know
	Risk Communication, Risk Statistics and Risk Comparisons	CMA
	Talk About Risk (video)	CMA
Warning Systems	Review of Emergency Systems Report to Congress Section 305(b) Title III SARA	EPA
	Emergency Warning Systems Guidebook	CMA

INFORMATION RESOURCES

(See page 20 for information on how to contact EPA, FEMA, CMA and the Working Group on Community Right-to-Know.)

	RESOURCE	HOW DO YOU GET IT?
Hazard Evaluation for Facilities	Guidelines for Hazard Evaluation Procedures	AIChE 345 East 47th St. New York, New York 10017 (212) 705-7657
	Hazard Assessment and Plume Mapping	Working Group on Community Right-to-Know
Prevention	Review of Emergency Systems Report to Congress Section 305(b) Title III SARA	EPA
Information on Computers	Evaluation Guide for Computer Applications: Appendix K, Technical Guidance for Hazards Analysis	EPA
	Preparedness and Prevention Technical Assistance Bulletin #5: Software Applicable to Title III	EPA

STATE EMERGENCY RESPONSE COMMISSION TELEPHONE NUMBERS

Alabama	(205) 834-1375
	(205) 271-7700
Alaska	(907) 465-2600
American Samoa	011 (684) 633-4116
Arizona	(602) 244-0504
Arkansas	(501) 562-7444
California	(916) 427-4201
Colorado	(303) 273-1622
	(303) 331-4600
Connecticut	(203) 566-4856
Delaware	(302) 736-4321
Florida	(904) 488-1472
Georgia	(404) 656-4863
Hawaii	(808) 548-5832
Idaho	(208) 342-0031
Illinois	(217) 782-2700
Indiana	(317) 243-5176
Iowa	(515) 281-3231
Kansas	(913) 296-1690
Kentucky	(502) 564-8660
Louisiana	(504) 925-6113
Maine	1-800-452-8735
Maryland	(301) 331-3130
Massachusetts	(617) 727-7775
Michigan	(517) 373-8481
Minnesota	(612) 296-0481
Mississippi	(601) 960-9000
Missouri	(314) 751-7929
Montana	(406) 444-6911
Nebraska	(402) 471-4230
Nevada	(702) 885-5375
New Hampshire	(603) 271-2231
New Jersey	(609) 882-2000
New Mexico	(505) 827-9222
New York	(518) 457-2222
North Carolina	(919) 733-3867
North Dakota	(701) 224-2374
Ohio	(614) 644-2260
Oklahoma	(405) 521-2481
Oregon	(503) 378-3473
Pennsylvania	(717) 783-8150
Puerto Rico	(809) 722-1175
Rhode Island	(401) 421-7333
South Carolina	(803) 734-0425
South Dakota	(605) 773-3153
Tennessee	(615) 252-3300
Texas	(512) 465-2138
Utah	(801) 533-5271
	(801) 538-6121
Vermont	(802) 828-2286
Virginia	(804) 225-2635
Washington	(206) 753-2200
West Virginia	(304) 348-2755
Wisconsin	(608) 266-3232
Wyoming	(307) 777-7566
Washington, DC	(202) 727-6161

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REMARKS OF

THE HONORABLE JAMES J. FLORIO, CHAIRMAN

SUBCOMMITTEE ON COMMERCE, CONSUMER PROTECTION

AND COMPETITIVENESS

BEFORE THE

FIRST ANNUAL CONFERENCE OF THE

NATIONAL INSTITUTE FOR CHEMICAL STUDIES

CHARLESTON, WEST VIRGINIA

MARCH 13, 1987

GOOD MORNING. IT IS A PLEASURE FOR ME TO BE HERE THIS MORNING. I WOULD LIKE TO COMMEND THE ORGANIZERS OF THIS CONFERENCE FOR BRINGING INTO SHARP FOCUS THE MECHANISMS NECESSARY TO ADDRESS THE RISKS ASSOCIATED WITH TOXIC CHEMICAL ACCIDENTS. I REALIZE THAT OTHER SPEAKERS IN THIS CONFERENCE HAVE DISCUSSED MANY IMPORTANT ASPECTS TO THE PROBLEMS OF CHEMICAL ACCIDENTS, AND I WOULD LIKE TO COMPLEMENT THOSE DISCUSSIONS BY DIRECTING MY REMARKS TO WHAT I BELIEVE MAY BE ONE OF THE MOST IMPORTANT ENVIRONMENTAL DEVELOPMENTS IN THE PAST DECADE.

AS PART OF THE SUPERFUND AMENDMENTS ADOPTED LAST FALL, CONGRESS ENACTED THE EMERGENCY PLANNING AND COMMUNITY RIGHT-TO-KNOW ACT. THIS NEW LAW WILL RADICALLY TRANSFORM THE WAY WE APPROACH TOXIC HAZARDS. IT WILL PLACE NEW BURDENS ON STATES AND LOCALITIES, AS WELL AS ON THE U.S. ENVIRONMENTAL PROTECTION AGENCY. IT WILL PLACE NEW BURDENS ON THE CHEMICAL INDUSTRY AND OTHER COMPANIES THAT HANDLE SUBSTANTIAL QUANTITIES OF TOXIC CHEMICALS. AND IT WILL PLACE NEW BURDENS ON THE PUBLIC WHO WILL

AVE TO LEARN AND UNDERSTAND THE NATURE AND MAGNITUDE OF THE RISKS THEY FACE FROM EXPOSURE TO TOXIC CHEMICALS.

BUT WHAT MAKES THIS LEGISLATION SO IMPORTANT IS NOT THE BURDENS AND TASKS IT IMPOSES ON PEOPLE, BUT THE ENTIRELY NEW APPROACH IT TAKES TO TOXIC HAZARDS.

FOR YEARS THERE HAS BEEN IN MANY COMMUNITIES AN ADVERSARIAL RELATIONSHIP BETWEEN THOSE HANDLING TOXIC CHEMICALS AND THOSE WHO MAY BE EXPOSED TO THEM. STRANGE SMELLS COMING FROM THE NEIGHBORHOOD PLANT AND ODD BITTERNESS IN THE DRINKING WATER HAVE RAISED CONCERN AMONG LOCAL CITIZENS. BUT RARELY DID THEY FIND ANSWERS TO THEIR CONCERNS.

INDUSTRY REPRESENTATIVES WOULD OFTEN PROVIDE REASSURANCES BY DOWNPLAYING THE POTENTIAL HAZARDS OF POLLUTANTS IN THE ENVIRONMENT. BUT WHETHER THEY WERE RIGHT OR WRONG, SUSPICION ABOUT ULTERIOR CORPORATE MOTIVES LEFT MANY PEOPLE STILL

ONDERING.

IN ADDITION, LOCAL COMMUNITIES, ESPECIALLY FIRE AND EMERGENCY RESPONSE PERSONNEL, FOUND THEMSELVES ILL-PREPARED TO HANDLE TOXIC CHEMICAL ACCIDENTS BECAUSE THEY EITHER DID NOT KNOW WHAT HAZARDS EXISTED AT A PARTICULAR PLANT OR, WHEN THEY DID KNOW ABOUT CERTAIN HAZARDS, THEY FOUND THE TOWN LEADERS UNINTERESTED IN COSTLY EMERGENCY PREPAREDNESS EFFORTS.

AS A PARTICIPANT IN THE DEVELOPMENT OF THE EMERGENCY PLANNING AND COMMUNITY RIGHT-TO-KNOW ACT OF 1986, I TOOK CAREFUL STEPS TO ASSESS THE NEED FOR FEDERAL LEGISLATION IN THIS AREA. I FOUND MANY COMMUNITIES WHO EXPRESSED FRUSTRATION AT THE UNWILLINGNESS OF THEIR CORPORATE NEIGHBORS TO DIVULGE VITAL INFORMATION ABOUT THE TYPES OF HAZARDS THAT EXISTED ON THE FACILITY'S PROPERTY. THE MESSAGE I GOT WAS THAT ANY LONG-TERM SOLUTION TO EMERGENCY PREPAREDNESS REQUIRED MORE OPENNESS AND SHARED INFORMATION BETWEEN THOSE HANDLING TOXIC CHEMICALS AND THOSE EXPOSED TO THEM.

I WAS ALSO TOLD BY CORPORATE OFFICIALS WHO WERE FORTHCOMING WITH INFORMATION THAT KEY LOCAL OFFICIALS DID NOT TAKE THE TIME OR EFFORT TO PROPERLY ASSESS PLANNING NEEDS IN ORDER TO RESPOND TO EMERGENCIES EFFECTIVELY. WHILE THIS LOCAL RELUCTANCE TO PARTICIPATE IN THE PLANNING PROCESS DOES NOT EXIST EVERYWHERE, IT BECAME CLEAR TO ME THAT ANY FEDERAL LAW HAD TO BLEND AN OPEN EXCHANGE OF INFORMATION WITH A PLANNING INFRASTRUCTURE THAT WOULD PUT THIS NEW INFORMATION TO ITS BEST POSSIBLE USE.

GREATER INDUSTRY ACCOUNTABILITY AND GREATER STATE AND LOCAL RESPONSIBILITY BECAME THE CORNERSTONES OF THE FEDERAL RIGHT-TO-KNOW LEGISLATION. WHILE THIS LEGISLATION TRAVELLED A ROCKY ROAD THROUGH CONGRESS, THIS TWO-PART FOUNDATION REMAINED INTACT FROM BEGINNING TO END. CONGRESSMAN BOB WISE AND OTHERS LED THE FIGHT TO TOUGHEN KEY PROVISIONS OF THE LAW AND THEIR ACCOMPLISHMENTS WILL BE FELT FOR YEARS TO COME. BUT THE ESSENTIAL TWIN GOALS OF GREATER INDUSTRY ACCOUNTABILITY AND

.EATER STATE AND LOCAL RESPONSIBILITY ARE WHAT SIGNAL THE REAL CHANGE IN THE WAY WE WILL PREPARE FOR TOXIC EMERGENCIES.

HOW DOES THE RIGHT-TO-KNOW ACT ACHIEVE THESE OBJECTIVES? FIRST, THE LAW REQUIRES THE CHEMICAL AND PETRO-CHEMICAL INDUSTRY TO PUT ALL THEIR CARDS ON THE TABLE. THE INDUSTRY IS NO LONGER IN A POSITION TO SELECTIVELY DECIDE WHAT INFORMATION WILL BE TURNED OVER TO THE PUBLIC. NO LONGER WILL THE INDUSTRY BE ERMITTED TO HIDE BEHIND CLAIMS OF CONFIDENTIAL BUSINESS INFORMATION AND TRADE SECRET PROTECTION. THE RIGHT-TO-KNOW ACT SPECIFIES WHAT INFORMATION MUST BE MADE AVAILABLE TO THE PUBLIC AND CAREFULLY LIMITS THE SCOPE OF TRADE SECRET PROTECTION ONLY TO THE NARROW AMOUNTS OF INFORMATION THAT MUST BE WITHHELD IN ORDER TO PROTECT CORPORATE INNOVATIONS. THEY CAN WITHHOLD NO MORE AND NO LESS.

THE REPORTING REQUIREMENTS CALL FOR FULL DISCLOSURE OF THE NAMES AND HEALTH HAZARDS OF TOXIC CHEMICALS AT MAJOR INDUSTRIAL

PLANTS ACROSS THE COUNTRY. BUT THE LAW GOES FURTHER. IT ALSO REQUIRES THAT COMPANIES DISCLOSE THE AVERAGE AMOUNTS AND LOCATION OF THESE TOXIC SUBSTANCES TO HELP LOCAL OFFICIALS ADEQUATELY PLAN FOR EMERGENCY SITUATIONS. ALSO, THE LAW REQUIRES THAT THOSE FIRMS HANDLING LARGE QUANTITIES OF TOXIC CHEMICALS REPORT TO THE PUBLIC THE ANNUAL AMOUNTS OF THOSE CHEMICALS BEING EMITTED INTO THE AIR, WATER, AND SOIL. THIS EMISSIONS REPORTING REQUIREMENT WILL TELL US, FOR THE FIRST TIME, THE MAGNITUDE OF OUR ROUTINE EXPOSURE TO TOXIC CHEMICALS.

