SUMMARIES

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FOREWORD

The U. S. Environmental Protection Agency, under a series of documents exchanges with foreign governments and international organizations, is collecting environmental reports from around the world. This publication, a monthly announcement of documents received by EPA under the exchanges, is distributed to EPA staff and is available to others through the National Technical Information Service (NTIS). See inside cover for subscription rates.

INDEX SYSTEM

In each issue, the document summaries are grouped by subject, by category of document, and by country. Subject areas, which reflect EPA programs, include:

air	pesticides
water	toxic substances
noise	radiation
solid wastes	land use

Categories of documents are:

1. general
2. legal/legislative/regulatory (LR)
3. planning/management/organization (PM)
4. scientific/technical (ST)
5. socio/economic (SE)

Summaries covering more than one subject are cross-referenced in the Table of Contents. Abstracts appear only once, however, under the primary subject heading marked by an asterisk. For example a British report on "Disposal of Awkward Household Wastes" is indexed under pesticides, solid wastes, water, and toxic substances. The summary appears only once, under solid wastes, but the report title is listed with the EPA ID number under each of the other headings.

Explanation of the codes and abbreviations used with each summary is on page ii.

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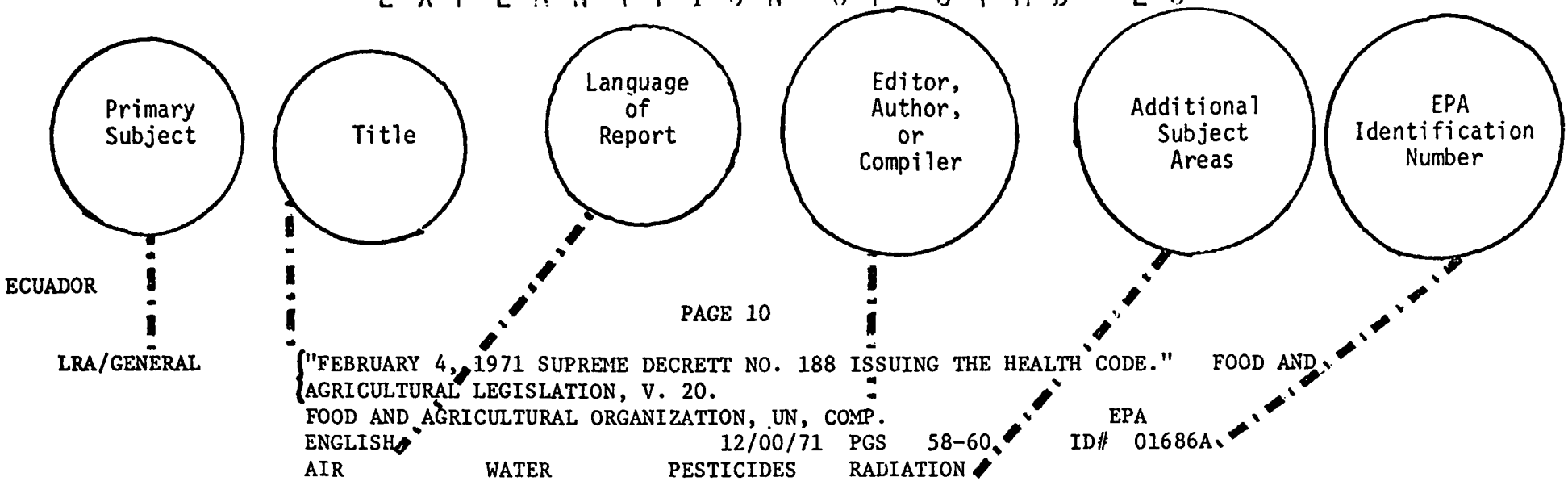
The documents cited in this publication are housed in the reference collection of the EPA Headquarters Library.

EXPLANATION OF SYMBOLS



THIS COMPREHENSIVE HEALTH DECREE ASSIGNS TO THE EXECUTIVE, ACTING THROUGH THE MINISTRY OF PUBLIC HEALTH, RESPONSIBILITIES IN THE POLITICAL, SOCIAL, AND ECONOMIC SPHERES AS REGARDS PUBLIC HEALTH AND THE ENVIRONMENT AND TO THE NATIONAL HEALTH DIRECTORATE RESPONSIBILITIES IN THE TECHNICAL AND ADMINISTRATIVE SPHERE AND IN THE FORMULATION OF DIRECTIVES AND IN ENFORCEMENT AND EVALUATION.

LRA - LEGAL TEXT

LRB - LEGAL COMMENTARY

Each original law has the letter A following the EPA identification number. Additional directly related legislation will have the same identification number and a subsequent alphabetical letter.

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AIR

CAMERON

"CHARACTERISTICS OF ATMOSPHERIC POLLUTION IN YAOUNDE DURING THE LONG DRY SEASON 1974-75: CONSEQUENCES FOR HEALTH." BULLETIN OF WHO. VOL. 54. NO. 5
PELASSY, PIERRE EPA
ST( ) FRENCH 00/00/76 PGS 507-512 ID# 04704A

DUST CONCENTRATIONS IN YAOUNDE, CAMEROON WERE STUDIED DURING THE 16-WEEK DRY SEASON OF 1974-75. THE DISTRIBUTION OF THESE CONCENTRATIONS FOLLOWS A LOG-NORMAL PATTERN. APPLICATION OF MCGUIRE'S EQUATION MAKES IT POSSIBLE TO EVALUATE THE PROBABLE MAXIMUM MEAN CONCENTRATION OVER 24 HOURS, WHICH IS THE MOST COMMONLY USED PERIOD FOR SETTING AIR QUALITY STANDARDS. DESPITE THE ABSENCE OF ANY SIGNIFICANT INDUSTRIALIZATION, IT WAS FOUND THAT, DURING 9 PERCENT OF THE STUDY PERIOD, ATMOSPHERIC DUST POLLUTION WAS ABOVE THE PRIMARY STANDARD LAID DOWN BY U.S. FEDERAL REGULATIONS AS THE LEVEL CONSIDERED NECESSARY TO PROTECT PUBLIC HEALTH, AND DURING 35 PERCENT (40 DAYS) OF THE STUDY PERIOD, IT EXCEEDED THE U.S. SECONDARY STANDARD NECESSARY FOR THE PROTECTION OF THE PUBLIC WELL-BEING AGAINST EXPECTED HARMFUL EFFECTS. RESULTS INDICATE THAT ANY FUTUTE INDUSTRIALIZATION CAUSING HARMFUL EMISSIONS SHOULD BE SUBJECT TO RIGOROUS CONTROL. (AUTHOR ABSTRACT.)

DENMARK

"MARCH 17, 1976 ORDER NO. 121 ON CHEMICAL WASTE." LOVTIDENDE FOR KONGERIGET DANMARK. PART A. NO. XVII
EPA
LR(A) DANISH 03/27/76 PGS 320-324 ID# 01445B
*WATER SOLID WASTE TOXIC SUBS

EUROPEAN COMMUNITIES

PATHWAY OF MERCURY AND THE IMPACT OF DIFFERENT ENVIRONMENTAL POLICIES ON THE FUTURE MERCURY CONTENT IN SOIL, AIR AND SEDIMENTS IN EUROPE. EUR 568E
VAN ENK, R.H., AND P. ZEGERS EPA
ST( ) ENGLISH 00/00/77 PGS 1-61 ID# 04699A
*TOXIC SUBS WATER

GERMANY,FED REP OF

POLLEN UND SPOREN ALS LUFTVERUNREINIGUNGEN (POLLEN AND SPORES AS AIR POLLUTANTS). BERICHTE 1/77
STIX, ERIKA EPA
ST( ) GERMAN 00/00/77 PGS 1-27 ID# 04732A
ALSO PMB

IN 1974 THE FEDERAL ENVIRONMENTAL AGENCY ASSUMED CONTROL OF A NETWORK OF MEASURING STATIONS MONITORING ANTHROPOGENIC PARTICLES IN THE AIR AS WELL AS AN AEROBIOLOGICAL EVALUATION OFFICE THAT MEASURES AIR POLLUTANTS OF BIOLOGICAL ORIGIN IN SEVERAL AREAS OF MIDDLE EUROPE. THIS PUBLICATION OF THE ENVIRONMENTAL AGENCY, SUBTITLED "AEROBIOLOGY AND SOME OF ITS AREAS OF APPLICATION," DESCRIBES AEROBIOLOGICAL RESEARCH IN THE FEDERAL REPUBLIC AND DISCUSSES MAJOR GOALS FOR THE YEAR 1977. A LIST OF PUBLICATIONS OF THE AEROBIOLOGICAL EVALUATION OFFICE COMPLETES THE TREATMENT. THE INTRODUCTION INDICATES SOME OF THE TYPES OF PROBLEMS INVESTIGATED BY AEROBIOLOGY. FOR EXAMPLE, THE GROWING NUMBER OF PERSONS SUFFERING FROM ALLERGIES IN INDUSTRIAL NATIONS LEADS TO THE ASSUMPTION THAT AIR QUALITY CAN NEGATIVELY INFLUENCE MAN'S REACTION TO POLLEN AND SPORES. AIR POLLUTANTS MAY ALSO HAVE AN EFFECT ON THE CAPACITY OF BIOLOGICAL ORGANISMS IN THE AIR TO GERMINATE.

AIR

GERMANY,FED REP OF

PRELIMINARY STUDIES ON THE MUNICIPAL ENGINEERING RESEARCH PROGRAMME.
ENVIRONMENT CANADA TRANSLATION OOENV TR-1230
GERMANY,FED OF. MINISTRY OF RESEARCH AND TECHNOLOGY EPA
ST( ) ENGLISH 00/00/77 PGS 1-31 ID# 04734A
ALSO PMB
*SOLID WASTE WATER NOISE

GREAT BRITAIN

THE PRACTICAL APPLICATION OF A PROPOSED UNIFORM TECHNIQUE FOR THE ASSESSMENT OF SMOKE LEAKAGE FROM COKE OVENS DURING CARBONIZATION. CARBONIZATION RESEARCH REPORT NO. 29
BRITISH CARBONIZATION RESEARCH ASSOCIATION EPA
ST( ) ENGLISH 06/00/76 PGS 1-27 ID# 04748A

A RECENTLY PROPOSED UNIFORM TECHNIQUE FOR THE ASSESSMENT OF SMOKE LEAKAGE FROM COKE OVENS DURING CARBONIZATION WAS APPLIED IN SOME SIX COKING PLANTS CONSIDERED TO BE REPRESENTATIVE OF THOSE AT PRESENT IN OPERATION IN THE U.K. THIS REPORT DESCRIBES THESE TRIAL APPLICATIONS OF THE TECHNIQUE AND ANALYZES THE DATA COLLECTED. THE SMALL AMOUNT OF EXPERIENCE GAINED IN THE ON-PLANT INSSTRUCTION OF PERSONNEL IN THE TECHNIQUE IS ALSO DISCUSSED. IT IS GENERALLY CONCLUDED THAT THE METHOD OF ASSESSMENT IS UNIVERSALLY APPLICABLE SINCE NO PROBLEMS WERE ENCOUNTERED WITH THE MONITORING TECHNIQUE OVER THE BROAD SPECTRUM OF PLANTS VISITED AND SURVEYED. THE TECHNIQUE IS REGARDED AS A USEFUL AID TO POLLUTION CONTROL, ENABLING CHANGES IN SMOKE LEAKAGE TO BE REALISTICALLY FOLLOWED AND ASSESSED.