IN CONJUNCTION WITH THE NEW LAW'S REPORTING REQUIREMENTS ARE PROVISIONS ESTABLISHING IN EACH STATE AN EMERGENCY RESPONSE COMMISSION AND APPROPRIATE LOCAL EMERGENCY RESPONSE COMMITTEES TO RECEIVE INDUSTRY INFORMATION AND TO DEVELOP APPROPRIATE EMERGENCY PLANNING PROCEDURES BASED ON THIS INFORMATION. TODAY, THIS EMERGENCY PREPAREDNESS INFRASTRUCTURE EXISTS ONLY IN A PATCHWORK WAY ACROSS THE COUNTRY, WITH MANY LOCAL FIRE AND POLICE OFFICIALS WRESTLING WITH A TREMENDOUS BURDEN OF EMERGENCY PLANNING

ESPONSIBILITIES.

THE RIGHT-TO-KNOW ACT BROADENS THE CAPABILITIES OF THESE LOCAL OFFICIALS BY REQUIRING THE U.S. EPA TO DEVELOP DETAILED GUIDANCE TO HELP LOCAL OFFICIALS DEVELOP EFFECTIVE EMERGENCY RESPONSE PLANS. THE LAW ALSO REQUIRES THE STATE EMERGENCY RESPONSE COMMISSIONS TO SERVE AS A SOURCE OF TECHNICAL AND EXPERT ADVICE FOR THE LOCAL COMMITTEES. AND FINALLY, THE LAW EXPANDS THE BASE OF LOCAL SUPPORT BY SPECIFICALLY REQUIRING THAT THE LOCAL PLANNING EFFORT INCLUDE NOT JUST FIRE AND POLICE CHIEFS, BUT ALSO REPRESENTATIVES OF THE LOCAL MEDIA, LOCAL CITIZENS GROUPS, HEALTH OFFICIALS AND OTHER PERSONS WHO ARE NECESSARY TO A FULLY COORDINATED AND INTEGRATED EMERGENCY RESPONSE PROGRAM.

WITH THESE TOOLS, INFORMATION AND INFRASTRUCTURE, LOCAL OFFICIALS ARE NOW FULLY EQUIPPED TO PLAN FOR EMERGENCIES AND ADDRESS TOXIC HAZARDS.

HOW SHOULD THESE TOOLS BE USED? I BELIEVE THAT, AS A STARTING POINT, ANY LOCAL PLANNING EFFORT SHOULD CAREFULLY FOCUS ON A THOROUGH RISK ASSESSMENT OF THEIR COMMUNITY. ONLY BY GAINING A COMPLETE UNDERSTANDING OF THE RISKS FACED BY THE COMMUNITY WILL LOCAL OFFICIALS BE ABLE TO DEVELOP SENSIBLE EMERGENCY RESPONSE CAPABILITIES. TO MAKE WELL-FOUNDED RISK MANAGEMENT DECISIONS, THE LOCAL EMERGENCY RESPONSE COMMITTEES CAN USE THE CHEMICAL REPORTING INFORMATION REQUIRED UNDER THE RIGHT-TO-KNOW ACT. BUT, IT MUST BE RECOGNIZED THAT THIS INFORMATION, ALTHOUGH EXTREMELY USEFUL, SHOULD NOT BE RELIED UPON TO THE EXCLUSION OF OTHER INFORMATION.

IN PARTICULAR, I WOULD COMMEND EACH OF YOU TO READ A LITTLE-NOTICED, BUT CRITICALLY IMPORTANT PROVISION IN THE RIGHT-TO-KNOW ACT -- SECTION 303(D). IT IS WORTH CITING THIS SPECIFIC PROVISION BECAUSE OF THE POTENTIAL BREADTH OF ITS EFFECT. SECTION 303(D) SAYS THAT, UPON THE REQUEST FROM A LOCAL EMERGENCY PLANNING COMMITTEE, THE OWNER OR OPERATOR OF ANY

)CAL EMERGENCY PLANNING COMMITTEE, THE OWNER OR OPERATOR OF ANY FACILITY SUBJECT TO THE EMERGENCY PLANNING PROVISIONS OF THE ACT MUST PROMPTLY PROVIDE INFORMATION TO THE COMMITTEE "NECESSARY FOR DEVELOPING AND IMPLEMENTING THE EMERGENCY PLAN." THE U.S. EPA, THE STATE EMERGENCY RESPONSE COMMISSION AND EVEN THE LOCAL EMERGENCY RESPONSE COMMITTEES THEMSELVES ARE AUTHORIZED TO ENFORCE THIS FAR-REACHING REQUIREMENT AGAINST RECALCITRANT FACILITIES.

WHAT THIS PROVISION MEANS IS THAT EMERGENCY RESPONSE COMMITTEES CAN OBTAIN ALL THE INFORMATION THEY NEED TO PLAN FOR EMERGENCY SITUATIONS, NOT JUST THE INFORMATION REQUIRING REPORTING UNDER THE ACT. TO BE SURE, THE ACT'S REPORTING REQUIREMENTS OFFER A TREMENDOUS AMOUNT OF INFORMATION TO THE LOCAL COMMITTEES, BUT SECTION 303(D) WILL FILL ANY GAPS AND PLUG ANY LOOPHOLES IN THE ACT'S REPORTING REQUIREMENTS.

LET ME GIVE YOU AN EXAMPLE OF HOW SECTION 303 (D) MIGHT WORK

IN PRACTICE. SUPPOSE A LOCAL EMERGENCY COMMITTEE IS TRYING TO ASSESS AND PLAN FOR THE TOXIC RISKS OF A COMPLEX CHEMICAL PLANT IN ITS NEIGHBORHOOD. THE COMMITTEE HAS RECEIVED A LIST OF THE TOXIC CHEMICALS AT THE PLANT, THE AVERAGE AMOUNTS HANDLED AND THE ANNUAL ESTIMATES OF EMISSIONS, ALL REQUIRED TO BE REPORTED UNDER THE ACT. BUT, AS MANY OF YOU KNOW, CHEMICAL PLANTS HANDLE THEIR CHEMICALS IN A VARIETY OF WAYS. SOMETIMES THESE SUBSTANCES ARE STORED UNDER INTENSE PRESSURE OR AT HIGH TEMPERATURES. THE RISKS ARE VERY DIFFERENT DEPENDING ON THE MANNER OF USE AND STORAGE OF THESE TOXIC SUBSTANCES.

CONSEQUENTLY, THE LOCAL COMMITTEE WILL LIKELY WANT TO CONDUCT A COMPLETE HAZARD ASSESSMENT OF THE FACILITY TO DETERMINE IN A MORE EXACT WAY THE TRUE RISKS FROM THE PLANT. USING SECTION 303(D), THE LOCAL COMMITTEE CAN RECEIVE THE FACILITY'S OWN HAZARD ASSESSMENT, IF ANY, WHICH WOULD PROVIDE THE COMPANY'S OWN PROJECTIONS FOR AIR RELEASES, WATER RELEASES OR EXPLOSIONS UNDER A VARIETY OF CONDITIONS. IN ADDITION, IF ONE CHEMICAL IS OF

ARTICULAR CONCERN BECAUSE OF ITS IMMEDIATE TOXIC EFFECTS, SUCH AS MIC, THE LOCAL COMMITTEE CAN OBTAIN DETAILED INFORMATION ON THE PRECISE USES, STORAGE CONDITIONS, AND LIKELY COMMUNITY RISKS OF THIS CHEMICAL.

WITH THE ADDED INFORMATION AVAILABLE UNDER SECTION 303(D), THE RIGHT-TO-KNOW ACT OFFERS LOCAL OFFICIALS THE OPPORTUNITY TO TURN THE SPOTLIGHT ON ALL OF THE ACTIVITIES OF THE LOCAL FACILITY, NOT JUST THOSE ASPECTS THE LOCAL PLANT MAY BE WILLING TO DIVULGE.

OBVIOUSLY, THE PROVISIONS OF THE RIGHT-TO-KNOW ACT SIGNAL A TURNING POINT IN THE WAY WE APPROACH TOXIC RISKS. THE DAYS OF CONFRONTATION AND DISTRUST BETWEEN LOCAL CITIZENS AND NEIGHBORHOOD CHEMICAL PLANTS MUST BE PUT BEHIND US. THE FEDERAL RIGHT-TO-KNOW ACT ESSENTIALLY REQUIRES FULL DISCLOSURE BY THOSE HANDLING TOXIC CHEMICALS. FOR INDUSTRY REPRESENTATIVES, THIS MEANS THAT THE PATH TO COOPERATION AND TRUST WILL, IN THE LONG

PROTECTION. I WOULD HOPE THAT THE SIMPLE PRINCIPLES OF THE RIGHT-TO-KNOW ACT WILL SPUR GREATER INDUSTRY COOPERATION AND WILLINGNESS TO FULLY ENGAGE IN THE PLANNING PROCESS.

AS I SAID EARLIER, I THINK IT IS IMPORTANT TO KEEP AN EYE ON THE TWO MAJOR CORNERSTONES OF THIS NEW LAW. ALTHOUGH THE PROVISIONS OF THIS NEW LAW MAY SEEM COMPLEX, THE ESSENTIAL PURPOSES ARE TO CREATE GREATER INDUSTRY ACCOUNTABILITY AND TO PROMOTE GREATER STATE AND LOCAL INVOLVEMENT IN THE PLANNING PROCESS.

I KNOW I ECHO THE VIEWS OF REPRESENTATIVE BOB WISE AND OTHERS WHEN I EXPRESS MY HOPE THAT ALL EFFORTS BE TAKEN TO MAKE THE RIGHT-TO-KNOW ACT WORK EFFECTIVELY. THIS IS A NEW AND EXCITING INITIATIVE, BUT WE MUST ENSURE THAT ITS IDEAS AND PRINCIPLES FIND THEIR WAY INTO THE EVERYDAY TASKS OF EMERGENCY PLANNING. I LOOK FORWARD TO WORKING WITH EACH OF YOU TO SEE THAT WE CARRY THE RIGHT-TO-KNOW ACT FROM A COLLECTION OF ADMIRABLE GOALS INTO THE

NITTY-GRITTY OF REAL EMERGENCY PLANNING. WE SIMPLY CANNOT AND WILL NOT TOLERATE A BHOPAL DISASTER IN THIS COUNTRY.

United States
Environmental Protection
Agency
Washington DC 20460

August 1988
(Revised)

EPA

Title III Fact Sheet

Emergency Planning and Community Right-to-Know

INTRODUCTION

The Emergency Planning and Community Right-to-Know Act of 1986 establishes requirements for federal, state, and local governments and industry regarding emergency planning and "community right-to-know" reporting on hazardous and toxic chemicals. This legislation builds upon EPA's Chemical Emergency Preparedness Program (CEPP) and numerous state and local programs aimed at helping communities to better meet their responsibilities in regard to potential chemical emergencies. The community right-to-know provisions will help to increase the public's knowledge and access to information on the presence of hazardous chemicals in their communities and releases of these chemicals into the environment. States and communities, working with facilities, will be better able to improve chemical safety and protect public health and the environment.

Nothing in this document should be construed to indicate that EPA has determined states have Title III authority over Indian reservations. For purposes of this document, definition of the terms "state" and "governor" includes "Indian tribe" and "Tribal Chairman." EPA has issued a draft policy for comment regarding the application of the emergency planning and community right-to-know law to Indian lands.

The emergency planning and community right-to-know (also known as Title III) provisions have four major sections: emergency planning (Section 301-303), emergency release notification (Section 304), community right-to-know reporting requirements (Sections 311, 312) and toxic chemical release reporting-emissions inventory (Section 313). Information from these four reporting requirements will help states and communities develop a broad perspective of chemical hazards for the entire community as well as for individual facilities.

SECTION 301-303: Emergency Planning

The emergency planning sections are designed to develop state and local governments' emergency response and preparedness capabilities through better coordination and planning, especially within the local community.

The Emergency Planning and Community Right-to-Know Act required the governor of each state to designate a state emergency response commission. Many state emergency response commissions include public agencies and departments concerned with issues relating to environment, natural resources, emergency services, public health, occupational safety, and transportation. Also, interested public and private sector groups and associations with experience in emergency planning and community right-to-know issues may be included in the state commission. At this time, all governors have established state emergency response commissions.

The state commission must also have designated local emergency planning districts and appointed local emergency planning committees for each district. State commissions have designated over 4,000 local districts. Thirty-five state commissions chose counties as the basic district designation (often with separate districts for municipalities), ten state commissions designated substate planning districts and five state commissions designated the entire state as a district. The state commission is responsible for supervising and coordinating the activities of the local emergency planning committees, for establishing procedures for receiving and processing public requests for information collected under other sections of Title III, and for reviewing local emergency plans.