INTERNATIONAL

BOOKS ON AIR POLLUTION, NOISE AND SOLID WASTES
NAT'L. CENTER FOR SCIENTIFIC AND TECHNICAL DOCUMENTATION EPA
ST( ) ENGLISH 09/10/76 PGS 1-151 ID# 04700A
ALSO PMB, LRB
NOISE SOLID WASTE

THIS LIST OF BOOKS, MONOGRAPHS, AND REPORTS IS THE SECOND IN A SERIES OF BOOK-GUIDES ON ENVIRONMENTAL PROBLEMS. OVER 1000 FULL REFERENCES IN THE FIELDS OF AIR POLLUTION, NOISE, AND SOLID WASTES ARE CITED. THESE ARE CLASSIFIED, WITHIN EACH OF THE MENTIONED FIELDS, ALPHABETICALLY BY AUTHOR OR INSTITUTION. A SUBJECT INDEX IS PROVIDED FOR EACH FIELD. AN ADDENDUM, WITH REFERENCES TO ENVIRONMENTAL LEGISLATION, IS ALSO INCLUDED. AN AUTHOR INDEX COMPLETES THE PUBLICATION.

AIR

INTERNATIONAL

PAPER ABSTRACTS FOR THE FOURTH INTERNATIONAL CLEAN AIR CONGRESS (16 - 20 MAY, 1977)
JAPANESE UNION OF AIR POLLUTION PREVENTION ASSOCIATIONS EPA
ST( ) ENGLISH 03/15/77 PGS 1-273 ID# 04707A
ALSO PMB, SE

THIS PUBLICATION, COMPILED BY THE JAPANESE UNION OF AIR POLLUTION PREVENTION ASSOCIATIONS, CONTAINS THE ABSTRACTS OF 273 OF THE 360 PAPERS PRESENTED AT THE FOURTH INTERNATIONAL CLEAN AIR CONGRESS HELD IN TOKYO DURING MAY 1977. THE ABSTRACTS ARE GROUPED UNDER SIX SUBJECT AREAS WHICH CORRESPOND TO THE TECHNICAL SESSIONS OF THE CONGRESS. THESE SUBJECT AREAS ARE: 1) THE MEDICAL AND BIOLOGICAL EFFECTS OF AIR POLLUTANTS (36 ABSTRACTS); 2) METEOROLOGICAL AND DIFFUSION ASPECTS OF POLLUTANTS (52 ABSTRACTS); 3) AIR POLLUTION MEASUREMENTS (28 ABSTRACTS; 4) RESEARCH AND SURVEY FOR AIR POLLUTION (50 ABSTRACTS); 5) AIR POLLUTION CONTROL TECHNOLOGY (55 ABSTRACTS); AND 6) AIR POLLUTION CONTROL PALNNING (52 ABSTRACTS. MOST ABSTRACTS ARE IN ENGLISH WITH THE TITLE GIVEN IN BOTH ENGLISH AND FRENCH. AN AUTHOR INDEX IS APPENDED TO THE VOLUME.

JAPAN

"GOVERNMENT-SET NOX EMISSION CURBS NOT MET BY PASSENGER CARS RUNNING IN TOKYO."
JAPAN TIMES
EPA
LR(B) ENGLISH 07/09/77 PGS 2 ID# 04762A

ACCORDING TO A SURVEY TAKEN BETWEEN APRIL AND MARCH 1976 BY THE TOKYO BUREAU OF ENVIRONMENTAL PROTECTION, PASSENGER CARS MADE TO COMPLY WITH THE GOVERNMENT'S 1976 AUTO EMISSION CONTROL STANDARDS EMIT NITROGEN OXIDES ABOVE THE OFFICIAL TOLERANCE LEVELS WHEN THEY OPERATE IN TOKYO. UNDER THE 1976 STANDARDS, PASSENGER CARS OF LESS THAN 1000 KG EQUIVALENT INERTIA WEIGHT, OR THE CAR'S ACTUAL WEIGHT PLUS 110 KG, ARE TO LIMIT EMISSIONS OF NITROGEN OXIDES TO 0.6 GRAMS OR LESS PER KM. WHEN DRIVEN UNDER THE TEN-MODE TESTING METHOD ADOPTED BY THE MINISTRY OF TRANSPORT, THESE CARS DISCHARGE AN AVERAGE 0.519 GRAMS NITROGEN OXIDES PER KM. IN TOKYO, HOWEVER, THE SAME CARS EMITTED AN AVERAGE 0.793 GRAMS NITROGEN OXIDES PER KM, 0.194 GRAMS ABOVE THE OFFICIAL TOLERANCE LEVAL. AS A RESULT, THE TOKYO BUREAU WILL URGE THE NATIONAL ENVIRONMENT AGENCY TO RE-EXAMINE AND IMPROVE THE TESTING MODE USED TO DETERMINE CONFORMANCE TO NITROGEN OXIDES STANDARDS.

SOUTH AFRICA

STATISTICS ON SMOKE AND SULPHUR DIOXIDE POLLUTION IN SOUTH AFRICA. PERIOD: OCTOBER 1974 TO SEPTEMBER 1976. CSIR SPECIAL REPORT APRG/77/3
KEMENY, ETEL
EPA
PM(B) ENGLISH 02/00/77 PGS 1-25 ID# 04701A
ALSO ST

THIS REPORT, ISSUED BY THE SOUTH AFRICAN COUNCIL FOR SCIENTIFIC AND INDUSTRIAL RESEARCH, PRESENTS SEVERAL STATISTICAL TABLES SHOWING THE MONTHLY AVERAGES AND MAXIMUM CONCENTRATIONS OF SMOKE AND SULFUR DIOXIDE IN VARIOUS SOUTH AFRICAN CITIES AND TOWNS DURING THE PERIOD FROM OCTOBER 1974 TO SEPTEMBER 1976. STATISTICS ARE ALSO TABULATED SHOWING THE LONG-TERM TRENDS AT SAMPLING SITES WHICH HAVE BEEN IN OPERATION FOR OVER FOUR WINTER SEASONS. THE BODY OF THE REPORT DESCRIBES METHODS OF MEASUREMENT, CLASSIFICATIONS OF SAMPLING SITES, AND INTERPRETATION OF RESULTS. CONCLUSIONS SHOW DOWNWARD LONG-TERM TRENDS IN SMOKE AND SULFUR CNCENTRATIONS AT MOST SAMPLING SITES.

AIR

SWEDEN "HEALTH HAZARDS EVEN WITH COAL AND OIL." SVENSKA DAGBLADET
EPA
PM(B) SWEDISH 04/18/77 PGS 27 ID# 04694A

THE NATIONAL ENVIRONMENT PROTECTION BOARD HAS WARNED THAT AN INCREASE OF OIL AND COAL COMBUSTION IN SWEDEN MAY HAVE SERIOUS HEALTH AND ENVIRONMENTAL CONSEQUENCES. THE BOARD HAS PRIMARILY STUDIED POLLUTION WHICH ORIGINATED IN SWEDEN IN RELATION TO PRESENT PURIFICATION METHODS. THE BOARD PREDICTS THAT IF NUCLEAR POWER PLANTS ARE REPLACED BY POWER PLANTS USING COAL, SERIOUS HEALTH HAZARDS MAY OCCUR. EMISSIONS FROM CARS ALREADY MAKE THE SITUATION HIGHLY UNSATISFACTORY, AND THE BOARD BELIEVES THAT THE ADDITONAL USE OF FOSSIL FUELS MAY EVEN PRODUCE LUNG CANCER. IF OIL WERE USED AS A SUBSTITUTE, THE EMISSIONS OF NITRIC OXIDES WOULD DOUBLE. THE EMISSION OF MERCURY WOULD BE THREE TIMES AS HIGH, WHICH WOULD ULTIMATELY RESULT IN THE POLLUTION OF NUMEROUS LAKES.

SWEDEN ENVIRONMENTAL POLICY IN SWEDEN
EPA
PM(A) ENGLISH 00/00/77 PGS 1-444 ID# 04702A
ALSO LRB, SE
*GENERAL SOLIDWASTE TOXIC SUBS LAND USE

SWEDEN "CAR EXHAUST FUMES--POLLUTE MORE THAT INDSUTRY." SVENSKA DAGBLADET
EPA
PM(B) SWEDISH 05/18/77 PGS 5 ID# 04738A

THE NATIONAL SWEDISH ENVIRONMENT PROTECTION BOARD HAS CONCLUDED AFTER SURVEYING 28 LARGER MUNICIPALITIES THAT CAR EXHAUST FUMES CAUSE MORE AIR POLLUTION THAN DO INDUSTRY, HEATING PLANTS, ELECTRICITY PRODUCTION, AND WASTE INCINERATORS COMBINED. IN MANY OF THE LOCATIONS INVESTIGATED, THE STANDARD WORLD HEALTH ORGANIZATION EXHAUST LIMITS WERE EXCEEDED; FOR INSTANCE, IN GOTHENBURG, STOCKHOLM, KINGSBACKA, UMEA, LUND, ESKILSTUNA, HARNOSAND, AND NORRKOPING. POLLUTION WAS MEASURED LOCALLY ON CERTAIN STREETS SO THIS DOES NOT MEAN THAT THESE CITIES ARE ENTIRELY POLLUTED. THE OZONE LEVEL WAS ALSO MEASURED IN GOTHENBURG, STOCKHOLM, AND NORRKOPING. ACCORDING TO U.S. SSTANDARDS, THE OZONE LEVELS IN STOCKHOLM AND NORRKOPING WERE WITHIN THE ACCEPTABLE LIMITS, BUT IN GOTHENBURG THESE WERE EXCEEDED SEVERAL TIMES. IT IS EMPHASIZED THAT EVEN IF EXHAUST STANDARDS WERE TO BE STICTLY ENFORCED, IT MIGHT STILL NOT PREVENT AIR POLLUTION SINCE THE NUMBER OF CARS IS CONTINUALLY INCREASING.

AIR

SWITZERLAND

"GASOLINE AND THE ENVIRONMENT." NEUE ZUERCHER ZEITUNG
EPA
PM(B) GERMAN 05/11/77 PGS 35 ID# 04757A

THIS ARTICLE SUMMARIZES THE FINAL REPORT OF A WORKING GROUP APPOINTED BY THE FEDERAL INTERIOR DEPARTMENT TO STUDY THE POSSIBILITIES OF FURTHER REDUCING THE LEAD CONTENT OF GASOLINE IN SWITZERLAND. STUDIED WERE TOXICOLOGICAL AND ECOLOGICAL EFFECTS OF LEAD, ASPECTS OF VEHICLE ENGINE AND REFINERY TECHNOLOGY, SUPPLY, PROFITABILITY AND TRADE POLICY. IN VIEW OF CURRENT TECHNOLOGICAL LEVELS AND SWITZERLAND'S DEPENDENCE ON FOREIGN REFINERIES, IT WAS CONCLUDED THAT A REDUCTION OF LEAD IN GASOLINE MUST OCCUR GRADUALLY AND IN HARMONY WITH SWITZERLAND'S MOST IMPORTANT COUNTRIES OF SUPPLY. A RAPID AND SIGNIFICANT REDUCTION OF LEAD CAN MOST READILY OCCUR IN REGULAR GASOLINE, THE USE OF WHICH CAN BE PROMOTED BY PUBLICITY AND FAVORABLE PRICE. A PROGRAM FOR THE REDUCTION OF LEAD IN GASOLINE IS PROPOSED WHICH WOULD LEAD TO UNLEADED REGULAR GASOLINE IN 1986 AND UNLEADED SUPER GASOLINE BY 1990. CURRENTLY 0.4 PERCENT LEAD IS ALLOWED. THE REDUCTION OF LEAD WOULD REQUIRE INCREASED ADDITIVES TO PRESERVE ANTIKNOCK CHARACTERISTICS.