This local emergency planning

KEY DATES TO REMEMBER

November 17, 1986	EPA published Interim List of Extremely Hazardous Substances and Threshold Planning Quantities in Federal Register (Sections 302, 303, 304)
November 17, 1986	EPA initiated comprehensive review of emergency systems (Section 305 (b))
January 27, 1987	EPA published proposed format for Emergency Inventory Forms and reporting requirements in Federal Register (Sections 311 & 312)
March 17, 1987	National Response Team published guidance for preparation and implementation of emergency plans (Section 303(f))
April 17, 1987	State governors appointed state emergency response commissions (Section 301(a))
April 22, 1987	EPA published Final List of Extremely Hazardous Substances and Threshold Planning Quantities in Federal Register (Sections 302, 303, 304)
May 17, 1987	Facilities subject to Section 302 planning requirements notified state emergency response commission (Section 302(c)). Interim report on emergency system review submitted to Congress (Section 305(b))
June 4, 1987	EPA published proposed toxic chemical release (i.e., emissions inventory) form (Section 313(g))
July 17, 1987	State emergency response commission designated emergency planning districts (Section 301 (b))
August 17, 1987 (or 30 days after designation of districts, whichever is sooner)	State emergency response commission appointed members of local emergency planning committees (Section 301 (c))
September 17, 1987 (or 30 days after local committee is formed, whichever is earlier)	Facilities notified local planning committee of selection of a facility representative (Section 303(d)(1))

(Continued on Page 4)

committee must include, at a minimum, elected state and local officials, police, fire, civil defense, public health professionals, environmental, hospital, and transportation officials as well as representatives of facilities subject to the emergency planning requirements, community groups, and the media. As soon as facilities are subject to the emergency planning requirements, they must designate a representative to participate in the planning process. The local committee must establish rules, give public notice of its activities, and establish procedures for handling public requests for information.

The local committee's primary responsibility is to develop an emergency response plan by October 17, 1988 and review it at least annually thereafter. In developing this plan, the local committee evaluates available resources for preparing for and responding to a potential chemical accident. The plan must:

— identify facilities and transportation routes of extremely hazardous substances;

— describe emergency response procedures, on-site and off-site;

— designate a community coordinator and facility coordinator(s) to implement the plan;

— outline emergency notification procedures;

— describe methods for determining the occurrence of a release and the probable affected area and population;

— describe community and industry emergency equipment and facilities and the identity of persons responsible for them;

— outline evacuation plans;

— describe a training program for emergency response personnel (including schedules); and,

— present methods and schedules for exercising emergency response plans.

In order to assist the local committees in preparing and reviewing plans, Congress required the National Response Team (NRT), composed of 14 federal agencies with emergency response responsibilities, to publish guidance on emergency response planning. This guidance, the "Hazardous Materials Emergency Planning Guide," was published by the NRT in March 1987.

The emergency response plan must be initially reviewed by the state commission and, at least, annually by the local committee. Regional Response Teams, composed of federal regional officials and state representatives, may review the plans and provide assistance to the local committees upon request.

Planning activities of local committees and facilities should be initially focused on, but not limited to, the 366 extremely hazardous substances published in the Federal Register. Plans should be comprehensive, addressing all hazardous materials of concern and transportation as well as fixed facilities. The list includes the threshold planning quantities (minimum limits) for each substance. Through rulemaking, EPA can revise the list and threshold planning quantities based on the toxicity, reactivity, volatility, dispersability, combustibility, or flammability of a substance.

Any facility that has present any of the listed chemicals in a quantity equal to or greater than its threshold planning quantity is subject to the emergency planning requirements. In addition, the state commission or the Governor can designate additional facilities, after public comment, to be subject to these requirements. Covered facilities must notify the state commission and local committee that they are subject to these requirements within 60 days after they begin to have present any of the extremely hazardous substances in threshold planning quantities.

Each state commission must notify the EPA Regional Office of all facilities subject to the emergency planning requirements, including facilities designated by the state commission or the governor.

SECTION 304: Emergency Notification

Facilities must immediately notify the local emergency planning committees and the state emergency response commissions likely to be affected if there is a release into the environment of a listed hazardous substance that exceeds the reportable quantity for that substance. Substances subject to this requirement are those on the list of 366 extremely hazardous substances as published in Federal Register (40 CFR 355) or on a list of 721 substances subject to the emergency notification requirements under CERCLA Section 103(a) (40 CFR 302.4). Some chemicals are common to both lists.

Initial notification can be made by telephone, radio, or in person. Emergency notification requirements involving transportation incidents can be met by dialing 911, or in the absence of a 911 emergency number, calling the operator.

This emergency notification needs to include:

— the chemical name;

— an indication of whether the substance is extremely hazardous;

— an estimate of the quantity released into the environment;

— the time and duration of the release;

— whether the release occurred into air, water, and/or land;

— any known or anticipated acute or chronic health risks associated with the emergency, and where necessary, advice regarding medical attention for exposed individuals;

— proper precautions, such as evacuation; and,

— name and telephone number of contact person.

Section 304 also requires a written follow-up emergency notice after the release. The follow-up notice or notices must:

— update information included in the initial notice, and

— provide information on

•actual response actions taken; and,

KEY DATES TO REMEMBER (Continued)

October 15, 1987	EPA published final format for emergency inventory forms and reporting requirements in the Federal Register (Sections 311 and 312)
	EPA published proposed regulation governing trade secret claims (Sections 322 and 323)
October 17, 1987	Manufacturing facilities submitted MSDS's or lists of MSDS chemicals to state commission, local committee and local fire department (Section 311 (d))
December 17, 1987	EPA published a final rule delisting four chemicals from the Extremely Hazardous Substance List (Section 302)
February 16, 1988	EPA published final toxic chemical release regulations, form and instructions (Section 313 (g))
February 25, 1988	EPA published a final rule delisting 36 chemicals from the Extremely Hazardous Substance List (Section 302)
March 1, 1988 (and annually thereafter)	Manufacturing facilities submit their hazardous chemical inventory forms to state commission, local committee and local fire department (Section 312(a)(2))
June 1988	Final report on emergency systems study submitted to Congress (Section 305(b))
June 20, 1988	EPA published final rule delisting titanium dioxide from the Toxic Chemical List (Section 313)
July 1, 1988 (and annually thereafter)	Covered facilities submitted initial toxic chemical forms to EPA and designated state officials (Section 313 (a))
July 29, 1988	EPA published final regulation governing trade secret claims (Sections 322 and 323)
August 4, 1988	EPA clarified Reporting Dates for facilities newly covered by the OSHA expansion of the Hazard Communication Standard (Sections 311 and 312)

(Continued on Page 6)

- advice regarding medical attention necessary for exposed individuals.

If local committees are not yet formed, releases should be reported to appropriate local response officials.

SECTION 311-312: Community Right-To-Know Requirements

There are two community right-to-know reporting requirements within the Emergency Planning and Community Right-to-Know Act. Section 311 requires facilities that must prepare material safety data sheets (MSDS) under the Occupational Safety and Health Administration (OSHA) regulations to submit either copies of their MSDSs or a list of MSDS chemicals to:

- the local emergency planning committee;
- the state emergency response commission; and,
- the local fire department.

If the facility owner or operator chooses to submit a list of MSDS chemicals, the list must include the chemical or common name of each substance and must identify the applicable hazard categories. These hazard categories are:

- immediate (acute) health hazard;
- delayed (chronic) health hazard;
- fire hazard;
- sudden release of pressure hazard; and,
- reactive hazard.

If a list is submitted, the facility must submit a copy of the MSDS for any chemical on the list upon the request of the local emergency planning committee or state commission. Also, EPA has established threshold quantities for hazardous chemicals below which no facility must report. The current thresholds for Section 311 are:

— for extremely hazardous substances: 500 pounds or the threshold planning quantity, whichever is lower.

— for all other hazardous chemicals: before October 17, 1989: 10,000 pounds; on or after October 17, 1989: zero pounds (Note: the zero threshold will be revised pending further study.)

The initial submission of the MSDSs or a list of MSDS chemicals was due on October 17, 1987, or three months after the facility is required to prepare or have available an MSDS under OSHA regulations. Currently, OSHA regulations require only manufacturers and importers in Standard Industrial Classification (SIC) codes 20-39 to have or prepare MSDSs for their chemicals. But as of June 24, 1988, those OSHA regulations expanded to include non-manufacturers except the construction industry. Thus, under the emergency planning and community right-to-know statute, facilities newly covered by the expanded OSHA regulations must submit MSDSs or a list of MSDS chemicals within 3 months after they become covered.

An MSDS or a revised list must be provided when new hazardous chemicals become present at a facility in quantities above the established threshold levels after the deadline. A revised MSDS must be provided to update the original MSDS if significant new information is discovered about the hazardous chemical.

Reporting under Section 312 requires a facility to submit an emergency and hazardous chemical inventory form to the local emergency planning committee, the state emergency response commission, and the local fire department. Hazardous chemicals covered by Section 312 are those for which facilities are required to prepare or have available an MSDS under OSHA's Hazard Communication Standard and that were present at the facility at any time during previous calendar year above specified thresholds.

EPA established threshold quantities for Section 312 for hazardous chemicals below which no facility must report. Currently those thresholds are:

— for extremely hazardous substances: 500 pounds or the threshold planning quantity, whichever is lower

— for all other hazardous chemicals:

January to December 1987 or first year of reporting...10,000 pounds.

January to December 1988 or second year of reporting ...10,000 pounds.

January to December 1989 or third year of reporting...zero pounds. (Note: the zero threshold will be revised pending further study.)

The inventory form incorporates a "two-tier" approach. Under Tier I, facilities must submit the following aggregate information for each applicable hazard category:

— an estimate (in ranges) of the maximum amount of chemicals for each category present at the facility at any time during the preceding calendar year;

— an estimate (in ranges) of the average daily amount of chemicals in each category; and,

— the general location of hazardous chemicals in each category.

If requested by a local committee, state commission or local fire department, the facility must provide the following Tier II information for each substance subject to the request:

— the chemical name or the common name as indicated on the MSDS;

— an estimate (in ranges) of the maximum amount of the chemical present at any time during the preceding calendar year;

— a brief description of the manner of storage of the chemical;

— the location of the chemical at the facility; and,

— an indication of whether the owner elects to withhold location information from disclosure to the public.

EPA published a uniform format for the inventory forms on October 15, 1987. Since many state commissions have additional requirements or have incorporated the federal con-

tents in their own forms, Tier I/ II forms should be obtained from the state commission. Tier I information must be submitted for covered manufacturing facilities on or before March 1, 1988 and annually thereafter on March 1, for all covered facilities.

The Tier II form may be sent by the facility instead of a Tier I form. The public may also request Tier II information from the state commission and the local committee. The information submitted by facilities under Sections 311 and 312 must generally be made available to the public by local emergency planning committees (LEPCs) and state emergency response commissions (SERCs) during normal working hours.

SECTION 313: Toxic Chemical Release Reporting

Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 requires EPA to establish an inventory of routine toxic chemical emissions from certain facilities. Facilities subject to this reporting requirement are required to complete a Toxic Chemical Release Form (Form R) for specified chemicals. The form must be submitted to EPA and those state officials designated by the governor, on or before July 1, 1988, and annually thereafter on July 1. These reports should reflect releases during the preceding calendar year.

The purpose of this reporting requirement is to inform the public and government officials about routine releases of toxic chemicals to the environment. It will also assist in research and the development of regulations, guidelines, and standards.

The reporting requirement applies to owners and operators of facilities that have 10 or more full-time employees, that are in Standard Industrial Classification (SIC) codes 20 through 39 (i.e., manufacturing facilities) and that manufacture (including importing), process or otherwise use a listed toxic chemical in excess of specified threshold quantities.

Facilities manufacturing or processing any of these chemicals in excess of 75,000 pounds in 1987 must report by July 1, 1988. Facilities manufacturing or processing in excess of 50,000 pounds in 1988 must report by July 1, 1989; thereafter, facilities manufacturing or processing more than 25,000 pounds in a year are required to submit the form. Facilities otherwise using listed toxic chemicals in quantities over 10,000 pounds in a calendar year are required to submit toxic chemical release forms by July 1 of the following year. EPA can revise these threshold quantities and covered SIC codes.

The list of toxic chemicals subject to reporting consisted initially of chemicals listed for similar reporting purposes by the States of New Jersey and Maryland. There are over 300 chemicals and categories on these lists. Through rule-

KEY DATES TO REMEMBER (Concluded)

September 24, 1988 (three months after the OSHA expansion)	Non-manufacturing facilities covered under the new OSHA expansion as of June 24, 1988 submit MSDSs or a list of chemicals present in quantities over the first year threshold to the state commission, local committee, and local fire department (Section 311)
October 17, 1988 (and review at least annually thereafter)	Local emergency planning committees complete preparation of an emergency plan (Section 303(a))
March 1, 1989	Non-manufacturing facilities submit their emergency inventory forms to state commission, local committee, and local fire department (Section 312 (a)(2))
October 17,1989	Manufacturing facilities submit MSDS or a list of chemicals over the final threshold to the state commission, local committee, and local fire department (Section 311)
June 20, 1991	Comptroller General submits Report to Congress on toxic chemical release information collection, use and availability (Section 313 (k))
October 17, 1991	EPA submits to Congress a Mass Balance Study (Section 313 (1))

making, EPA can modify this combined list.

The final Toxic Chemical Release Form and regulations were published in the Federal Register on February 16, 1988. The following information is required on the form:

— the name, location and type of business;

— off-site locations to which the facility transfers toxic chemicals in waste;

— whether the chemical is manufactured (including importation), processed, or otherwise used and the general categories of use of the chemical;

— an estimate (in ranges) of the maximum amounts of the toxic chemical present at the facility at any time during the preceding year;

— quantity of the chemical entering each medium--air, land, and water--annually;

— waste treatment/disposal methods and efficiency of methods for each waste stream;

— optional information on waste minimization; and,

— a certification by a senior facility official that the report is complete and accurate.

Reports are sent to EPA and designated state agencies. EPA must establish and maintain a national toxic chemical inventory based on the data submitted. The public must be able to access this national database, and obtain the data through other means.

In addition to the toxic chemical release reporting requirements, Section 313 authorizes EPA to arrange for a Mass Balance Study to be carried out by the National Academy of Sciences (NAS). The study will determine the feasibility, utility, and alternatives to collecting mass balance type information as a supplement to the currently required toxic release data. A report of this study must be submitted by EPA to Congress no later than October 17, 1991. An interim report from NAS is due to EPA in early 1989.

OTHER TITLE III PROVISIONS

Trade Secrets

Section 322 of the Emergency Planning and Community Right-to-Know Act addresses trade secrets as they apply to emergency planning, community right-to-know, and toxic chemical release reporting. Any facility may withhold the specific chemical identity on these submittals. No trade secrets are allowed to be claimed under Section 304 of the statute. The withholder must show that:

— the information has not been disclosed to any person other than a member of the local planning committee, a government official, an employee of the withholder or someone bound by a confidentiality agreement; measures have been taken to protect the confidentiality; and the withholder intends to continue to take such measures;

— the information is not required to be disclosed to the public under any other Federal or State law;

— the information is likely to cause substantial harm to the competitive position of the withholder; and,

— the chemical identity is not readily discoverable through reverse engineering.

However, even if chemical identity information can be legally withheld from the public, Section 323 provides for disclosure of this information to health professionals who need the information for diagnostic and treatment purposes or local health officials who need the information for prevention and treatment activities. In non-emergency cases, the health professional receiving the information must sign a confidentiality agreement with the facility and provide a written statement of need. In medical emergency situations, the health professional must, if requested by the facility, provide these documents as soon as circumstances permit.

Information claimed as a trade secret and substantiation for that claim must be submitted to EPA. More detailed information on the procedure for submitting trade secrecy claims can be found in the trade secrets final rule, published in the Federal Register on July 29, 1988. Any person may challenge trade secret claims by petitioning EPA. The Agency must then review the claim and rule on its validity.

The trade secret regulations cover the process for submission of claims, petitions for disclosure and the review process for petitions.

Title III Penalties

Section 325 of the Emergency Planning and Community Right-to-Know Act addresses the penalties for failure to comply with the requirements of this law. Civil and administrative penalties ranging from up to $10,000 – $75,000 per violation or per day per violation can be assessed to facilities that fail to comply with the emergency planning (Section 302), emergency notification (Section 304), community right-to-know (Sections 311 and 312), toxic chemical release (Section 313) and trade secret (Sections 322 and 323) reporting requirements.

Criminal penalties up to $50,000 or five years in prison may also be given to any person who knowingly and willfully fails to provide emergency release notification. Penalties of not more than $20,000 and/or up to one year in prison may be given to any person who knowingly and willfully discloses any information entitled to protection as a trade secret. In addition, Section 326 allows citizens to initiate civil actions against EPA, state emergency response commissions, and/or the owner or operator of a facility for failure to meet the requirements of the emergency planning and community right-to-know provisions. A state emergency response commission, local emergency planning committee, state or local government may institute actions against facility owner/operators for failure to comply with Title III requirements. In addition, states may sue EPA for failure to provide trade secret information.

Training Grants

Section 305(a) of the Emergency Planning and Community Right-to-Know Act authorizes the Federal Emergency Management Agency to provide $5 million for each of fiscal years 1987, 1988, 1989, and 1990 for training grants to support state and local governments. These training grants are designed to improve emergency planning, preparedness, mitigation, response, and recovery capabilities. Such programs must provide special emphasis to hazardous chemical emergencies. The training grants may not exceed 80 percent of the cost of any such programs. The remaining 20 percent must come from non-federal sources. These training grants are coordinated within each state by the state emergency response commission.

Emergency Systems Study

Under Section 305(b), EPA is required to review emergency systems for monitoring, detecting, preventing and warning of accidental releases of extremely hazardous substances at representative U.S. facilities that produce, use, or store these substances. EPA reported interim findings to Congress in May 1987 and issued a final report of findings and recommendations to Congress in June 1988.

Public Access

Section 324 of the Emergency Planning and Community Right-to-Know Act provides for public access to information gathered under this law. Under this section, all material safety data sheets, hazardous chemical inventory forms, toxic chemical release form follow-up emergency notices, and the emergency response plan must be made available during normal working hours by the state commissions and local committees. In order to inform the public of the availability and location of the information provided to the local emergency planning committee, the local committee must publish a notice annually in the local newspaper. In addition, Toxic Release Inventory (Section 313) information is being collected by EPA and will be made available by telecommunications and other means.

For more information, contact the Emergency Planning & Community Right-to-Know Information Hotline:

Hotline: 1-800-535-0202
(in Washington, D.C. – (202) 479-2449)

Hours: 8:30 am - 7:30 pm (Eastern Time) Monday - Friday

This is NOT an emergency number.

CHEMICAL LISTS ASSOCIATED WITH EMERGENCY PLANNING/COMMUNITY RIGHT-TO-KNOW

LIST	SECTION	PURPOSE
List of Extremely Hazardous Substances (366 Substances) (40 CFR 355)	§302: Emergency Planning §304: Emergency Notification §311/312: Material Safety Data Sheets and Emergency Inventory	• Facilities with more than estimated planning quantities of these substances must notify the State commission and local committee • Initial focus for preparation of emergency plans by local emergency planning committees. • Certain releases of these substances trigger Section 304 notification to State commission and local committees. • Separate and lower thresholds are established for these substances of concern for the MSDS and Tier I/II reporting requirements.
Substances requiring notification under Section 103(a) of CERCLA [721 substances] (40 CFR 302.4)	§304: Emergency Notification	• Certain releases of these trigger Section 304 notification to State commission and local communities as well as Section 104(a) requirement for National Response Center notification.
Hazardous Chemicals considered physical or health hazards under OSHAs Hazard Communication Standard (29 CFR 1910, 1200) [This is a performance standard; there is no specific list of chemicals.]	§304: Emergency Notification §311: Material Safety Data Sheets §312: Emergency Inventory	• Identifies facilities subject to emergency notification requirements. • MSDS or list of MSDS chemicals provided by covered facilities to state commissions, local committees and local fire departments. • Tier I/II hazardous chemical inventory forms must be provided by facilities to state commissions, local committees and local fire departments.
Toxic Chemicals [327 chemical/chemical categories] (40 CFR 372)	§313: Toxic Chemical Release Reporting	• These chemicals are reported on an emissions inventory to inform government officials and the public about the release of toxic chemicals into the environment.

TRI

TOXIC CHEMICAL RELEASE INVENTORY

FACT NATIONAL LIBRARY of MEDICINE **SHEET**

**** COMING SPRING 1989 ****

TRI DEFINED

TRI (the Toxic Chemical Release Inventory) will contain information on the annual estimated releases of toxic chemicals to the environment. Based upon data collected by the Environmental Protection Agency (EPA), the file will become part of the National Library of Medicine's (NLM) Toxicology Data Network (TOXNET) and be available online for public access sometime in the late Spring of 1989.

TRI BACKGROUND

Mandated by Title III of the SUPERFUND Amendments and Reauthorization Act (SARA) of 1986, the Inventory contains provisions for the reporting, by industry, of data on over 300 toxic chemicals into the air, water, and land. Data submitted to EPA includes names and addresses of facilities which manufacture, process, or otherwise use these chemicals, as well as amounts released to the environment or tranferred to waste sites. Title III, also known as the Emergency Planning and Community Right-to-Know Act, calls for the EPA to collect this data nationwide on an annual basis. The Law mandates that the data be made publicly available through a computer database. The online **TRI** file is likely to have a broad based user audience including industry, state and local environmental agencies, emergency planning committees, the Federal government, and other regulatory groups. Another important user group is likely to be concerned citizens who, on their own or through public interest groups and public libraries, will use **TRI** to answer their questions about chemical releases in their communities.

TRI FILE STRUCTURE

TRI data will be arranged in the following broad categories:

Facility Identification
Substance Identification
Environmental Release of Chemical
Waste Treatment
Off-Site Waste Transfer

The data includes the names, addresses and public contacts of plants manufacturing, processing or using the reported chemicals, the maximum amount stored on site, the estimated quantity emitted into the air (point and non-point emissions), discharged into bodies of water, injected underground, or released to land, methods used in waste treatment and their efficiency, and data on the transfer of chemicals off-site for treatment/disposal, either to publicly owned treatment works or elsewhere.

SEARCHING TRI

TRI will be a component file of NLM's TOXNET system. Utilizing a free text search capability, full Boolean logic, a powerful and flexible command language and a variety of online user assistance features, TOXNET offers state-of-the-art user-friendly searching. Online and offline printing of entire or specified portions of records will be available, as will a variety of customized print options. Special **TRI** features will allow sorting and numerical manipulation of data. A menu-driven search package will allow individuals with limited computer skills to search **TRI** efficiently.

TRI IN ACTION

TRI users will be able to ask such questions as:

- How much benzene was reported released to waterways in 1987 by Virginia industrial plants?
- What waste minimization methods are reported by Marin County manufacturers of toluene?
- How much chlorine gas have entire plants of Company XYZ released into the air last year throughout the country?
- What are the names and addresses of Baltimore steel plants importing vanadium?
- What quantity of sulfuric acid at Boston's ABC Waste Treatment Facility is transferred there from outside the State of Massachusetts?

TRI AVAILABILITY

TRI will be available 24 hours/day, 7 days/week, except for a brief daily maintenance period.

TRI ACCESS

Registered NLM online services users will be able to access **TRI** on the TOXNET system by direct dial or through the TELENET or TYMNET telecommunication networks. **TRI** users will also automatically have access to all TOXNET and other NLM files, through the TOXNET Gateway. Other NLM files may be used to obtain supporting information in such areas as health hazards and emergency handling of **TRI** chemicals.

TRI USER SERVICES

For further details about the status of the **TRI** file, contact:

TRI Representative
Specialized Information Services
National Library of Medicine
8600 Rockville Pike
Bethesda, MD 20894

Telephone (301) 496-6531

Interested parties should note that an application package to become a registered TOXNET user is available now. Registered users have immediate access to current TOXNET files (Hazardous Substances Data Bank, Registry of Toxic Effects of Chemical Substances, Chemical Carcinogenesis Research Information System) and all other NLM files, including the TOXLINE/TOXLIT group, which contain some 2.5 million references on literature related to toxic chemicals. Further, current users are kept up-to-date about the status of **TRI** through online NEWS messages and the NLM *Technical Bulletin*, and will be able to search **TRI** as soon as it comes online in the Spring.