GENERAL

CANADA

LE CADRE JURIDIQUE DE LA PARTICIPATION DU PUBLIC.... (LEGAL FRAMEWORK FOR PUBLIC PARTICIPATION IN THE CANADIAN WATER MANAGEMENT). SERIE DES SCIENCES SOCIALES. ETUDE NO. 14
MORLEY, C. G.
EPA
RB( ) FRENCH 00/00/76 PGS 1-68 ID# 04706A
ALSO SE
WATER

THIS REPORT WAS PREPARED BY ENVIRONMENT CANADA'S DIVISION OF SOCIAL SCIENCES TO PROVIDE INFORMATION ON THE LEGAL BASES FOR PUBLIC PARTICIPATION IN RESOURCE MANAGEMENT. THE REPORT EXAMINES THE BODY OF COMMON LAW, AS WELL AS FEDERAL AND PROVINCIAL LEGISLATION FOR SUCH LEGAL GROUNDS. ITS FINDINGS INDICATE THAT THE CANADIAN LEGAL SYSTEM DOES NOT GUARANTEE THE CITIZEN A RIGHT TO PARTICIAPTE IN PUBLIC AND PRIVATE DECISIONS. CLAIMS FOR COMPENSATION, WHICH ARE ALLOWED BY COMMON LAW, CAN ONLY OCCUR AFTER THE FACT AND HAVE, THEREFORE, NOT PROVED EFFECTIVE TOOLS FOR PARTICIAPTION. THE PUBLIC HAS AN OPPORTUNITY TO PRESENT ITS VIEWS DURING PUBLIC HEARINGS, BUT THEY ARE NOT CONSIDERED AN ADEQUATE FORUM FOR THE ASSERTION OF ENVIRONMENTAL RIGHTS. BASED ON THESE FINDINGS AND ON A FULLER DISCUSSION OF THEM, THE CENTRAL RECOMMENDATION OF THE REPORT IS THAT EFFECTIVE PUBLIC PARTICIPATION IN DECISION-MAKING BE ESTABLISHED BY LEGISLATION AS A LEGAL RIGHT AND NOT AS A PRIVELEGE.

GENERAL

CANADA AN ENVIRONMENTAL ETHIC--ITS FORMULATION AND IMPLICATIONS. CANADIAN ENVIRONMENTAL ADVISORY COUNCIL REPORT NO. 2
MORSE, NORMAN H. EPA
SE( ) ENGLISH 01/00/75 PGS 1-20 ID# 04691A

THE OBJECTIVE OF THIS PAPER IS TO FORMULATE AN ENVIRONMENTAL ETHIC FOR OUR TIME AND TO EXAMINE SOME OF ITS IMPLICATIONS. THE NEED FOR THIS NEW ETHIC IS POINTED OUT IN A SECTION WHICH DISCUSSES THE ESCALATING ASSAULT BY MAN ON THE NATURAL ENVIRONMENT. THE DEVELOPMENT OF AN ETHIC IS EXPECTED TO CONTRIBUTE TO A REVISION IN THE STANDARDS OF HUMAN BEHAVIOR TOWARD MAN AND THE LIVING WORLD. THE ETHIC WHICH IS FORMULATED IS AS FOLLOWS: "EVERY PERSON SHALL STRIVE TO PROTECT AND ENHANCE THE BEAUTIFUL EVERYWHERE HIS OR HER IMPACT IS FELT, AND TO MAINTAIN OR INCREASE THE FUNCTIONAL DIVERSITY OF THE ENVIRONMENT IN GENERAL." STRATEGIES THAT WILL FACILITATE THE UNDERSTANDING, ADOPTION AND IMPLEMENTATION OF THIS ENVIRONMENTAL ETHIC ARE DISCUSSED AND SOME COMMENTS ON THE CANADIAN EXPERIENCE ARE INCLUDED. (A FRENCH TRANSLATION OF THE REPORT IS ALSO PROVIDED.)

CANADA ENVIRONMENTAL APPLICATIONS OF INPUT-OUTPUT ANALYSIS. ENVIRONMENT CANADA PLANNING AND FINANCE SERVICE REPORT NO. 3
EMMETT, BRIAN EPA
ST( ) ENGLISH 00/00/75 PGS 1-71 ID# 04740A

THIS PAPER PRESENTS A BALANCED ASSESSMENT OF THE PROBLEMS AND POTENTIAL OF THE ENVIRONMENTAL APPLICATIONS OF INPUT-OUTPUT ANALYSIS BASED UPON A THOROUGH EXAMINATION OF THE MODEL AND ITS UNDERLYING ASSUMPTIONS. ENVIRONMENTAL EXTENSIONS OF INPUT-OUTPUT TECHNIQUES ARE REPORTED TO SHARE THE PROBLEMS OF TRADITIONAL INPUT-OUTPUT MODELS AND, IN ADDITION, TO HAVE MANY OF THEIR OWN. TWO OF THE MAJOR PROBLEMS ARE THE NEED TO USE REGIONAL INPUT-OUTPUT MODELS IN ENVIRONMENTAL STUDIES AND THE APPROPRIATENESS OF THE INPUT-OUTPUT FRAMEWORK FOR HANDLING ECOLOGICAL INTERACTIONS. THE PAPER CONCLUDES THAT THE COMPREHENSIVENESS OF INPUT-OUTPUT ANALYSIS AND THE INSIGHT IT PROVIDES INOT ECONOMIC-ECOLOGICAL INTERACTIONS MUST BE WEIGHTED AGAINST THE RESTRICTIVENESS OF THE MODEL'S BASIC ASSUMPTIONS. NO FINAL ASSESSMENT CAN BE MADE SOLELY ON THEORETICAL GROUNDS, HOWEVER. THE VALUE OF THESE MODELS CAN ONLY BE ESTABLISHED BY THEIR PERFORMANCE OVER TIME AS ANALYTICAL AND PREDICTIVE TOOLS.

CANADA ENVIRONMENTAL STUDIES--JAMES BAY TERRITORY AND SURROUNDING AREA.
FISCAL YEAR OF 1975-1976
CANADA. ENVIRONMENT CANADA EPA
ST( ) ENGLISH 00/00/00 PGS 1-151 ID# 04756A

IN 1972, ENVIRONMENT CANADA AND THE SOCIETY FOR THE DEVELOPMENT OF JAMES BAY SIGNED AN AGREEMENT FOR THE PURPOSE OF CARRYING OUT A JOINT FOUR-YEAR PROGRAM OF BIOPHYSICAL INVENTORIES AND STUDIES. THESE STUDIES WERE AIMED AT PROVIDING A BASIC KNOWLEDGE OF THE ECOSYSTEMS AND THEIR ELEMENTS AND WERE DESIGNED TO PERMIT THE EVENTUAL ASSESSMENT OF ENVIRONMENTAL EFFECTS THAT WERE LIKELY TO RESULT FROM THE DEVELOPMENT OF THE TERRITORY AND ITS NATURAL RESOURCES. THE PURPOSE OF THIS REPORT IS TO PRESENT AN OVERVIEW OF THE VARIOUS BIOPHYSICAL STUDIES AND INVENTORIES CARRIED OUT DURING THE FISCAL YEAR 1975-76 UNDER THE TERMS OF THE AGREEMENT, AS WELL AS TO PROVIDE AN INDICATION OF THE RESULTS OBTAINED TO DATE. THE STUDIES ARE DIVIDED INTO TWO CATEGORIES: PROGRAMS OF A NATIONAL INTEREST AND PROGRAMS OF A MUTUAL AND PROVINCIAL INTEREST. INCLUDED IN THE FIRST CATEGORY ARE PROJECTS DEALING WITH THE ATMOSPHERIC ENVIRONMENT, HYDROGRAPHY AND OCEANOGRAPHY. IN THE SECOND ARE PROJECTS ON AQUATIC ENVIRONMENT AND SMALL FAUNA.

GENERAL

EUROPEAN COMMUNITIES "ENVIRONMENTAL STRATEGY OF EUROPEAN INDUSTRY." UMWELT, FORSCHUNG, GESTALTUNG, SCHUTZ, NO. 2
KABELITZ, KLAUS ROBERT EPA
PM(B) GERMAN 04/00/77 PGS 172-175 ID# 04704A

IN DECEMBER 1976, THE UNION OF INDUSTRIES OF THE EUROPEAN COMMUNITIES (UNICE) PRESENTED ITS BASIC PRINCIPLES FOR ENVIRONMENTAL PROTECTION. THESE PRINCIPLES ARE INTENDED TO APPLY TO THE PRACTICAL PROBLEMS OF ENVIRONMENTAL PROTECTION IN EUROPE. IN GENERAL, UNICE AGREES WITH THE IDEAS EXPRESSED IN JUNE 1974 BY THE INTERNAITONAL CHAMBER OF COMMERCE IN THE DOCUMENT, "ENVIRONMENTAL GUIDELINES FOR WORLD INDUSTRY." HOWEVER, CERTAIN POINTS ARE EXPANDED AND DISCUSSED UNDER THE FOLLOWING HEADINGS: 1) GENERAL CONSIDERATIONS; 2) HARMONIZATION (OF PROGRAMS AND POLICIES, LEGISLATION, AND PROCEDURES); 3) DESIDERATA REGARDING ENVIRONMENTAL CONTROL SYSTEMS; 4) GENERAL CONDITIONS FOR EMISSIONS; 5) THE COST OF MEASURES FOR POLLUTION ABATEMENT; 6) TECHNOLOGICAL ASPECTS OF ENVIRONMENTAL CONTROL; AND 7) COOPERATION WITH THE AUTHORITIES.

EUROPEAN COMMUNITIES "ENVIRONMENTAL PROTECTION COOPERATION: EC-SWITZERLAND." NEUE ZUERCHER ZEITUNG
EPA
PM(B) GERMAN 06/10/77 PGS 17 ID# 04766A

A THIRD MEETING OF ENVIRONMENTAL EXPERTS FROM SWITZERLAND AND THE EUROPEAN COMMUNITIES NATIONS WAS HELD IN JUNE 1977 IN BURSSELS. PARTICIPANTS IN SPECIALIZED GROUPS ENGAGED IN TECHNICALLY DETAILED DISCUSSIONS OF A WIDE RANGE OF ENVIRONMENTAL TOPICS. AMONG THE SUBJECTS DISCUSSED WERE: DANGEROUS SUBSTANCES AND A FIRST ACCOUNTING OF THE CATASTROPE AT SEVESO; THE PROBLEMS OF AUTO EXHAUSTS; AND EXPERIENCES WITH STATIONARY MEASURING NETWORKS AND THE COMPARABILITY OF VARYING MONITORING RESULTS. IN ADDITION, BOTH PARTIES TO THE DISCUSSIONS AGREED TO COMPILE LISTS OF ENVIRONMENTAL RESEARCH PROJECTS BEING CONDUCTED BY PUBLIC AND PRIVATE INSTITUTIONS IN ORDER TO AVOID DUPLICATION OF EFFORTS AND TO FACILITATE DIRECT CONTACTS BETWEEN INSTITUTIONS WORKING ON SIMILAR PROJECTS. THE EC COMMISSION WILL CONSIDER A SWISS REQUEST FOR DIRECT ACCESS TO EC ENVIRONMENTAL RESEARCH PROJECTS. THE MEETING TOOK PLACE ON THE BASIS OF A DDEC. 1975 SWISS-EC INFORMATIONAL EXCHANGE AGREEMENT.