February 1989

TITLE III FACT SHEET

EPA

EMERGENCY PLANNING AND COMMUNITY RIGHT–TO–KNOW

April 1988
(Revised)

U.S. Environmental Protection Agency

INTRODUCTION

The Emergency Planning and Community Right-to-Know Act of 1986 establishes requirements for federal, state, and local governments and industry regarding emergency planning and "community right-to-know" reporting on hazardous and toxic chemicals. This legislation builds upon EPA's Chemical Emergency Preparedness Program (CEPP) and numerous state and local programs aimed at helping communities to better meet their responsibilities in regard to potential chemical emergencies. The community right-to-know provisions will help to increase the public's knowledge and access to information on the presence of hazardous chemicals in their communities and releases of these chemicals into the environment.

Nothing in this document should be construed to indicate that EPA has determined states have Title III authority over Indian reservations. For purposes of this document, definition of the terms "State" and "Governor" includes "Indian tribe" and "Tribal Chairman." EPA has issued a draft policy for comment regarding the application of the emergency planning and community right-to-know law to Indian lands.

The emergency planning and community right-to-know (also known as Title III) provisions have four major sections: emergency planning (Section 301-303), emergency release notification (Section 304), community right-to-know reporting requirements (Sections 311, 312) and toxic chemical release reporting emissions inventory (Section 313).

SECTION 301-303: Emergency Planning

The emergency planning sections are designed to develop state and local governments emergency response and preparedness capabilities through better coordination and planning, especially within the local community.

The Emergency Planning and Community Right-to-Know Law required the Governor of each state to designate a state emergency response commission. The governors have designated existing state organizations to be the state emergency response commissions including public agencies and departments concerned with issues relating to environment, natural resources, emergency services, public health, occupational safety, and transportation. Also, interested public and private sector groups and associations with experience in Emergency Planning and Community Right-to-Know issues may be included in the state commission. At this time, all state emergency response commissions have been appointed and are in place.

The state commission must also have designated local emergency planning districts and appointed local emergency planning committees for each district. The state commission is responsible for supervising and coordinating the activities of the local emergency planning committees, for establishing procedures for receiving and processing public requests for information collected under other sections of Title III, and for reviewing local emergency plans.

This local emergency planning committee must include, at a minimum, elected State and local officials, police, fire, civil defense, public health professionals, environmental, hospital, and transportation officials as well as representatives of facilities subject to the emergency planning requirements, community groups, and the media. As soon as facilities are subject to the emergency planning requirements, they must designate a representative to participate in the planning process. The local committee must establish rules, give public notice of its activities

KEY DATES TO REMEMBER

November 17, 1986	EPA published Interim List of Extremely Hazardous Substances and Threshold Planning Quantities in Federal Register (Section 302, 303, 304)
November 17, 1986	EPA initiated comprehensive review of emergency systems (Section 305 (b))
January 27, 1987	Proposed format for Emergency Inventory Forms and reporting requirements published in Federal Register (Section 311 & 312)
March 17, 1987	National Response Team published guidance for preparation and implementation of emergency plans (Section 303(i))
April 17, 1987	State governors appoint State emergency response commissions (Section 301(a))
April 22, 1987	EPA published Final List of Extremely Hazardous Substance and Threshold Planning Quantities in Federal Register (Section 302, 303, 304)
May 17, 1987	Facilities subject to Section 302 planning requirements notify State emergency response commission (Section 302(c)). Interim report on emergency system review submitted to Congress (Section 305(b))
June 4, 1987	EPA published proposed toxic chemical release (i.e., emissions inventory) form (Section 313(g))
July 17, 1987	State emergency response commission designates emergency planning districts (Section 301 (b))
August 17, 1987 (or 30 days after designation of districts, whichever is sooner)	State emergency response commission appoints members of local emergency planning committees (Section 301 (c))
September 17, 1987 (or 30 days after local committee is formed, whichever is earlier)	Facility notifies local planning committee of selection of a facility representative (Section 303(d)(1))

(Continued on Page 4)

and establish procedures for handling public requests for information.

The local committee's primary responsibility is to develop an emergency response plan by October 17, 1988. In developing this plan, the local committee will evaluate available resources for preparing for and responding to a potential chemical accident. The plan must:

- identify facilities and extremely hazardous substances transportation routes;
- describe emergency response procedures, on-site and off-site;
- designate a community coordinator and facility coordinator(s) to implement the plan;
- outline emergency notification procedures;
- describe methods for determining the occurrence of a release and the probable affected area and population;
- describe community and industry emergency equipment and facilities and the identity of persons responsible for them;
- outline evacuation plans;
- describe a training program for emergency response personnel (including schedules); and
- present methods and schedules for exercising emergency response plans.

In order to assist the local committees in preparing and

reviewing plans, Congress required the National Response Team (NRT), composed of 14 federal agencies with emergency response responsibilities, to publish guidance on emergency response planning. This guidance, the "Hazardous Material Emergency Planning Guide," was published by the NRT in March 1987 and incorporated the emergency planning aspects of the CEPP Interim Guidance. It also replaced the "Federal Emergency Management Agency's Planning Guide and Checklist for Hazardous Materials Contingency Plans" (popularly known as "FEMA 10"). See Federal Register dated March 17, 1987.

The emergency response plan must be initially reviewed by the state commission and annually by the local committee. Regional Response Teams, composed of federal regional officials and state representatives, may review the plans and provide assistance to the local committees upon request.

Planning activities of local committees and facilities should be focused on, but not limited to, the 366 extremely hazardous substances published in the Federal Register. The list includes the threshold planning quantities (minimum limits) for each substance. Through rulemaking, EPA can revise the list and threshold planning quantities based on the toxicity, reactivity, volatility, dispersability, combustability or flammability of a substance.

Any facility that produces, uses, or stores any of the listed chemicals in a quantity greater than its threshold planning quantity is subject to the emergency planning requirements.

In addition, the state commission or the Governor can designate additional facilities, after public comment, to be subject to these requirements. Covered facilities must notify the state commission and local committee that they are subject to these requirements within 60 days after they begin, to produce, use, or store any of the extremely hazardous substances in threshold planning quantities.

Each state commission must notify EPA of all facilities subject to the emergency planning requirements, including facilities designated by the state commission or the Governor.

SECTION 304: Emergency Notification

Facilities must immediately notify the local emergency planning committees and the state emergency response commissions likely to be affected if there is a release of a listed hazardous substance that exceeds the reportable quantity for that substance. Substances subject to this requirement are the list of 366 extremely hazardous substances as published in Federal Register (40 CFR 355) and substances subject to the emergency notification requirements under CERCLA Section 103(a) (40 CFR 302.4).

Initial notification can be made by telephone, radio, or in person. Emergency notification requirements involving transportation incidents can be met by dialing 911, or in the absence of a 911 emergency number, calling the operator.

This emergency notification needs to include:

— the chemical name;

— an indication of whether the substance is extremely hazardous;

— an estimate of the quantity released into the environment;

— the time and duration of the release;

— whether the release occurred into air, water, and/or land;

— any known or anticipated acute or chronic health risks associated with the emergency, and where necessary, advice regarding medical attention for exposed individuals;

— proper precautions, such as evacuation; and

— name and telephone number of contact person.

Section 304 also requires a follow-up "written" emergency notice after the release. The follow-up notice or notices must:

- update information included in the initial notice, and
- provide information on
  - –actual response actions taken; and
  - –advice regarding medical attention necessary for exposed individuals.

If local committees are not yet formed, releases should be reported to appropriate local response officials.

KEY DATES TO REMEMBER (Continued)

October 15, 1987	Final format for Emergency Inventory forms and reporting requirements published in the Federal Register (Section 311 and 312)
	EPA published proposed regulation governing trade secret claims (Section 322 & 323)
October 17, 1987	Manufacturing facilities submit MSDS's or list of MSDS chemicals to State commission, local committee and local fire department (Section 311 (d))
December 17, 1987	EPA published a final rule delisting four chemicals from the Extremely Hazardous Substance List (Section 302)
February 16, 1988	EPA published final toxic chemical release regulations, form and instructions (Section 313 (g))
February 25, 1988	EPA published a final rule delisting 36 chemicals from the Extremely Hazardous substance list (Section 302)
March 1, 1988	Manufacturing facilities submit their hazardous chemical inventory forms to State commission, local committee and local fire department (Section 312(a)(2))
April 17, 1988	Final Report on emergency systems study due to Congress (Section 305(b))
July 1, 1988 (and annually thereafter)	Covered facilities submit initial toxic chemical forms to EPA and designated State officials (Section 313 (a))
August 23, 1988	Non-manufacturing facilities covered under the new OSHS expansion submit MSDSs or a list of chemicals over the first year threshold to the State commission, local committee, and local fire department (Section 311)
October 17, 1988	Local emergency planning committees complete preparation of an emergency plan (Section 303(a))
March 1, 1989 (and annually hereafter)	Covered facilities submit their emergency inventory forms to State commission, local committee, and local fire department (Section 312 (a)(2))

(Continued on Page 6)

SECTION 311-312: Community Right-To-Know Requirements

There are two community right-to-know reporting requirements within the Emergency Planning and Community Right-to-Know law. Section 311 requires that facilities which must prepare material safety data sheets (MSDS) under the Occupational Safety and Health Administration (OSHA) regulations submit either copies of its MSDSs or a list of MSDS chemicals to:

— the local emergency planning committee;

— the state emergency response commission; and

— the local fire department.

If the facility owner or operator chooses to submit a list of MSDS chemicals, the list must include the chemical or common name of each substance and must identify the applicable hazard categories. These hazard categories are:

- immediate (acute) hazard;
- delayed (chronic) health hazard;
- fire hazard;
- sudden release of pressure hazard; and
- reactive hazard.

If a list is submitted, the facility must submit a copy of the MSDS for any chemical on the list upon the request of

the local emergency planning committee or state commission. Also, EPA has established threshold quantities for hazardous chemicals below which no facility must report. The current thresholds are:

— for extremely hazardous substances: 500 pounds or the threshold planning quantity whichever is lower.

— for all other hazardous chemicals: before October 17, 1989: 10,000 pounds; on or after October 17, 1989: Zero pounds (Note: The zero threshold will be revised pending further study).

The initial submission of the MSDSs or a list of MSDS chemicals was due on October 17, 1987, or 3 months after the facility is required to prepare or have available an MSDS under OSHA regulations. Currently, OSHA regulations require only manufacturers and importers in Standard Industrial Classification (SIC) codes 20-39 to have or prepare MSDS for their chemicals. But, as of May 23, 1988, those OSHA regulations will expand to include all non-manufacturers (i.e., SIC codes 1-89). Thus, under the statute, facilities newly covered by the expanded OSHA regulations must submit MSDSs or a list of MSDS chemicals by August 23, 1988 or within three months after they become covered.

An MSDS or list must be provided when new hazardous chemicals become present at a facility in quantities above the established threshold levels.

A revised MSDS must be provided to update original MSDS if significant new information is discovered about chemicals.

Reporting under Section 312 requires a facility to submit an emergency and hazardous chemical inventory form to the local emergency planning committee, the state emergency response commission, and the local fire department. Hazardous chemicals covered by Section 312 are those for which facilities are required to prepare or have available an MSDS under OSHA's Hazard Communication Standard and which were present at the facility at any time during previous calendar year.

EPA has also established threshold quantities for Section 312 for hazardous chemicals below which no facility must report. Currently those thresholds are:

— for extremely hazardous substances: 500 pounds or the threshold planning quantity whichever is lower

— for all other hazardous chemicals:

January to December 1987 or first year of reporting...10,000 pounds.

January to December 1988 or second year of reporting ...10,000 pounds.

January to December 1989 or third year of reporting...zero pounds. (Note: The zero threshold will be revised pending further study.

The inventory form incorporates a "two-tier" approach. Under Tier I, facilities must submit the following aggregate information for each applicable hazard category.

- An estimate (in ranges) of the maximum amount of chemicals for each category present at the facility at any time during the preceding calendar year.

- An estimate (in ranges) of the average daily amount of chemicals in each category.

- The general location of hazardous chemicals in each category.

If requested by a local committee, state commission or local fire department, the facility must provide the following Tier II information for each substance subject to the request...

— The chemical name or the common name as indicated on the MSDS.

— An estimate (in ranges) of the maximum amount of the chemical present at any time during the preceding calendar year.

— A brief description of the manner of storage of the chemical.

— The location of the chemical at the facility.

— An indication of whether the owner elects to withhold location information from disclosure to the public.

EPA published a uniform format for the inventory forms on October 15, 1987. Since many state commissions have additional requirements or have incorporated the federal contents in their own forms, Tier I/II forms should be obtained from the state commission. Tier I information shall be submitted for covered manufacturing facilities on or before

March 1, 1988 and annually thereafter on March 1, for all covered facilities.