EUROPEAN COMMUNITIES DISPONIBILITE ET BESOINS FUTURS EN MINERAIS PHOSPHATES (FUTURE AVAILABILITY AND NEEDS FOR PHOSPHATE ORES IN LIGHT OF THE ANITPOLLUTION CAMPAIGN AND NEW POSSIBLE APPLICATIONS)
SLANSKY, M. EPA
ST( ) FRENCH 00/00/77 PGS 1-68 ID# 04772A

THIS STUDY, UNDERTAKEN AT THE REQUEST OF THE EC COMMISSION'S OFFICE OF THE ENVIRONMENT AND CONSUMER PROTECTION, EXAMINES THE PRINCIPAL TYPES OF PHOSPHATE DEPOSITS LOCATED THROUGHOUT THE WORLD, THE LEVELS OF THE MAINTYPES OF PRODUCTION, AND EC PHOSPHATE CONSUMPTION, BOTH ON A COMPREHENSIVE AND ON AN INDIVIDUAL MEMBER STATE BASIS. THE USE OF PHOSPHATES IS ANALYZED BY INDUSTRIAL SECTORS, AND THE PROBLEMS OF POLLUTION RELATED TO THEIR USE ARE DISCUSSED WITH RESPECT TO FUTURE DEMAND AND NEW TECHNOLOGICAL ADVANCES. A FINAL SECTION DEALS WITH PRICING AND FLUCTUATION THEREIN ARISING FROM CHANGES IN PRODUCTION LEVELS. (THE FULL FRENCH TITLE IS: DISPONIBILITE ET BESOINS FUTURS EN MINERAIS PHOSPHATES COMPTE TENU DE LA LUTTE ANTI-POLLUTION ET E NOUVELLES APPLICATIONS POSSIBLES.)

GENERAL

FINLAND "UNCLEAR HOW TO PUNISH ENVIRONMENTAL DAMAGE." HUFVUDSTADSBLADET
EPA
LR(A) SWEDISH 05/27/77 PGS 17 ID# 04710A

THE FINNISH MINISTRY OF JUSTICE INDICATES, ACCORDING TO THIS ARTICLE, THAT THE PRESENT SYSTEM OF INDEMNITY FOR ENVIRONMENTAL DAMAGE NEEDS TO BE SCRUTINIZED. A CLARIFICATION OF WHO IS IN CHARGE OF COMPENSATION AND WHICH BENEFIT LOSSES SHOULD BE COMPENSATED AS WELL AS A BETTER SYSTEM OF PROCESSING INDEMNITY CLAIMS ARE URGENTLY NEEDED. WATER LEGISLATION AND LEGISLATION DEALING WITH NEIGHBORS, BOTH OF WHICH COME UNDER THE AUTHORITY OF MINISTRY OF JUSTICE, ARE OF PARTICULAR INTEREST. A SPECIAL COMMITTEE STUDYING THIS PROBLEM HAS ALREADY CONCLUDED THAT PRESENT REGULATIONS FOR ENVIRONMENTAL CRIME ARE INSUFFICIENT. IT FINDS THAT AN APPROPRIATE PUNISHMENT WOULD INCLUDE RESTORING THE ENVIRONMENT TO ITS EARLIER STAGE. SEVERAL NEW GUIDELINES HAVE BEEN SUGGESTED AS A RESULT OF THE COMMITTEE'S WORK BUT THE QUESTION, FOR INSTANCE, OF WHO BEARS RESPONSIBILITY IN CASE OF OIL POLLUTION REMAINS UNCLEAR. THE PROCESS OF REIMBURSEMENT ALSO TAKES TOO LONG AT THE PRESENT TIME.

FRANCE "JANUARY 10, 1977 CIRCULAR CONCERNING DEPARTMENT-LEVEL ENVIRONMENTAL MEETINGS." POLLUTION ATMOSPHERIQUE, NO. 73
EPA
LR(A) FRENCH 01/00/77 PGS 76 ID# 04770A

THIS CIRCULAR FROM THE PRIME MINISTER TO FRENCH DEPARTMENT PREFECTS CALLS FOR THE INSTITUTION OF ANNUAL DEPARTMENT-LEVEL ENVIRONMENTAL MEETINGS WITH THE PURPOSE OF ALLOWING FRENCH CITIZENS TO PARTICIPATE MORE DIRECTLY IN THE PREPARATION AND IMPLEMETATION OF DECISIONS BEARING ON THEIR ENVIRONMENT. TOWARD THAT GOAL, THE MEETINGS WOULD ASSEMBLE ELECTED REPRESENTATIVES, ASSOCIATION MEMBERS, AND VARIOUS EXPERTS, AS WELL AS GOVERNMENT OFFICIALS. AN ASSESSMENT OF THE YEAR'S GENERAL ENVIRONMENTAL POLICY WOULD BE PRESENTED BY THE PREFECT. THIS REVIEW WOULD SEEK TO SHOW HOW A CONCERN FOR IMPROVEMENTS IN THE QUALITY OF LIFE HAD AFFECTED THE VARIOUS ACTIVITIES OF THE LOCAL AUTHORITIES. THIS OCCASION WOULD ALSO PROVIDE AN OPPORTUNITY TO MAKE PUBLIC THE PRINCIPAL IMPACT STUDIES WHICH HAD BEEN CONDUCTED. A BROAD EXCHANGE OF INFORMATION ON THE VARIOUS ACTIVITIES OF DEPARTMENT ENVIRONMENTAL COMMISSIONS WOULD GENERALLY BE MADE POSSIBLE. THE REGIONAL ENVIRONMENTAL DELEGATE IS INSTRUCTED TO ASSIST IN THE INSTITUTION OF THE MEETINGS.

FRANCE "A LETTER OF MR. ANSQUER ON THE 1978 ENVIRONMENTAL BUDGET."
PRESSE ENVIRONNEMENT, NO. 245
EPA
SE( ) FRENCH 07/01/77 PGS QV4 ID# 04764A

A LETTER OF FEBRUARY 23, 1977 FROM THE FRENCH MINISTER FOR THE QUALITY OF LIFE TO THE PRIME MINISTER ON THE SUBJECT OF THE 1978 ENVIRONMENTAL BUDGET WAS CITED IN THE FRENCH PRESS. THE MINISTER IS REPORTED TO HAVE WRITTEN THAT, ACCORDING TO COMPLETED COMPUTATIONS, ENVIRONMENTAL APPROPRIATIONS, OTHER THAN THOSE PERTAINING TO RESEARCH, WOULD UNDERGO A THREE PERCENT REDUCTION, PASSING FROM 276.5 MILLION TO 268 MILLION FRANCS. THE MINISTER FURTHER STATED THAT THE ADOPTION OF SUCH A BUDGET WOULD BRING ABOUT A LOSS OF EFFECTIVENESS AND CREDIBILITY IN ALL ENVIRONMENTALLY RELATED GOVERNMENT ACTIVITIES. FURTHERMORE, THE PROPOSED 1978 BUDGET WOULD NOT ONLY CURTAIL NEW ENDEAVORS BUT WOULD EVEN HINDER THE CONTINUATION OF EXISTING PROGRAMS. FINALLY, MR. ANSQUER REQUESTED THAT THE MINISTRY BE DISASSOCIATED FROM FINANCIAL PARTICIPATION (TOTALING 113 MILLION FRANCS) IN THE ECOLOGICALLY CONTESTED NAUSSAC AND VILLEREST DAMS.

GENERAL

GERMANY,FED REP OF "TWENTY YEARS OF ENVIRONMENTAL PROTECTION." WASSER, LUFT UND BETRIEB
LERSNER, HEINRICH FREIHERR VON EPA
PM(B) GERMAN 05/00/77 PGS 266-267 ID# 04751A

THIS ARTICLE BY THE PRESIDENT OF THE FEDERAL ENVIRONMENTAL AGENCY DISCUSSES THE DEVELOPMENT OF ENVIRONMENTAL PROTECTION MEASURES IN THE PAST 20 YEARS. IN 1957, THE FEDERAL DIET PASSED THE FEDERAL REPUBLIC'S FIRST NATIONAL WATER MANAGEMENT LAW, WHICH CAME INTO FORCE IN 1960. AIR AND NOISE POLLUTION WERE REGULATED UNDER THE INDUSTRIAL CODE AND THE CIVIL CODE. ENVIRONMENTAL MATTERS WERE DEALT WITH PRIMARILY BY HEALTH AND MUNICIPAL AUTHORITIES, AND POLLUTION PROBLEMS WERE APPROACHED ON AN INDIVIDJAL MEDIUM (AIR, WATER, SOIL) BASIS WITHOUT REGARD TO CUMMULATIVE EFFECTS OF POLLUTANTS. TODAY ENVIRONMENTAL PROTECTION HAS BECOME A NATIONAL AND INTERNATIONAL CONCERN. THE FEDERAL REPUBLIC HAS PASSED NUMEROUS SPECIALIZED ENVIRONMENTAL LAWS, SUCH AS THE FEDERAL NUISANCES CONTROL LAW, THE AIRCRAFT NOISE LAW, AND THE WASTE REMOVAL LAW. PUBLIC ENVIRONMENTAL AWARENESS HAS ALSO GREATLY INCREASED. NEVERTHELESS, MUCH REMAINS TO BE DONE; FOR EXAMPLE, NEW PROBLEMS, SUCH AS THE DANGERS OF ENVIRONMENTAL CHEMICALS, ARE CONTINUALLY BECOMING EVIDENT.

GERMANY,FED REP OF POSITIVE OEKONOMISCHE ASPEKTE DES UMWELTSCHUTZES (POSITIVE ECONOMIC ASPECTS OF ENVIRONMENTAL PROTECTION). BERICHTE 3/77
MEISSNER, WERNER, AND ERICH HOEDL EPA
SE( ) GERMAN 00/00/77 PGS 1-148 ID# 04693A

THIS REPORT WAS PREPARED UNDER CONTRACT TO THE FEDERAL ENVIRONMENTAL AGENCY IN THE FRAMEWORK OF THE ENVIRONMENTAL RESEARCH PLAN OF THE FEDERAL INTERIOR MINISTRY. THE AUTHORS APPROACH THE PROBLEM ON A MACROECONOMIC LEVEL. ENVIRONMENTAL LEGISLATION LEADS TO PUBLIC AND PRIVATE INVESTMENTS AND CONTINUING COSTS, WHICH BECAUSE OF THEIR MULTIPLIER EFFECT, INFLUENCE ECONOMIC GOALS AND STRUCTURAL DATA. IT IS SHOWN THAT THE NEGATIVE ASPECTS OF INDIVIDUAL ENVIRONMENTAL COSTS LOSE MEANING IN THE MACROECONOMIC SENSE AND ARE MORE THAT COMPENSATED FOR BY POSITIVE ECONOMIC EFFECTS. THE EXTENT TO WHICH GENERALLY ACCEPTED ECONOMIC GOALS COULD BE ENDANGERED BY ENVIRONMENTAL MEASURES IS ALSO INVESTIGATED. CHAPTERS DEAL WITH: THE BENEFIT SIDE OF THE COST-BENEFIT ANALYSIS; DETERMINATION OF THE POSITIVE EFFECTS OF ENVIRONMENTAL POLICY THROUGH SOCIAL INDICATORS; TPTA; ECONOMIC ANALYSIS; AND A CATALOG OF CRITERIA FOR APPLICATION OF PRINCIPLES DISCUSSED.