The Tier II form may be sent by the facility instead of a Tier I form. The public may also request Tier II information from the state commission and the local committee. The information submitted by facilities under Sections 311 and 312 must generally be made available to the public by local and state governments during normal working hours.

SECTION 313: Toxic Chemical Release Reporting

Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 requires EPA to establish an inventory of routine toxic chemical emissions from certain facilities. Facilities subject to this reporting requirement are required to complete a Toxic Chemical Release Form (Form R) for specified chemicals. The form must be submitted to EPA and those state officials designated by the Governor, on or before July 1, 1988, and annually thereafter on July 1. These reports should reflect releases during each preceding calendar year.

The purpose of this reporting requirement is to inform the public and government officials about routine releases of toxic chemicals in the environment. It will also assist in research and the development of regulations, guidelines, and standards.

The reporting requirement applies to owners and operators of facilities that have 10 or more full-time employees, that are in Standard Industrial Classification (SIC) codes 20 through 39 (i.e., manufacturing facilities) and that manufacture (including importing), process or otherwise use a listed toxic chemical in excess of specified threshold quantities.

Facilities using listed toxic chemicals in quantities over 10,000 pounds in a calendar year are required to submit toxic chemical release forms by July 1 of the following year. Facilities manufacturing or processing any of these chemicals in excess of 75,000 pounds in 1987 must report by July 1, 1988. Facilities manufacturing or processing in excess of 50,000 pounds in 1988 must report by July 1, 1989; thereafter, facilities manufacturing or processing more than 25,000 pounds in a year are required to submit the form. EPA can revise these threshold quantities and covered SIC codes.

The list of toxic chemicals subject to reporting consist initially of chemicals listed for similar reporting purposes by the States of New Jersey and Maryland. There are over 300 chemicals and categories on these lists. Through rulemaking, EPA can modify this combined list.

The final Toxic Chemical Release Form and regulations were published in the Federal Register on February, 16, 1988. The following information is required:

- The name, location and type of business;
- Off-site locations to which the facility transfers toxic chemicals in waste;
- Whether the chemical is manufactured (including importation), processed, or otherwise used and the general categories of use of the chemical;
- An estimate (in ranges) of the maximum amounts of the toxic chemical present at the facility at any time during the preceding year;
- Quantity of the chemical entering each air, land, and water annually;

KEY DATES TO REMEMBER (Concluded)

October 17, 1989	Manufacturing facilities submit MSDS or a list of chemicals over the final threshold to the state commission, local committee, and local fire department (Section 311)
August 23, 1990	Non-manufacturing facilities submit MSDS's or a list of chemicals over the final threshold to the State commission, local committee, and local fire department (Section 311)
June 20, 1991	Comptroller General Report to Congress on toxic chemical release information collection, use and availability (Section 313 (k))
October 17, 1991	EPA report to Congress on Mass Balance Study (Section 313 (l))

— Waste treatment/disposal methods and efficiency of methods for each waste stream;

— Optional information on waste minimization; and

— A certification by a senior facility official that the report is complete and accurate.

Reports are sent to EPA and designated state agencies. EPA must establish and maintain a national toxic chemical inventory based on the data submitted. The public must be able to access this national database, and obtain the data through other means.

In addition to the toxic chemical release reporting requirements, Section 313 authorizes EPA to arrange for a Mass Balance Study to be carried out by the National Academy of Sciences. The study will determine the feasibility, utility, and alternatives to collecting mass balance type information (throughout quantities) as a supplement to the currently required toxic release data. A report of this study must be submitted by EPA to Congress no later than October 17, 1991. An interim report from NAS is due to EPA in early 1989.

OTHER TITLE III PROVISIONS

Trade Secrets

Section 322 of the Emergency Planning and Community Right-to-Know law addresses trade secrets as they apply to emergency planning, community right-to-know, and toxic chemical release reporting. Any facility may withhold the specific chemical identity on these submittals. No trade secrets are allowed to be claimed under Section 304 of the statute. The withholder must show that:

- the information has not been disclosed to any person other than a member of the local planning committee, a government official, an employee of the withholder or someone bound by a confidentiality agreement; measures have been taken to protect the confidentiality; and the withholder intends to continue to take such measures;

- the information is not required to be disclosed to the public under any other Federal or State law;

- the information is likely to cause substantial harm to the competitive position of the withholder; and

- the chemical identity is not readily discoverable through reverse engineering.

However, even if chemical identity information can be legally withheld from the public, Section 323 provides for disclosure of this information to health professionals who need the information for diagnostic and treatment purposes or local health officials who need the information for prevention and treatment activities. In non-emergency cases, the health professional receiving the information must sign a confidentiality agreement with the facility and provide a written statement of need. In medical emergency situations, the health professional must, if requested by the facility, provide these documents as soon as circumstances permit.

Information claimed as a trade secret and substantiation for that claim must be submitted to EPA. More detailed information on the procedure for submitting trade secrecy claims can be found in the proposed trade secrets rule, published on October 15, 1987. Any person may challenge trade secret claims by petitioning EPA. The Agency must then review the claim and rule on its validity.

EPA published proposed regulations governing trade secret claims on October 15, 1987. The regulations covered the process for submission of claims, petitions for disclosure and the review process for petitions.

Title III Penalties

Section 325 of the Emergency Planning and Community Right-to-Know law addresses the penalties for failure to comply with the requirements of this law. Civil and administrative penalties ranging from up to $10,000 – $75,000 per violation or per day per violation can be assessed to facilities that fail to comply with the emergency planning (Section 302), emergency notification (Section 304), community right-to-know (Section 311 and 312), toxic chemical release (Section 313) and trade secret (Section 322 and 323) reporting requirements.

Also, criminal penalties of up to $50,000 or 5 years in prison may be given to any person who knowingly and willfully fails to provide emergency release notification. As well, penalties of not more than $20,000 and/or up to one year in prison may be given to any person who knowingly and willfully discloses

any information entitled to protection as a trade secret. In addition, Section 326 allows citizens to initiate civil actions against EPA, state emergency response commissions, and/or the owner or operator of a facility, for failure to meet the requirements of the Emergency Planning and Community Right-to-Know provisions.

Training Grants

Section 305 of the Emergency Planning and Community Right-to-Know law authorizes the Federal Emergency Management Agency to provide $5 million for each of fiscal years 1987, 1988, 1989, and 1990 for training grants to support State and local governments. These training grants are designed to improve emergency planning, preparedness, mitigation, response, and recovery capabilities. Such programs must provide special emphasis to hazardous chemical emergencies. The training grants may not exceed 80 percent of the cost of any such programs. The remaining 20 percent must come from non-Federal sources.

Emergency Systems Study

Under Section 305, EPA is required to review emergency systems for monitoring, detecting, preventing and warning of accidental releases of extremely hazardous substances at representative facilities that produce, use, or store these substances. EPA reported interim findings to Congress in May 1987 and is required to issue a final report of findings and recommendations to Congress. The report will include EPA's findings regarding each of the following:

— status of current technological capabilities to (1) monitor, detect, and prevent significant releases of extremely hazardous substances; (2) determine the magnitude and direction of the hazard posed by each release: (3) identify specific substances; (4) provide data on specific chemical composition of such releases: and (5) determine relative concentration of the constituent substances;

— status of public emergency alert devices or systems for effective public warning of accidental releases of extremely hazardous substances into any media; and

— technical and economic feasibility of establishing, maintaining, and operating alert systems for detecting releases.

The report must also include EPA's recommendations for:

- initiatives to support development of new or improved technologies or systems that would assist the timely monitoring, detection, and prevention of releases of extremely hazardous substances.
- improving devices or systems for effectively alerting the public in the event of an accidental release.

Public Access

Section 324 of the Emergency Planning and Community Right-to-Know law provides for public access to information gathered under this law. Under this section, all material safety data sheets, hazardous chemical inventory forms, toxic chemical release form follow-up emergency notices, and the emergency response plan must be made available during normal working hours. In order to inform the public of the availability and location of the information provided to the local emergency planning committee, the local committee must publish a notice annually in the local newspaper.

For more information, contact the Emergency Planning & Community Right-to-Know Information Hotline:

Hotline: 1-800-535-0202 (in Washington, D.C. (202) 479-2449)

Hours: 8:30 am - 4:30 pm (Eastern Time) Monday - Friday

This is NOT an emergency number.

CHEMICAL LISTS ASSOCIATED WITH EMERGENCY PLANNING/COMMUNITY RIGHT-TO-KNOW

LIST	SECTION	PURPOSE
List of Extremely Hazardous Substances (366 Substances) (40 CFR 355)	§302: Emergency Planning §304: Emergency Notification	• Facilities with more than estimated planning quantities of these substances must notify the State commission. • Initial focus for preparation of emergency plans by local emergency planning committees. • Certain releases of these substances trigger Section 304 notification to State commission and local committees.
Substances requiring notification under Section 103(a) of CERCLA [717 substances] (40 CFR 302.4)	§304: Emergency Notification	• Certain releases of these trigger Section 304 notification to State commission and local communities as well as Section 104(a) requirement for National Response Center notification.
Hazardous Chemicals considered physical or health hazards under OSHAs Hazard Communication Standard (29 CFR 1910, 1200) [This is performance standard, there is no specific list of chemicals.]	§304: Emergency Notification §311: Material Safety Data Sheets §312: Emergency Inventory	• Identifies facilities subject to emergency notification requirements. • MSDS or list of MSDS chemicals provided by covered facilities to state commissions, local committees and local fire departments.
Toxic Chemicals [329 chemical/chemical categories] (40 CFR 372)	§313: Toxic Chemical Release Reporting	• These chemicals are reported on an emissions inventory to inform government officials and the public about the release of toxic chemicals into the environment.

State Title III Status Report - National Summary

Region	State	LEPCs Appointed	LEPCs Functioning	302 Reports	Plans	304 Reports	311 Reports	312 Reports	313 Reports **	Information Requests	SERC Workyears	SERC Funding	LEPC Funding
1	Massachusetts	351	334		234	1,075	150	550	1,670	15	0	0	0
	Connecticut	157	157	850	102				1,327	6		100,000	1,000,000
	Rhode Island	8	8	230	8	3	500	270	425	8	1	62,000	0
	Vermont	9	9		0	many	many	many	165	0	1		
	New Hampshire	230	175	319	4	6			433	65	0	0	0
	Maine	16	16	170	10	0	302	82	352	11		0	0
	TOTAL	771	699	1,569	358	1,084	952	902	4,372	105	2	162,000	1,000,000
2	New Jersey	588	397	1,280	141	10,153	1,393	10,059	3,154	183	19	1,200,000	0
	New York (as of 9/9)	57	57	2,339	57		1,200	1,100	2,662				
	Puerto Rico	9	9	501	9		474	365	562	5	0	0	0
	Virgin Islands*								26				
	TOTAL	654	463	4,120	207	10,153	3,067	11,524	6,404	188	19	1,200,000	0
3	Washington, D.C.	1	1	16	1	16	21	6		50	2	65,000	0
	Delaware	1	1	277	1		800	650	240	12	2	42,500	0
	Maryland	25	25	850	15	30	1,500	520	688	21	1	60,000	0
	Pennsylvania	64	64	1,717	32		90,178	1,916	3,637	200	3	85,000	0
	Virginia	114	107	1,330	48	32	2,500	796	1,395	10	1	189,000	
	West Virginia	52	52		16				568	10	0	0	0
	TOTAL	257	250	4,190	113	78	94,999	3,888	6,528	303	9	441,500	0
4	Alabama	67	67		62				1,495	6			
	Florida	11	11	1,452	0	24	1,767	2,921	1,214	? 14/day ?	8	175,000	720,000
	Georgia *								2,110				
	Kentucky	120	50	1,100	90	147			1,294		0	0	0
	Mississippi	80	68	2,510	28	80	2,510	1,010	911	10	3	93,200	0
	North Carolina	101	101	1,377	99	14	2,420	3,664	2,624	174	2	450,000	0
	South Carolina	46	46	1,131	46	10	598	597	1,636	3		0	0
	Tennessee*								1,815				
	TOTAL	425	343	7,570	325	275	7,295	8,192	13,099	193	13	718,200	720,000
5	Illinois	76	72	2,646	45		2,950	3,211	4,166	very few			
	Indiana	92	87	2,000	62		2,000	2,430	2,615	very few			
	Michigan	96	91	1,263	16		2,450	1,285	3,260	very few			
	Minnesota	7	7	1,500	7		2,200	2,200	1,078	very few			
	Ohio	87	83	2,609	50		3,159	3,137	4,989	very few			
	Wisconsin	72	68	800	35		2,000	2,000	2,104	very few			
	TOTAL	430	408	10,818	215	0	14,759	14,263	18,212	very few	0	0	0

State Title III Status Report - National Summary

6	Texas	289	289	4,700	116	1,801	4,700	unknown	5,268	unknown		unknown	0
	Louisiana	64	64	695	38	1,228	2,000	6,551	1,779	8		some	some
	Arkansas	77	77	300	70	12	1,219	497	934	6	3	60,000	3,000
	Oklahoma	78	75	658	26	100	3,500	3,500	678	7	2	63,687	0
	New Mexico	31	28	420	20	0	500	200	125	1	2	86,000	some
	TOTAL	539	533	6,773	270	3,141	11,919	10,748	8,784	22	7	209,687	3,000
7	Kansas	105	105	2,639	81	38	2,288	552	668		14	750,000	
	Nebraska	10	5	1,300	1				414	10	2	100,000	0
	Iowa	99	60	1,260	21		1,313	1,326	986	2	0	0	0
	Missouri	65	50	719	44	very few	644	992	1,769	20		112,000	0
	TOTAL	279	220	5,918	147	38	4,245	2,870	3,837	32	16	962,000	0
8	Colorado	58	53	379	16	21	433	305	526	10	0	0	0
	Montana	56	40	250	26	5	300	300	157	0	0	0	0
	North Dakota	53	53	1,078	25	10	938	938	72	1	0	0	0
	South Dakota*								54				
	Utah	13	13	425	13	5	151	120	371	2	2	150,000	
	Wyoming	23	23	230	21	5	145	117	129	4	2	6,000	0
	TOTAL	203	182	2,362	101	46	1,967	1,780	1,309	17	4	156,000	0
9	Arizona	15	15	232	15	3	837	493	506	20		245,000	120,000
	California	6	6	1,800	6	180	2,600		5,472		23	1,200,000	
	Nevada	17	13	402	12	1		351	117	200	0	0	0
	Hawaii	4	4	200	0	3	300	150	116		1		0
	TOTAL	42	38	2,634	33	187	3,737	994	6,211	220	24	1,445,000	120,000
10	Washington	45	40	550	8	24	550	460	1,009	150		352,462	0
	Oregon	1	1	553	1	4	329	6,010	637	60	0	0	0
	Idaho	6	6	601	5	5	601	600	154	0	3	100,000	15,000
	Alaska	5	0	47	0	2	70	30	81	0	1	70	0
	TOTAL	57	47	1,751	14	35	1,550	7,100	1,881	210	4	452,532	15,000
	U.S. TOTAL	3,657	3,183	47,705	1,783	15,037	144,490	62,261	70,637	1,290	97	5,746,919	1,858,000
		* Data not received from State			** Data reported by facilities to EPA HQ								

STATEMENT OF
J. WINSTON PORTER
ASSISTANT ADMINISTRATOR FOR
SOLID WASTE AND EMERGENCY RESPONSE
U.S. ENVIRONMENTAL PROTECTION AGENCY
BEFORE THE
SUBCOMMITTEE ON SUPERFUND AND ENVIRONMENTAL OVERSIGHT
OF THE COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS
UNITED STATES SENATE

MAY 26, 1988

Mr. Chairman and members of the subcommittee, I am J. Winston Porter, Assistant Administrator for the Office of Solid Waste and Emergency Response. With me today are Victor Kimm, Deputy Assistant Administrator for the Office of Pesticides and Toxic Substances, and Frederick F. Stiehl, Associate Enforcement Counsel for the Office of Enforcement and Compliance Monitoring. I appreciate this opportunity to discuss the implementation of the Emergency Planning and Community Right to Know Act of 1986 (Title III).

I. OVERVIEW

It is a year and one-half since Title III was enacted. That particular action introduced into our nation a new relationship among government at all levels, federal, State and local, industry and the private sector, environmental and other public interest organizations, and the general public regarding information related to chemical safety. All of these parties have roles in program implementation.

The federal role is to provide national leadership, guidance, technical assistance and training through the States and to develop regulations and appropriate enforcement

mechanisms. States, through State Emergency Response Commissions, provide program leadership to ensure the development of an emergency planning structure and implementation of State and local Title III responsibilities and to provide training and technical assistance to communities. The local government role is to take the lead in carrying out emergency planning, community right to know and response functions. It is the responsibility of industry officials to ensure compliance with Title III reporting requirements and to actively participate with the SERCs and LEPCs, to ensure the effectiveness of this program, especially at the local level. Finally, the public role involves gaining increased awareness and understanding of chemical risks and supporting actions to increase public safety and protection of the environment.

This is not a typical Federal regulatory program. For example, EPA does not receive the majority of the required reports and Congress recognized that fundamental responsibility for implementation already rested with State and local governments. While Title III has programs that deal with both the routine and the accidental releases, they have very consistent and common threads. For example, each requires the receipt and analysis of substantial amounts of information at the State or local level regarding chemical risk to the community. The data, when properly assimilated may prompt significant State or local action using State or local authorities or even direct and persuasive dialogue with local industry. Each program

requires communication of risk in a rational and understandable manner to the local citizens. Each requires a relationship with the private sector producer or user of chemicals in a cooperative manner. Also, each can be benefited by an informed and knowledgeable citizenry at the local level.

Today, I would like to provide you with a status of Title III implementation activities at all levels, outline our enforcement strategy and discuss future plans. In the past nineteen months, we have met ten statutory deadlines, published seven substantive rulemakings, under Sections 302, 304, 311, 312 and 313, provided an interim report to Congress on the Review of Emergency Systems, (or Byrd Study), presented with FEMA a plan to Congress for administering Section 305(a) State training grants, and initiated an extensive outreach program. Let me begin with a detailed report on emergency planning and training.

II. EMERGENCY PLANNING AND TRAINING

In the law, the Governor of each State is required to appoint a State Emergency Response Commission (SERC) which is intended to be broad based. I am pleased to report that every state has designated a SERC.

These commissions under Section 302 requirements received notifications from facilities where any of 366 extremely hazardous substances were present in excess of threshold planning quantities established by the EPA. The commissions also defined

local emergency planning districts. Thirty-four States used county (or county/municipality) designations, 10 used regional boundaries and six States designated only one district state-wide. The commissions were further required to appoint, supervise and coordinate local emergency planning committees (LEPC) for these districts. The law was very specific about the membership of these LEPCs, involving most segments of the population---fire, police, civil defense, state and local officials, media, environmental groups. To date, all States have established local emergency planning districts. However, the number of districts per State and the functioning level of the committees varies greatly.

The end result of this effort is a comprehensive emergency plan which is due to be developed by these local emergency planning committees by October 17th of this year. EPA shares with others a concern over the quality of these plans in light of the short time allowed for development. Compliance rates for the emergency planning notification by industry is believed to be less than 50 percent of what States expected. This is due in large part to lack of awareness on the part of small businesses and others regarding their role in the planning process. On the other hand, planning guidance was published by the National Response Team for use by LEPCs within five months of enactment of the law and an additional technical guide explaining hazard analysis for extremely hazardous substances was published in January by EPA, FEMA, and DOT. Work is currently underway on an

expansion of this guide to address hazard analysis for all hazardous materials (e.g., explosives, flammables,etc.). This expanded guide will be published by the full National Response Team and should be available this fall.

Concerning extensions of the statutory planning deadline under Section 303, EPA is encouraging State commissions and local planning committees to consider the October deadline the first round of the planning process. The goal for this October should be to develop the best possible plans given the short time frame and other constraints. Title III makes clear that the planning process is iterative and continuous, with updates, revisions and testing each year. EPA will work with other Federal agencies to assist SERCs and LEPCs to improve the process and plans during each planning cycle.

We have already learned of several areas which got an early start and are near or at completion now. One of the forerunners is the community of Hopewell, Virginia.

From the outset of the voluntary Chemical Emergency Preparedness Program (CEPP), which preceded Title III, the accident preparedness, prevention, response and mitigation program in the Environmental Protection Agency (EPA) has focused on local planning and local action as its core. Historically, in the area of routine releases of toxic chemicals into one or another of the waste streams, the focus has been national legislation and regulation with full recognition that one of the weaknesses in implementation was the lack of direct local

community involvement. As a general rule, there is no carefully constructed, durable, and effective network of institutions at the local level and the program has traditionally been implemented by State organizations.

Title III recognized these structural issues and required the creation of institutions at the local level to specifically deal with the full range of toxics problems -- accidental and routine-identified under the emergency response and right-to-know programs. In the long term, these new organizations -- State commissions and local planning committees -- can provide a structure for coordinating State and community actions for prevention, preparedness, and response to both accidental and routine chemical releases.

Each SERC is also required to notify EPA of the facilities that are subject to the planning requirements of Title III. EPA Regional Offices have received these notifications from States. EPA will use this information to work with States to identify priority areas and compliance patterns.

While EPA is not directly responsible for administering the Title III training grants under Section 305(a), we have been actively working with FEMA to ensure effective use of these grant monies. FEMA and EPA developed a plan for distributing the grants which was submitted to Congress in June of 1987. We serve on the Interagency Technical Review Panel, along with OSHA, ATSDR and FEMA, which provided recommendations to FEMA for

distributing the grants in 1987 and 1988. The State Commissions are responsible for submitting States' proposals for the grants.

III. COMMUNITY RIGHT TO KNOW REPORTING

The Community Right-to-Know provision of the law builds on the OSHA Hazard Communication Standard--the worker right to know program. There are two reports which facilities covered by this standard must provide to State commissions, local planning committees and fire departments.

Material Safety Data Sheets (MSDS) or a list of MSDS chemicals were required to be submitted beginning October 17, 1987. Additionally, an annual inventory report was due on these same chemicals beginning March 1 of this year. Again, compliance levels are believed by States to be less than 50% of what is expected. OSHA's expansion of the worker right-to-know program will significantly impact reporting under Title III later this year.

Of primary concern is the information management problems for the receiving entities. Currently about 350,000 facilities are subject to the OSHA standard. After the Occupational Safety and Health Administration (OSHA) expansion of coverage, there is potential for reporting by 4.5. million facilities on some 500,000 products. EPA established thresholds of 10,000 pounds for the first two years of reporting, except for the list of extremely hazardous substances, which has a lower threshold. We are currently studying the appropriate level for a permanent

third-year threshold. Our goal in setting thresholds is to strike a balance between information needed to protect public safety and information overload which could mask community hazards. However, public access to information below the thresholds will be preserved.

Perhaps this is the time to discuss EPA assistance to SERCs and LEPCs regarding information management activities associated with Title III. EPA has scheduled five information management workshops for SERCs and LEPCs this summer. The primary purpose of these workshops is to provide a forum for the sharing of information on systems developed and used by these various constituencies for handling of data. Some states have designated a particular location to design an information system for state-wide use. The Seattle fire department has been instrumental in the Department of Commerce National Oceanic and Atmospheric Administration's (NOAA) development of the CAMEO system which is an information management system that can also be helpful in planning for and responding to a chemical accident. While this system is in the public domain, there are a great many other systems available in the private sector to manage the kind of data used in Title III implementation. We're trying to foster the exchange of States' and communities' experiences in this area.

Concerns have also been raised regarding the use of MSDS since there are numerous MSDS for the same chemical, the format is not standardized and there is doubt that the technical information can be easily understood by the LEPCs and the public.

EPA is consulting with OSHA, Chemical Manufacturers Association, and the American Society of Testing Materials on these issues.

IV. TOXIC CHEMICAL RELEASE INVENTORY

Regarding the Toxics Release Inventory, or TRI data required under section 313 Title III, I believe we have made some major achievements given our short deadlines. As you know, the TRI regulations list over 300 chemicals and 20 chemical categories which are subject to the annual reporting requirements. The TRI is a unique environmental data base because it collects data on emissions to the air, water, and land and will provide the Agency, state and local governments, industry and the public unique opportunities in the use of the data. EPA's efforts to implement TRI have focussed primarily on the following objectives:

1. design a data collection form which accurately incorporates the breadth of information which Congress mandated be collected;
2. carry out an outreach program to contact as many manufacturers as possible who are subject to the reporting requirement;
3. provide technical guidance to industry regarding how to develop accurate answers to the questions on the report form;
4. design an efficient computer-based data system to house the data and to catch obvious errors in the submitted data;

5. provide the data to the public both electronically and by other means in a manner which promotes easy access and use;
6. work with our state and local colleagues to help them prepare for answering questions from the public regarding the data; and
7. determine how EPA itself can make the best use of the data in its own programs.