GERMANY,FED REP OF ENVIRONMENTAL PROTECTION AND ECONOMIC GROWTH--CONFLICT OR OPPORTUNITY?
INTER NATIONES SONDERDIENST SO 3-77 (E)
KEIM, WALTHER EPA
SE( ) ENGLISH 03/00/77 PGS 1-22 ID# 04696A
ALSO PMB

ENVIRONMENTAL PROTECTION COVERS A WIDE AREA FROM REGIONAL PLANNING TO NOISE ABATEMENT. SINCE 1971, THE FEDERAL AND LAND GOVERNMENTS HAVE DEVELOPED A VARIETY OF LAWS TO PROTECT THE ENVIRONMENT, FOR EXAMPLE, THE FEDERAL REFUSE DISPOSAL LAW. THE GOVERNMENT ADHERES TO ITS BELIEF THAT THE POLLUTER SHOULD PAY THE COST OF ENVIRONMENTAL CLEAN-UP. WITH THIS IN MIND, SPECIFIC ENVIRONMENTAL PROBLEMS ARE BEING TACKLED AT THE LAND AND NATIONAL LEVELS, INCLUDING THE PROVISION OF PURE WATER, REGULATION OF REFUSE DISPOSAL AND PROMOTION OF RECYCLING, THE PROTECTION OF FOODSTUFFS AND THE REDUCTION OF NOISE THROUGH RESEARC AND TECHNOLOGY. THE DEBATE ABOUT NUCLEAR ENERGY CONTINUES. IT IS FELT THAT ECONOMIC GROWTH AND ENVIRONMENTAL PROTECTION ARE NOT CONTRADICTORY GOALS. GROWTH IN AN INDUSTRIAL COUNTRY, SUCH AS THE FEDERAL REPUBLIC, MUST BE BOTH QUANTITATIVE AND QUALITATIVE, AND TECHNICAL PROGRESS IS NEEDED TO PROTECT THE ENVIRONMENT. PUBLIC AWARENESS AND INTERNATIONAL COOPERATION IN THIS REGARD SHOULD BE PROMOTED.

GENERAL

INDIA "ECOLOGY AND ENVIRONMENT OF URBAN AREAS." SCAVENGER. VOL. 7, NO. 1
GHOSE, SANKAR EPA
PM(8) ENGLISH 01/00/77 PGS 16-23 ID# 04759A
ALSO SE

THIS ARTICLE, PUBLISHED IN THE JOURNAL OF THE INDIAN SOCIETY FOR CLEAN ENVIRONMENT, REPRINTS A SPEECH MADE BY THE INDIAN MINISTER OF STATE FOR PLANNING AT THE SEMINAR ON ECOLOGY AND ENVIRONMENT IN URBAN AREAS, HELD BY THE INDIAN MARCHANT'S CHAMBER IN BOMBAY ON JANUARY 6, 1977. IT SUMMARIZES THE CHANGING CONCEPTS OF MAN'S RELATIONSHIP TO NATURE AND THE GROWING AWARENESS OF THE NEED TO PROTECT THE ENVIRONMENT. IN THIS REGARD, IT REVIEWS WHAT IS BEING DONE IN INDIA TO MAKE URBAN AREAS MORE COMPATIBLE WITH ECOLOGICAL AND HUMA NEEDS. CERTAIN ACTIVITIES, COSTS AND PROGRAMS ARE LISTED WHICH ARE INCLUDED IN THE NATIONAL POPULATION POLICY, IN STATE URBAN DEVELOPMENT PLANS, AND IN THE FIFTH NATIONAL PALAN TO CONTEND WITH THE PROBLEMS OF POPULATION GROWTH, URBAN IMMIGRATION, URBAN SPRAWL, INDUSTRIAL AGGLOMERATION, HOUSING SHORTAGES, WATER SUPPLY, SANITATION AND PUBLIC HEALTH TRAINING. THE ARTICLE CONCLUDES THAT THE PARTICULAR PROBLEMS OF INDIA REQUIRE INDIGENOUS SOLUTIONS WHICH EQUALLY CONSIDER ALL NATIONAL PRIORITIES.

INDIA NEERI: ANNUAL REPORT 1975
NATIONAL ENVIRONMENTAL ENGINEERING RESEARCH INSTITUTE EPA
ST( ) ENGLISH 00/00/75 PGS 1-72 ID# 04747A
ALSO SE

THIS ANNUAL REPORT OF THE INDIAN ENVIRONMENTAL ENGINEERING RESEARCH INSTITUTE (NEERI) PROVIDES AN OVERVIEW OF THE ACTIVITIES OF THE INSTITUTE FOR THE YEAR 1975. AN ORGANIZATIONAL CHART AND A BRIEF REPORT OF THE DIRECTOR ARE FOLLOWED BY A SUMMARY OF COMPLETED AND CONTINUING RESEARCH ACTIVITIES WITHIN EACH OF THE RESEARCH DIVISIONS AT HEADQUARTERS AND WITHIN EIGHT ZONAL LABORATORIES. RESEARCH ENCOMPASSES AREAS OF AIR POLLUTION, INDUSTRIAL WASTES, SEWAGE SOLID WASTES AND WATER. OTHER ACTIVITIES OF THE INSTITUTE INCLUDE CONSULTANCY SERVICES TO VARIOUS PUBLIC AND PRIVATE ORGANIZATIONS; SYMPOSIA AND SEMINARS; TRAINING, INFORMATION, LIBRARY AND EXTENSION SERVICES; AND A WORKSHOP FOR THE PRODUCTION OF NECESSARY RESEARCH AND MAINTENANCE EQUIPMENT. FURTHER ENUMERATED OR SUMMARIZED ARE PUBLICATIONS AND SPECIAL REPORTS; COMMERCIAL EXPLOITATION OF KNOW-HOW; BUDGET ALLOCATIONS; PILOT PLANTS IN OPERATION; AND PERSONNEL.

JAPAN "PROCEDURAL ASPECTS OF ENVIRONMENTAL IMPACT ANALYSIS IN JAPAN: A PROPOSAL OF LEGAL POLICY." EARTH LAW JOURNAL, VOL. 2, NO. 3
YAMAMURA, TSUNETOSHI EPA
PM(8) ENGLISH 08/00/76 PGS 255-271 ID# 04750A
ALSO LRB

AFTER DISCUSSING THE CURRENT LACK OF EFFECTIVE POLICIES AND PROCEDURES FOR ENVIRONMENTAL IMPACT ANALYSIS (EIA) IN JAPAN, THIS ARTICLE DESCRIBES THE PRESENT OPERATIONS, TRENDS, AND WEAKNESS OF EIA AS IT IS PRACTICED IN THAT COUNTRY. ENVIRONMENTAL DISRUPTION DUE TO ECONOMIC GROWTH AND DEVELOPMENT JUSTIFIES THE USE OF EIA IN JAPAN. THE ARTICLE THERE EXPLAINS JAPAN'S PRESENT EIA PROCESSAS IT RELATES TO POLLUTION CONTROL PLANS AND LAWS, CABINET AGREEMENT, AND ADMINISTRATIVE PRACTICE. SOME SAMPLES OF THE PRESENT EIA PROCESS APPLIED TO DEVELOPMENT ACTIVITIES IN JAPAN ARE GIVEN, AND SOME ESSENTIAL POINTS AND DESIRABLE FEATURES OF A SUITABLE EIA PROCESS FOR JAPAN ARE OUTLINED. A PROPOSAL FOR AN EIA SYSTEM FROM AN INTERNATIONAL ENVIRONMENTAL PROTECTION PERSPECTIVE IS ALSO GIVEN.

GENERAL

SWEDEN ENVIRONMENTAL POLICY IN SWEDEN

EPA

PM(A) ENGLISH 00/00/77 PGS 1-444 ID# 04702A

ALSO LRB, SE

SOLIDWASTE TOXIC SUBS LAND USE AIR

THIS BOOKLET WAS PUBLISHED BY THE ORGANIZATION FOR ECONOMIC COOPERATION AND DEVELOPMENT (OECD) IN AN EFFORT TO REVIEW THE SWEDISH EXPERIENCE IN ENVIRONMENTAL POLICY, ESPECIALLY IN RELATION TO THE IMPLEMENTATION OF OECD'S GUIDING PRINCIPLES CONCERNING INTERNATIONAL ECONOMIC ASPECTS OF ENVIRONMENTAL POLICIES. FROM THIS REVIEW AND CONTRIBUTIONS MADE BY OTHER COUNTRIES, A FEW ENVIRONMENTAL POLICY ISSUES WILL BE IDENTIFIED WHICH CAN BE USEFULLY COMPARED INTERNATIONALLY. CHAPTERS COVER THE FOLLOWING TOPICS: THE ENVIRONMENT PROTECTION ACT AND RELATED LEGISLATION; THE ACT ON PRODUCTS HAZARDOUS TO MAN AND TO THE ENVIRONMENT; NATIONAL PHYSICAL PLANNING IN SWEDEN; PRINCIPAL GUIDELINES FOR THE UTILIZATION OF NATURAL RESOURCES; SWEDISH EXPERIENCE OF TRADE PROBLEMS ARISING FROM THE ENVIRONMENTAL POLICIES OF SWEDEN AND OTHER OECD COUNTRIES; RECENT LEGISLATION FOR ENVIRONMENTAL PROTECTION PERTAINING TO SULFUR AND SOLID WASTES; AND EMPLOYMENT EFFECTS OF THE SWEDISH SCHEME FOR SUBSIDIZATION OF EMISSION CONTROL INVESTMENTS.

UNITED NATIONS "DIFFICULTIES WITH GLOBAL ENVIRONMENTAL PROTECTION." NEUE ZUERCHER ZEITUNG

EPA

PM(A) GERMAN 05/26/77 PGS 5 ID# 04761A

THIS ARTICLE DEFENDS ACTIVITIES OF THE UNITED NATIONS ENVIRONMENT PROGRAMME (UNEP) AFTER SUMMARIZING CERTAIN CRITICISMS LEVELED AGAINST THE ORGANIZATION. CRITICS HAVE FOUND BOTH UNEP'S BUDGET AND STAFF LEVELS TOO HIGH AND HAVE LABELEDITS ACTIVITIES TOO AMBITIOUS AND INEFFECTIVE. OTHER UNITED NATIONS ORGANIZATIONS HAVE RESENTED WHAT THEY REGARD AS UNEP INTERFERENCE IN THEIR ACTIVITIES. IN RESPONSE, UNEP'S ACTING GENERAL DIRECTOR STATES THAT THE INCREASED BUDGET SIMPLY KEEPS PACE WITH INFLATION AND THAT THE STAFF WOULD ACTUALLY HAVE TO BE MUCH LARGER IF UNEP WERE REPRESENTED IN ALL ENVIRONMENTAL MATTERS FALLING WITHIN THE PURVIEW OF THE UNITED NATIONS. UNEP IS CONDUCTING MANY USEFUL PROGRAMS IN THE THIRD WORLD TO PREVENT DESTRUCTION OF THE ENVIRONMENT FROM ACCOMPANYING ECONOMIC DEVELOPMENT. IN ADDITION, MANY UNEP-SPONSORED CONFERENCES PROMOTE INTERNATIONAL COOPERATION AND COORDINATION IN ENVIRONMENTAL MATTERS. THE RECENT CONFERENCE FOR PROTECTION OF THE MEDITERRANEAN IS CITED AS A SUCCESSFUL EXAMPLE.

LAND USE

INTERNATIONAL

"URBAN LAND USE CONTROLS IN ASIA AND THE FAR EAST: LEGAL AND ADMINISTRATIVE FRAMEWORK." EARTH LAW JOURNAL, VOL. 2, NO. 2
SHAH, S.M. EPA
LR(B) ENGLISH 05/00/76 PGS 111-119 ID# 04717A
ALSO PMB AND SE

THIS ARTICLE REVIEWS THE PROBLEMS OF URBAN LAND USE CONTROL IN ASIA AND NOTES THE MEASURES WHICH HAVE BEEN TAKEN OR NEED TO BE TAKEN TO RESOLVE THESE PROBLEMS. AMONG THE FACTORS PREVENTING EFFECTIVE LAND USE MANAGEMENT ARE HIGH POPULATION DENSITIES, POOR FARMING METHODS, HIGH URBAN GROWTH RATES, UNEQUAL DISTRIBUTION OF URBAN POPULATIONS, URBAN ENCROACHMENT, ACUTE HOUSING CONGESTIONS, HIGH URBAN LAND VALUES, AND INTENSE LAND SPECULATION. SOME ASIAN COUNTRIES HAVE TAKEN DYNAMIC STEPS TO RESOLVE THESE PROBLEMS WITH SOME IMPRESSIVE RESULTS, BUT THE INSTITUTIONAL AND LEGAL SHORTCOMMINGS PERTAINING TOLAND MANAGEMENT IN MOST ASIAN COUNTRIES HINDER EFFECTIVE MEASURES. COMPREHENSIVE DEVELOPMENT PLANS, LAND READJUSTMENT PROGRAMS, PUBLIC ACQUISTION OF LANDS AND ADEQUATE TAXATION OF PROPERTIES MUST BE APPLIED WITHIN AN EFFECTIVE LEGAL AND ADMINISTRATIVE FRAMEWORK IF URBAN SPRAWL AND DETERIORATION IN ASIA ARE TO BE REVERSED.

INTERNATIONAL

"LAND USE PLANNING MEASURES." EARTH LAW JOURNAL, VOL. 3, NO. 2
DARIN-KRASKIN, HAIN EPA
PM(B) ENGLISH 05/00/76 PGS 133-165 ID# 04716A
ALSO LRB

THIS ARTICLE EXAMINES SOME OF THE LEGAL AND ADMINISTRATIVE TOOLS ADOPTED BY VARIOUS COUNTRIES IN REORIENTING THEIR URBAN LANDUSE POLICIES TO HALT THE DECLINING QUALITY OF URBAN LIFE. THE VARIOUS MEASURES TAKEN BY THESE COUNTRIES ARE GROUPED FOR DISCUSSION INTO THE FOLLOWING SIX CATEGORIES: 1) LONG-TERM NATIONAL AND REGIONAL LAND USE PLANNING; 2) READJUSTMENT SCHEMES (COMPULSORY REPARCELLING OF LAND IN A GIVEN AREA); 3) SPECIAL LAND USE CONTROLS IN AREAS OF DEVELOPMENT; 4)POSITIVE LAND USE CONTROL (MANDATORY DEVELOPMENT OF LAND); 5) PREEMPTION RIGHTS; AND 6) METHODS OF EXPROPRIATION AND OCMPENSATION OF LAND. VARIOUS NEW CONCEPTS OF URBAN DEVELOPMENT CAN BE SEEN REQUIRING THE RATIONAL DEVELOPMENT OF LAND AS A DUTY RATHER THAN A RIGHT OF THE INDIVIDUAL. AMONG THE COUNTRIES REVIEWED TO VARIOUS DEGREES FOR URBAN LAND POLICIES ARE FRANCE, GERMANY, ITALY, NETHERLANDS, SPAIN, SWEDEN, DENMARK, UNITED KINGDOM, INDIA, INDONESIA, SINGAPORE, VENEZUELA, CHILE, URUGUAY, SWITZERLAND, JAPAN, SRI-LANKA, SYRIA, BELGIUM AND KOREA.

LAND USE

SWEDEN ENVIRONMENTAL POLICY IN SWEDEN
EPA
PM(A) ENGLISH 00/00/77 PGS 1-444 ID# 04702A
ALSO LRB, SE
*GENERAL SOLIDWASTE TOXIC SUBS AIR

SWEDEN "PROJECT HJARTFJALLET (DESTRUCTION OF COUNTRYSIDE, FUTURE OF LAPLAND AREA OUTLINED)." SVENSKA DAGBLADET
EPA
PM(B) SWEDISH 04/06/77 PGS 3 ID# 04731A
ALSO SE

IN THE MUNICIPALITY OF JOKKMOKK IN THE NORTHERN PART OF SWEDEN, IT HAS BEEN ESTIMATED THAT BY 1981 HALF OF THE PRESENT POPULATION, THAT IS 3,500 PEOPLE, WILL HAVE TO MOVE BECAUSE OF LACK MPLOYMENT. THE MUNICIPALITY WOULD LIKE TO SEE A PROPOSED POWER STATION DEVELOPED. THIS PROJECT WOULD, HOWEVER, ALSO INVOLVE SITOJAURE AND SITOETNO, TWO BODIES OF WATER WHICH HAVE BEEN PLACED IN THE HIGHEST PROTECTION CLASSIFICATION BY THE GOVERNMENT BECAUSE OF THE AREA'S UNIQUE VALUE FOR NATURE PROTECTION, RECREATION, SCIENCE, CULTURE, AND REINDEER MANAGEMENT. IF A POWER STATION WERE BUILT: WATER WOULD FLOOD HUNDREDS OF HECTARES OF VALUABLE LAND IN SAREK NATIONAL PARK; PART OF 'KUNGSLEDEN', ONE OF THE COUNTRY'S MOST FAMOUS HIKING TRAILS, WOULD BE DESTROYED; FAUNA WOULD BE DAMAGED; CULTURAL LANDMARKS WOULD BE LOST; AND THE LIFESTYLE OF MANY LAPPS WOULD BE DISTURBED. THE ARTICLE CONCLUDES THAT OTHER ALTERNATIVE MUST BE EXPLORED TO FIND EMPLOYMENT FOR THE PEOPLE OF JOKKMOKK. AN ENGLISH TRANSLATION OF THE ARTICLE IS INCLUDED.

VENEZUELA TROPICAL RAIN FOREST USE AND PRESERVATION. A STUDY OF PROBLEMS AND PRACTICES IN VENEZUELA. SIERRA CLUB SPECIAL PUBLICATION, INTERNATIONAL SERIES NO. 4
HAMILTON, LAWRENCE S.
EPA
PM(B) ENGLISH 03/00/76 PGS 1-100 ID# 04746A

IN RESPONSE TO THE GLOBAL CONCERN OVER THE RAPID DESTRUCTION OF TROPICAL RAIN FORESTS, THIS REPORT, PREPARED BY THE UNITED STATES SIERRA CLUB UNDER CONTRACT TO THE UNITED NATIONS ENVIRONMENT PROGRAM, EXAMINES THE PROBLEMS AND PRACTICES RELATING TO RAIN FOREST USE AND CONSERVATION IN VENEZUELA WITH A VIEW TOWARDS IDENTIFYING THOSE ASPECTS OF RAIN FOREST CONCERN WHICH ARE COMMON TO ALL TROPICAL REGIONS AS WELL AS THOSE WHICH ARE UNIQUE TO VENEZUELA. BASED ON A TWO-YEAR STUDY AND ON INFORMATION DRAWN FROM VARIOUS SOURCES, THE REPORT ATTEMPTS TO PRESENT A CONSENSUS OF OPINION ON RAIN FOREST CONSERVATIONAND MANAGEMENT FOR CONSIDERATION BY VENEZUELAN DECISION MAKERS. SPECIFIC CHAPTERS OF THE REPORT INCLUDE AN INTRODUCTION, RECOMMENDATIONS APPLICABLE TO OTHER COUNTRIES, THE DISPOSITION OF VENEZUELA'S RAIN FOREST, NATIONAL PARKS, RAIN FOREST WILDLIFE, RAIN FOREST NATIVE PEOPLES, AND A SUMMARY AND COMMENTS ON THE VENEZUELA STUDY. SEVERAL SUPPORTIVE APPENDIXES AND MAPS ARE INCLUDED.

NOISE

GERMANY,FED REP OF "BUILDER MUST TAKE NOISE PROTECTION INTO ACCOUNT." KAMPF DEM LAERM
EPA
LR(B) GERMAN 04/00/76 PGS 52-53 ID# 04771A

ACCORDING TO A RULING OF THE FEDERAL HIGH COURT, A BUILDER WHO CONSTRUCTS HOUSES ON SITES PARTICULARLY SUSCEPTIBLE TO NOISE MUST TAKE SOUNDPROOFING MEASURES, EVEN IF THIS IS NOT SPECIFICALLY STIPULATED IN THE CONTRACT. THE BUILDER IS OBLIGATED TO PROVIDE A MANNER OF CONSTRUCTION THAT DEFLECTS STREET NOISE TO THE MAXIMUM POSSIBLE EXTENT WITHIN REASONABLE COST LIMITS. IN THE CASE CITED, THE PLAINTIFF CONTRACTED FOR A HOUSE TO BE BUILT 50 METERS FROM A HIGHWAY THEN IN CONSTRUCTION. HE INQUIRED AND WAS REASSURED ABOUT POSSIBLE NOISE DISTURBANCES. WWHEN THE HIGHWAY OPENED TO TRAFFIC, NOISE LEVELS IN THE HOUSE NEVERTHELESS EXCEEDED MAXIMUM PERMISSIBLE LEVELS. THE PLAINTIFF SUED AND WAS AWARDED BY THE COURT THE COSTS FOR SOUNDPROOFING IN EXCESS OF THOSE THAT WOULD HAVE BEEN INCURRED HAD IT BEEN DONE AT THE TIME OF CONSTRUCTION. THE COURT RULED THAT IT WAS PART OF THE BUILDER'S BUSINESS TO HAVE OR TO ACQUIRE KNOWLEDGE OF POSSIBLE NOISE NUISANCE AND TO OFFER THE BUYER THE OPTION OF SOUNDPROOFING.

GERMANY,FED REP OF PRELIMINARY STUDIES ON THE MUNICIPAL ENGINEERING RESEARCH PROGRAMME.
ENVIRONMENT CANADA TRANSLATION DOENV TR-1230
GERMANY,FED OF. MINISTRY OF RESEARCH AND TECHNOLOGY EPA
ST( ) ENGLISH 00/00/77 PGS 1-31 ID# 04734A
ALSO PMB
*SOLID WASTE WATER AIR

INTERNATIONAL BOOKS ON AIR POLLUTION, NOISE AND SOLID WASTES
NAT'L. CENTER FOR SCIENTIFIC AND TECHNICAL DOCUMENTATION EPA
ST( ) ENGLISH 09/10/76 PGS 1-151 ID# 04700A
ALSO PMB, LRB
*AIR SOLID WASTE

PESTICIDES

SWEDEN "APRIL 28, 1977 ORDER NO. 246 TO AMEND THE ROYAL ORDINANCE (1973:334) ON PRODUCTS HAZARDOUS TO HEALTH AND TO THE ENVIRONMENT." SVENSK FORFATTNINGSSAMLING 1977:246
EPA
LR(A) SWEDISH 05/17/77 PGS 1 ID# 02699J

THIS ORDER AMENDS PARAGRAPH 27, SECTIONS 2 AND 3, OF THE ROYAL ORDINANCE (1973:334) ON PRODUCTS HAZARDOUS TO HEALTH AND TO THE ENVIRONMENT. THESE SECTIONS STIPULATE THAT PESTICIDES MAY NOT BE REGISTERED IF THE SUBSTANCE IS NOT SUITABLE FOR INSECT CONTROL DUE TO LACK OF EFFICIENCY; IF THE NAME OF THE PRODUCT COULD BE MISUNDERSTOOD IN CONNECTION WITH ITS COMPOSITION, EFFECT, OR QUALITY; IF IT COULD BE MISTAKEN FOR ANOTHER PESTICIDE; OR IF THE PRODUCT CONTAINS 2,4,5-TRICHLOROPHENOXYACETIC ACID (2,4,5 -T), ITS DERVIVATIVES OR SALTS. IF ANY OF THESE SUBSTANCES HAVE BEEN REGISTERED IN ACCORDANCE WITH OLDER REGULATIONS, THEY ARE NOW PROHIBITED.