Let me elaborate on how we have worked to achieve these objectives. EPA's reporting form and proposed rule, which were carefully crafted to follow the Congressional blueprint for the content of the data base, were published by the June 1, 1987 deadline. The final rule, form and instructions were published on February 16, 1988, meeting the goal of providing final requirements and other guidance in time for the regulated community to effectively comply by the July 1, 1988 deadline.

EPA has also taken a number of steps to notify companies of their reporting obligations and to provide technical assistance to facilitate accurate reporting. The Agency developed an information brochure and mailed it to over 300,000 potentially covered facilities. We developed and are distributing a videotape to assist in reaching smaller facilities that may need to report. We developed a detailed training program for regional personnel and the regulated community on the 313 reporting rule's provisions and techniques for release estimation. The Agency is also providing technical support through an information hotline service that is answering over 300 section 313 calls per day. We have also developed a detailed

technical guidance document for estimating releases and waste treatment efficiencies. We have developed 11 industry specific guidance documents for industries such as electroplating operations, textile dying, etc., and 6 more will soon be available.

The Agency has also taken steps to assure that the data received from the reports are effectively entered into the data base and that a proper management system for the data is in place. The start-up of the data processing center is on schedule and has begun limited data entry activities. Design and programming for the data base has been completed and is being tested. Because we are concerned about the quality of the data which will be reported, we are incorporating automatic "edit checks" into the computer program to detect obvious omissions and errors. This will allow notices of non-compliance to be generated by the computer for major errors and sent to the submitting company for correction.

The Agency has taken a number of steps to provide public access to the TRI database. In early March 1988, EPA issued and distributed a report regarding options to make TRI Data Base accessible to the public. A public meeting was held on March 30, 1988 to present the options analysis and EPA's recommended approach for making TRI data publicly available on a database. We decided to proceed with an Interagency Agreement with the National Library of Medicine and to encourage private vendors to put the data on thin systems as well. We believe this is the

best option based primarily on two salient features: cost to the user of the NLM system (estimated at $18.00 to $25.00/hr.); and access to NLM's multiple complementary toxicological and other health and safety data files. We expect to sign the EPA/NLM interagency agreement shortly. Subsequently, we expect the TRI public database will be available in Spring 1989, following the procurement of the computer equipment and the requisite programming by NLM. As required by Title III, EPA will also use "other means" of distributing the data. Among the options being evaluated are computer generated microfiche, and CD - ROM (compact disks which can be searched by computer).

The release of the TRI data will undoubtedly stimulate many questions from the public, ranging from "What do these releases mean for my health and the health of my community?" to "What type of controls have been imposed on these releases and can more be done?" Environmental and health officials at all levels of government will be the recipients of these questions which, in one sense are really no different from questions we all receive today, but which are likely to require more detailed and specific answers. Within available resources we are working to provide state and local officials with support for their inevitable role in answering these questions, building on their traditional role of answering this type of question from the public. We recognize, however, that this type of question from the public adds a new burden on their personnel which they have not anticipated. We therefore need to be modest in our

expectations of their ability to respond. For their use in the immediate future, we are preparing: a one-page citizens' brochure that answers questions such as what is the Toxic Release Inventory, and how additional information may be obtained; a question and answer document to be given to Regions, State and local officials for use in assisting them in answering questions which they may receive from the general public; and chemical fact sheets (developed by the state of New Jersey) covering the basic health hazards of the chemicals listed in section 313 of Title III of SARA. By July of 1988, 170 of the 300 New Jersey fact sheets will be completed and available for distribution. The remaining fact sheets will be completed by early 1989.

Use of the data within the Agency, across the various media programs, is also a high priority for EPA. We have an active TRI Task Force composed of Agency managers which is focusing on the use of the data by EPA. Among the uses being studied are the prioritizing of regulatory and enforcement activities in all of our media programs.

In summary, we have worked hard to make the Toxic Release Inventory an effective new source of information for the public and for environmental professionals in EPA and in State and local agencies. We have developed an efficient form to collect the data, attempted to notify as many manufacturers as possible about the requirements of the law and how to provide accurate data, and set up the internal structure to receive and computerize the data. We are making a special effort to try to understand the

needs of potential users and to provide "user-friendly" access to the data. We now await the arrival of the data and the beginning of this new program which we are sure will prove to be an important one for both the public and for EPA.

V. OUTREACH ACTIVITIES

"Getting the word out" is one of the most difficult problems we faced over the last year and a half. To meet the somewhat unprecedented outreach requirements of Title III, the Agency is working to help prepare states and localities to respond to inquiries about the law and the data, educate the public about the requirements and opportunities under Title III, help prepare them to access and understand the data being reported, and work with industry to ensure compliance.

An Agency-wide Outreach Subcommittee, including a designated Title III Outreach Coordinator from each region, represents offices involved in implementing and communicating the Title III program. It was designed primarily to ensure coordination and consistency, support the regions in their outreach efforts, share information and maximize the benefits for public information/ education. It's important to note that, while the Outreach Subcommittee was formed to assure coordination and consistency, outreach is an integral part of the overall implementation plan for this program. Those involved in managing and implementing this program are sensitive to the need for effective

communication and interaction with all parties involved in Title III, especially the public.

Together, HQ and regional communications coordinators, working closely with program managers are: targeting audiences; tailoring specific messages to those audiences; responding to requests for speakers; identifying opportunities for senior managers to incorporate Title III into presentations and helping them prepare for those presentations; establishing ongoing communications contact with the SERCs; establishing and maintaining a dialogue with interested and involved external groups; identifying needed public information materials; setting priorities for developing those materials; ensuring that materials being provided to the public are consistent, clear, accurate and timely. Regional and HQ Outreach Coordinators work closely with program managers to provide support and counsel as they develop their implementation plans and in most instances, provide a regular forum for information-sharing and problem identification.

VI. ENFORCEMENT

Having established these outreach efforts to inform the regulated community, we are now turning our attention to enforcement. Title III authorizes the Federal government, state and local governments, and citizens to bring legal action against owners or operators of facilities for their failure to comply with Title III. Title III gives States, local governments, and

citizens the right to information on hazardous chemicals used in their areas and the tools to access that information should an owner or operator fail to meet the statutory reporting obligations. State and local involvement in enforcement of Title III is essential to its successful implementation.

In trying to meet the challenge of enforcing Title III at the Federal level, two distinct approaches are being taken. First, under Section 313, the Agency is receiving data submissions directly from facilities that are required to report. Using submitted reports, the data will be screened for errors, i.e., missing information. Computer generated Notices of Noncompliance will be issued to those with major errors based on these data screens. The Agency plans to identify non-reporters by identifying companies likely to be subject to section 313, comparing the information against the list of those who reported, and conducting inspections at facilities which failed to report to verify that they are subject. EPA plans to identify and penalize non-reporters.

A second approach is being used for enforcement of the reporting requirements under Sections 302, 303, 304, 311, and 312. Since these reports are sent directly to States, LEPCs, and fire departments, EPA will be depending on States to carry much of the routine enforcement load. The Agency will concentrate its resources on enforcement follow-up to violations of the accidental release notification requirements of CERCLA Section 103 and SARA 304. Section 304 of Title III emergency release

notification builds on the release reporting to the National Response Center which is required under CERCLA. Facilities that spill any of approximately 700 CERCLA hazardous substances or any of the Title III extremely hazardous substances must notify SERCs and LEPCs and provide a written follow-up report under Section 304. It is difficult to estimate compliance rates under this section because many states and localities had emergency notification requirements in place prior to passage of Title III. Title III cases are currently being developed in Regions IV and V in response to requests from States and local committees.

EPA will combine CERCLA Section 103 and SARA Section 304 enforcement whenever possible and, in developing these cases, EPA will routinely coordinate with the appropriate SERC to incorporate other violations of Title III into the case. Additionally, EPA will take enforcement action on specific cases referred by the SERCs for violations of Sections 302, 303, 311, and 312. However, EPA believes that states and locals have the primary responsibility for enforcement of these Sections. SERCs and LEPCs have the statutory authority to enforce Sections 302, 303, 311, and 312 through civil actions.

We believe that the enforcement program currently under development by the Agency will be sufficient to address the demand. Current demand from SERCs for EPA enforcement has been limited to a few isolated cases. We do not anticipate a large number of requests to intervene on behalf of the States. In fact, EPA expects that many more States will incorporate the

Federal reporting requirements into State law and take ownership of the program and its enforcement.

VII. FUNDING AND RESOURCES

The State commissions, local planning committees and fire departments continue to assert the need for Federal funding of Title III activities. Nonetheless, many have managed to generate resources. In a recent poll conducted nationally by the State of Kansas, of the nineteen respondent states, thirteen had approved significant state funding for current and/or future Title III operations. In addition, four states have implemented fee structures under the law, and eight other states have pending legislation for such systems.

Several States appropriated money for Title III in 1987. North Carolina and Kansas led the country in Title III spending, each appropriating approximately half a million dollars. This year and next, Kansas is spending general revenues for Title III, but that will soon change. Since January of this year, reporting facilities have been paying a fee with each filing ranging from $12 to $46.

VIII. FUTURE DIRECTIONS

While preparing to respond to chemical accidents is important, preventing them in the first place is even more crucial. It is therefore important that we place more emphasis on prevention activities. The Section 305(b) review of emergency

systems, which should be submitted to the Congress shortly, not only identified areas where improvements in technology are needed, but also highlighted the need for management commitment and support, and information sharing, aimed at actual prevention of chemical accidents. We plan to continue the dialogue established with industry, trade and professional organizations, states, and environmental groups regarding needs in the areas of hazard evaluation, prevention, detection, and monitoring technologies, and public alert devices via the continuation of technical panels formed as part of the study. We will work closely with all of these groups to fill gaps in research and development and information in these areas. To this end, we will continue to gather and exchange information on the causes of accidents and approaches to prevent them, sharing it domestically and internationally and emphasizing distribution to small companies, users and distributors, SERCs and LEPCs.

As we work to strengthen the capabilities of the SERCs and LEPCs, we will include guidance and technical assistance in the areas mentioned above in an effort to enhance an understanding of the hazards of chemicals and chemical processes and thus promote a dialogue with industry that will result in local actions to decrease the risk of chemical accidents. We will also place a renewed emphasis on the conduct of chemical process safety audits and conduct an effort to strengthen agency and state capability in these areas.

We expect to complete the major rule-making activity next month with the final rule on trade secret provisions. In addition, EPA, in collaboration with other Federal agencies, will continue to emphasize our support to SERCs and LEPCs by providing guidance, technical assistance and training through our Regional offices. The effectiveness of this structure is essential to the success of the Title III program. Planned support includes additional guidance materials and updates/revisions of existing documents; technical assistance in plan development, hazards analysis, exercising plans, information management, risk communication, compliance and enforcement, outreach, and accident prevention; expansion of existing training courses and development of new training courses and materials. We will continue to support national and regional conferences and workshops to share information on program successes and problems and work with the National Governor's Association to share information among States and consult with states on program implementation. For example, NGA and EPA are sponsoring a national SERC/LEPC conference on June 8 through June 10.

IX. CONCLUSION

In conclusion, I would like to indicate that we view Title III as the beginning rather than the end of a national chemical safety program. It is an extraordinary legislative opportunity, but also carries some important burdens for individuals, governments, and industries. As a result of the new information

flow, data will have to be developed, provided, received, assimilated, managed, disclosed, explained, understood, stored, interpreted, used and acted upon by many people, some of whom have no familiarity with that kind of data, and by many people and organizations who didn't have or don't have much time to prepare to deal with these issues.

The Pampa, Texas Fire Department shares our view that the legislation provides an opportunity rather than a burden. In a recent letter to the International Association of Fire Chiefs, they explained how they are implementing Title III by building on an existing program in which every business in the city is inspected annually for fire hazards. During the course of inspections, a hazardous materials response team member surveys the business to determine reportable chemicals, informs the owner or operator about Title III and assists them with reporting procedures, this not only helps in planning for possible hazardous materials incidents, but also enhances the public relations of the fire department. Many other fire departments across the country are similarly taking enlightened approaches to the Title III program to increase public safety and environmental protection.

The result we all hope for from all of this isn't a single product or written plan at all, but a process, one of an informed community grappling with the management of the presence of chemicals. If we succeed, we should save some lives.

Mr. Chairman, that concludes my testimony for today. Thank you for the opportunity to testify on this very important program. If you have any questions, I would be happy to answer them.