RADIATION

AUSTRIA

"ZWENTENDORF BECOMES VIENNA'S ATOMIC VEXATION." FRANKFURTER ALLENGEMEINE ZEITUNG
KONITZER, HANNI
EPA
PM(B) GERMAN 05/23/77 PGS 10 ID# 04742A

THIS ARTICLE REVIEWS DISPUTES IN AUSTRIA'S RULING SOCIALIST PARTY REGARDING THE USE OF NUCLEAR ENERGY. THE COUNTRY'S FIRST NUCLEAR POWER PLANT, LOCATED IN ZWENTENDORF, IS NEARING COMPLETION, BUT THERE IS DEBATE AS TO WHETHER IT WILL BE PERMITTED TO OPERATE. FEDERAL CHANCELLOR KREISKY HAS SAID THAT HIS CHIEF CONCERN IS THE SAFE DISPOSAL OF NUCLEAR WASTES. PARTY OPPONENTS OF SUCH PLANTS EMPHASIZE DOUBTS ABOUT THEIR SAFETY AND EFFECTS ON HUMAN HEALTH. PROPONENTS POINT TO ENERGY NEEDS AND THE EXISTENCE OF A NEARBY NUCLEAR POWER PLANT IN CAECHOSLOVAKIA. THE QUESTION OF ZWENTENDORF WILL PROBABLY COME BEFORE THE AUSTRIAN PARLIAMENT BEFORE SUMMER, BUT THE GOVERNMENT MIGHT POSTPONE THE OPENING OF THE PLANT UNTIL AFTER PARLIAMENTARY ELECTION IN 1979. ANOTHER ARTICLE DATED JUNE 25, 1977 STATES THAT SOCIALIST PARTY LEADERSHIP MAY RECOMMEND ALLOWING ZWENTENDORF TO OPERATE BUT NOT GRANTING ANOTHER FURTHER CONSTRUCTION PERMITS FOR NUCLEAR POWER PLANTS IN THE IMMEDIATE FUTURE.

FINLAND

"NUCLEAR WASTE WILL BE STORED FOR A LONG TIME." HUFVUDSTADSBLADET
EPA
PM(B) SWEDISH 04/06/77 PGS 1, 18 ID# 04718A

FINNISH NUCLEAR POWER PLANTS ARE PREPARED TO STORE THEIR RADIOACTIVE WASTES FOR A LONG TIME, ACCORDING TO THIS ARTICLE. THE WASTE COULD LATER BE PROCESSED ABROAD AND RETURNED TO FINLAND ALTHOUGH NO SUCH PLANS EXIST AT THE PRESENT TIME. CURRENTLY, USED FUEL FROM THE NUCLEAR POWER PLANT IN LOVISA IS NO PROCESSED IN FINLAND BUT SHIPPED TO THE SOVIET UNION. A MODEL HAS BEEN SET UP ON THE INITIATIVE OF THE MINISTRY OF TRADE AND INDUSTRY WHICH SUGGESTS THAT POWER PLANTS WOULD BE RESPONSIBLE FOR THE HANDLING OF NUCLEAR WASTE AS LONG AS IT REMAINED ON THEIR PREMISES. ANOTHER ORGANIZATION, NOT YET IN EXISTENCE, WOULD BE RESPONSIBLE FOR THE TRANSPORTATION, PROCESSING, AND FINAL DISPOSAL OF RADIOACTIVE WASTE. THE COMPETENCE AND DEPANDABILITY OF SUCH AN ORGANZATION WOULD BE OF UTMOST IMPORTANCE.

FRANCE

"FEBRUARY 12, 1973 DECRES NO. 73-138 IMPLEMENTING THE LAW OF AUGUST 1, 1905 ON THE PREVENTION OF FRAUDULENT PRACTICES." JOURNAL OFFICIEL
EPA
LR(A) FRENCH 02/15/73 PGS 1728-30 ID# 04754A

THIS DECREE WAS ISSUED BY THE PRIME MINISTER IN IMPLEMENTATION OF THE AUGUST 1, 1905 LAW ON THE PREVENTION OF FRAUDULENT PRACTICES WITH RESPECT TO CHEMICALS IN HUMAN FOOD AND MATERIALS AND OBJECTS COMING INTO CONTACT WITH FOODS, PRODUCTS AND BEVERAGES INTENDED FOR HUMAN AND ANIMAL CONSUMPTION, AS WELL AS PROCESSES AND PRODUCTS USED IN THE CLEANSING OF SUCH MATERIALS AND OBJECTS. THE DECREE PROVIDES IN PARTICULAR THAT COMPONENTS, MATERIALS AND OBJECTS WHICH WILL COME INTO CONTACT WITH FODDS, PRODUCTS AND BEVERAGES FOR HUMAN CONSUMPTION MAY BE SUBMITTED TO IONIZING RADIATION ONLY IN ACCORDANCE WITH THE CONDITIONS AND LIMITS DETERMINED BY THE REGULATIONS IN FORCE. THIS ALSO APPLIES TO CLEANSING PROCESSES FOR SUCH MATERIALS AND OBJECTS.

RADIATION

FRANCE "JULY 29, 1974 ORDER ON TELEGAMMATHERAPY DEVICES." JOURNAL OFFICIEL
EPA
LR(A) FRENCH 08/13/77 PGS 8515 ID# 04755A

THIS ORDER, ISSUED BY THE MINISTER OF HEALTH, EMPOWERS OFFICIALS OF THE CENTRAL SERVICE FOR PROTECTION FROM IONIZING RADIATION (SCPRI) TO DETERMINE WHETHER A TELEGAMMATHERAPY DEVICE IS BEING USED ILLEGALLY OR WHETHER IT IS BEING MISUSED. SHOULD THEY ESTABLISH THAT THE LICENSE FOR THE USE OF A TELEGAMMATHERAPY SOURCE HAS BEEN WITHDRAWN OR HAS LAPSED, SCPRI OFFICIALS MAY SEAL THE FACILITY TO PROHIBIT ITS FURTHER USE. THE GENERAL DIRECTOR OF HEALTH AND THE HEAD OF SCPRI ARE CHARGED WITH THE IMPLEMENTATION OF THIS ORDER.

SCANDINAVIA "THE NORDIC COUNCIL ON NUCLEAR POWER--THE WASTE RISK MUST BE ELIMINATED."
HUFVUDSTADSBLADET
EPA
PM(B) SWEDISH 04/03/77 PGS 12 ID# 04719A

THE NORDIC COUNCIL HAS DISCUSSED THE HANDLING OF NUCLEAR WASTE AS A RESULT OF THE RAPID EXPANSION OF NUCLEAR POWER IN FINLAND AND SWEDEN. TWO CATEGORIES OF WASTE ARE RECOGNIZED IN THIS CONTEXT: WASTE RESULTING FROM REACTOR OPERATIONS, AND WASTE RESULTING FROM THE PROCESSING OF IRRADIATED REACTOR FUEL TO BE USED FOR URANIUM. THE FIRST CATEGORY CONSISTS OF LOW AND MEDIUM ACTIVATED WASTE, AND THE NORDIC COUNCIL HAS ALREADY AGREED TO COOPERATE CONCERNING ITS TREATMENT. HIGHLY ACTIVATED WASTE, I.E. THE SECOND CATEGORY, WILL BE A PROBLEM IN SCANDINAVIA AT THE EARLIEST BY 1990. THE COUNCIL RECOGNIZES THAT RESEARCH IN THIS FIELD IS OF UTMOST IMPORTANCE AND ALSO URGES NORDIC COOPERATION WHEN SOLVING HANDLING AND STORAGE PROBLEMS INVOLVING NUCLEAR WASTE. SINCE NORWAY HAS NOT YET DECIDED IF NUCLEAR POWER WILL BE AUTHORIZED WITHIN ITS BORDERS, IT HAS VOICED CERTAIN RESERVATIONS ABOUT FORMALIZING FURTHER COOPERATION ON THIS SUBJECT AT THE PRESENT TIME.

SWEDEN "APRIL 21, 1977 LAW NO. 140 CONCERNING SPECIAL PERMISSION TO SUPPLY NUCLEAR REACTORS WITH NUCLEAR FUEL, ETC." SVENSK FORFATTNINGSSAMLING 1977:140
EPA
LR(A) SWEDISH 05/03/77 PGS 1-2 ID# 04695A

THIS LAW STIPULATES THAT A GOVERNMENT PERMIT MUST BE ISSUED FOR THE SUPPLY OF NUCLEAR FUEL TO NUCLEAR REACTORS WHICH WERE NOT SUPPLIED WITH THIS TYPE OF FUEL PRIOR TO OCTOBER 8, 1976, EVEN THOUGH PERMISSION MAY HAVE ALREADY BEEN GIVEN ACCORDING TO PARAGRAPH TWO OF THE ATOMIC ENERGY LAW (1956:306). THE OWNER OF A NUCLEAR REACTOR MUST OBTAIN A CONTRACT GUARANTEEING THE PROCESSING AS WELL AS THE FINAL STORAGE AREA OF THE HIGHLY RADIOACTIVE NUCLEAR WASTE OR MUST DEDICATE A SAFE STORAGE AREA FOR NON-PROCESSED NUCLEAR WASTE. IF THE REJECTION OF A PERMIT APPLICATION REPEALS A FORMER APPROVAL ISSUED ACCORDING TO THE ATOMIC ENERGY LAW, WHICH IN TURN RESULTS IN FINANCIAL LOSS FOR THE OWNER, HE MAY RECEIVE COMPENSATION FOR THIS LOSS. DELIBERATE VIOLATION OF THIS LAW WILL RESULT IN FINES OR A MAXIMUM PRISON TERM OF TWO YEARS.

SWEDEN

"BARSEBACK II HAS REACHED AN AGREEMENT FOR THE PROCESSING OF NUCLEAR WASTE."
SVENSKA DAGBLADET

EPA

PM(B) SWEDISH 04/23/77 PGS 4 ID# 04703A
ALSO LRB

THE SWEDISH COMPANY SYDKRAFT REPORTS THAT A CONTRACT, VALID UNTIL 1979, HAS BEEN WORKED OUT WITH THE FRENCH FIRM COGEMA TO PROCESS BETWEEN 25-30 TONS OF NUCLEAR WASTE EACH FROM THE REACTORS BARSEBACK II AND RINGHALS III AT A PRICE OF 80 MILLION KRONOR. IT IS PROJECTED THAT THE WASTE WILL BE RETURNED TO SWEDEN EMBEDDED IN GLASS IN ACCORDANCE WITH PENDING FRENCH SAFETY STANDARDS SOMETIME BETWEEN 1985 AND 1990. SWEDISH LAW (APRIL 21, 1977 LAW NO. 140 CONCERNING SPECIAL PERMISSION TO SUPPLY NUCLEAR REACTORS WITH NUCLEAR FUEL, ETC.) STATES THAT PLANS FOR SAFE PROCESSING, HANDLING, AND FINAL DISPOSAL OF NUCLEAR WASTE MUST BE APPROVED BY THE GOVERNMENT. A CONTRACT FOR THE PROCESSING OF NUCLEAR WASTE AFTER 1979 IS UNDER NEGOTIATION BETWEEN SKBF (SWEDISH NUCLEAR FUEL SUPPLY) AND UNITED PROCESSORS. AN APPLICATION HAS BEEN SUBMITTED TO ESTABLISH A PERMANENT STORAGE AREA FOR WASTE FROM THE FIVE REACTORS ESTABLISHED PRIOR TO THE GOVERNMENT CHANGEOVER IN 1976.

SWITZERLAND

"PROTECTION OF LIVESTOCK AND AGRICULTURAL PRODUCTS IN CASE OF REACTOR ACCIDENTS." NEUE ZUERCHER ZEITUNG

EPA

PM(B) GERMAN 06/02/77 PGS 19 ID# 04768A

THE FEDERAL COMMISSION FOR MONITORING RADIOACTIVITY (KUER) IN SWITZERLAND HAS DEVELOPED MEASURES TO PROTECT LIVESTOCK AND OTHER AGRICULTURAL PRODUCTS IN CASE OF AN ACCIDENT INVOLVING NUCLEAR REACTORS. THE PUBLIC WOULD BE WARNED OF THE OCCURRENCE OF THE EMERGENCY, AND IN MOST CASES, FARMERS WOULD HAVE TIME TO DRIVE CATTLE INTO STALLS WHERE THEIR EXPOSURE TO RADIATION WOULD BE REDUCED BY A FACTOR OF3-5. TO AVOID CONTAMINATION FROM GRAZING LAND, CATTLE WOULD HAVE TO BE FED FROM STORED FEED SUPPLIES FOR ONE OR TWO DAYS, FOLLOWED BY THE USE OF FEEDSTUFFS FROM UNAFFECTED NEIGHBORING AREAS. WATER FROM PUBLIC SUPPLIES WOULD BE UNCONTAMINATED. CROPS MIGHT HAVE TO BE DESTROYED IN THE WORST IMAGINABLE SITUATION, BUT IN MOST CASES, RADIOACTIVITY WOULD DECREASE SUFFICIENTLY TO ALLOW THE SAFE USE OF SUCH END PRODUCTS AS MEAL AND DAIRY GOODS. ALL SUCH PRODUCTS WOULD BE MONITORED BEFORE USE THE SAFETY OF OTHER AGRICULTURAL PRODUCTS WOULD BE DETERMINED BY MEASURING RADIOACTIVITY IN REPRESENTATIVE SAMPLES.

RADIATION

WHO

WHOLESOMENESS OF IRRADIATED FOOD. TECHNICAL REPORT SERIES 604
WORLD HEALTH ORGANIZATION EPA
ST( ) ENGLISH 00/00/77 PGS 1-44 ID# 04715A

THE REDUCTION OF FOOD LOSS IS AN IMPORTANT PART OF THE EFFORT TO MEET THE NUTRITIONAL NEEDS OF THE WORLD'S EXPANDING POPULATION. IT IS USUALLY MINIMIZED BY THE USE OF CHEMICALS, BUT THESE HAVE PROVED TO BE A SOURCE OF HAZARD. INCREASING ATTENTION HAS THEREFORE BEEN PAID TO THE USE OF IRRADIATION WITH GAMMA-RAYS OF FAST ELECTRONS FOR FOOD PROTECTION AND TO DETERMINE THE WHOLSOMENESS OF SUCH FOOD. THIS REPORT REVIEWS THE ADVANCES IN KNOWLEDGE AND THE DATA THAT HAVE BECOME AVAILABLE DURING THE PAST SEVEN YEARS. AN EXAMINATION OF THE TECHNICAL ASPECTS; RADIATION CHEMISTRY; THE NUTRITIONAL, MICROBIOLOGICAL AND TOXICOLOGICAL ASPECTS; AND THE METHOD OF EVALUATION IS PRESENTED. A NUMBER OF FOOD ITEMS ARE EVALUATED OR RE-EVALUATED. SUGGESTED TOPICS FOR FUTURE RESEARCH AND RECOMMENDATIONS TO INTERNATIONAL AGENCIES ARE INCLUDED.

SOLID WASTE

DENMARK

"MARCH 17, 1976 ORDER NO. 121 ON CHEMICAL WASTE." LOVTIDENDE FOR KONGERIGET DANMARK, PART A, NO. XVII
EPA
LR(A) DANISH 03/27/76 PGS 320-324 ID# 01445B
*WATER AIR TOXIC SUBS

GERMANY,FED REP OF

BEISPIELE AUS DER PRAXIS DER ABLAGERUNG VON SONDERABFAELLEN IN DER BRD (EXAMPLES FROM GENERAL PRACTICE OF THE DEPOSIT OF SPECIAL WASTES IN THE FRG). BERICHTE 2/77
WIEDEMANN, H. U. EPA
PM( ) GERMAN 00/00/77 PGS 1-60 ID# 04692A
ALSO ST

THIS REPORT, PUBLISHED BY THE FEDERAL ENVIRONMENTAL AGENCY, REVIEWS THE PRACTICES REGARDING THE DISPOSAL OF SPECIAL WASTES IN THE FEDERAL REPUBLIC OF GERMANY SEVERAL YEARS AFTER PASSAGE OF THE FEDERAL WASTE DISPOSAL LAW. THIS IS DONE BY PRESENTING NUMEROUS EXAMPLE, OFTEN IN CONSIDERABLE DETAIL, FROM CURRENT TECHNICAL LITERATURE. IN PARTICULAR, CHAPTERS DEAL WITH REMOVAL OF LIQUID AND SLIMY WASTES AT TEFUSE DUMPS; STORAGE OF SLUDGES CONTAINING METAL IN MONO-DUMPS; SPECIAL WASTE DUMPS WITHOUT WASTE TREATMENT FACILITIES; SPECIAL WASTE DUMPS WITH FILIATED WASTE TREATMENT FACILITIES; AND DISPOSAL OF LIQUID SLUDGES IN SLUDGE BEDS. CONCLUSIONS AND RECOMMENDATIONS ARE DRAWN FROM THE REVIEW, WHICH MAY BE USEFUL IN PLANNING NEW DUMPS AND IN EVALUATING EXISTING ONES. FINALLY A SELECTED BIBLIOGRAPHY IS PRESENTED TO ALLOW ADDITIONAL STUDY OF THE PROBLEM.

SOLID WASTE

GERMANY,FED REP OF "CRITICISM OF THE WASTE MANAGEMENT PROGRAM." UMWELT: FORSCHUNG, GESTALTUNG, SCHUTZ, NO. 2
EPA
PM(B) GERMAN 04/00/77 PGS 138-139 ID# 04735A

THE FEDERATION OF GERMAN INDUSTRIES (BDI)AGREES FOR THE MOST PART WITH THE GOALS OF THE FEDERAL GOVERNMENT'S 1975 WASTE MANAGEMENT PROGRAM, BUT DISAGREES WITH SOME OF THE PROPOSED MEASURES TO ACCOMPLISH THEM. IN GENERAL THE PROGRAM WILL ATTEMPT TO REDUCE WASTE, PROMOTE RECYCLING, AND REVIEW PRODUCTION AND USE PRACTICES IN REGARD TO MATERIALS. AMONG THE GOVERNMENT'S SUGGESTIONS TO ACHIEVE THESE ENDS ARE: A DIALOGUE WITH INDUSTRY, SYSTEMATIC PLANNING THAT MIGHT INCLUDE A CERTAIN STANDARDIZATION OF PRODUCTS, AND THE POSSIBLE RESTRICTION OR PROHIBITION OF CERTAIN PRODUCTION PROCESSES OR PRODUCTS. THE FEDERATION FEELS THAT WASTE MANAGEMENT SHOULD BE REGARDED AS A PART OF THE LARGER PROBLEM OF RAW MATERIAL MANAGEMENT AND THAT ECONOMIC FACTORS NOT BE OVERLOOKED. IT FEELS THAT THE GOVERNMENT TENDS TO PLACE TOO LITTLE FAITH IN THE COMPETITIVE MARKET SYSTEM'S ABILITY TO SOLVE THE WASTE PROBLEM AND THAT INCREASED REGULATION IS NOT THE ANSWER. GREATER SUPPORT OF INDUSTRY'S RESEARCH AND DEVELOPMENT MIGHT BE MORE PRODUCTIVE.

GERMANY,FED REP OF PRELIMINARY STUDIES ON THE MUNICIPAL ENGINEERING RESEARCH PROGRAMME.
ENVIRONMENT CANADA TRANSLATION DOENV TR-1230
GERMANY,FED OF. MINISTRY OF RESEARCH AND TECHNOLOGY EPA
ST( ) ENGLISH 00/00/77 PGS 1-31 ID# 04734A
ALSO PMB
WATER AIR NOISE

THIS TRANSLATION OF AN EXTRACT FROM THE BOOKLET ON MUNICIPAL ENGINEERING DEALS WITH WASTE DISPOSAL TECHNOLOGY, DEFINE AS THAT AREA OF TECHNOLOGY CONCERNED WITH ELIMINATING THE NEGATIVE ECOLOGICAL EFFECTS OF TECHNOLOGY ITSELF. THE EXTRACT TREATS SOLIDS WASTE; WASTE HEAT AND WASTEWATER; AIR POLLUTION; AND NOISE AND THE PSYCHOLOGICAL STRESS THAT IT CAUSES. DATA ARE PROVIDED ON THE PRESENT WASTE ACCUMULATION/POLLUTION LEVELS, AND A DESCRIPTION OF THE PRESENT STATUS OF WASTE DISPOSAL ENGINEERING IS GIVEN. FROM THIS BACKGROUND, MEASURES ARE DERIVED FOR IMPROVING WASTE DISPOSAL TECHNOLOGY AT THE MUNICIPAL ENGINEERING LEVEL.

INDIA "TOWARDS A WASTE UTILISAITON POLICY." SCAVENGER, VOL. 7, NO. 1
RAMACHANDRAN, A. EPA
PM(B) ENGLISH 01/00/77 PGS 6-10 ID# 04760A
ALSO SE
WATER

THIS ARTICLE, PUBLISHED IN THE JOURNAL OF THE INDIAN SOCIETY FOR CLEAN ENVIRONMENT, SUMMARIZES THE CHARACTERISTICS OF A MODERN WASTE-PRODUCING SOCIETY AND THE STEPS THAT CAN BE TAKEN TO UTILIZE WASTES. IT ALSO LISTS THE CONSIDERATIONS TAKEN BY THE NATIONAL COMMITTEE ON SCIENCE AND TECHNOLOGY OF INDIA IN MAKING WASTE UTILIZATION AN IMPORTANT PART OF THE SCIENCE AND TECHNOLOGY PLAN AND REPORTS THAT ABOUT 90 PROJECTS HAVE BEEN IDENTIFIED IN WASTE UTILIZATION RESEARCH AND DEVELOPMENT. THESE PROJECTS FALL INTO ONE OF THE FOLLOWING CATEGORIES: AGRICULTURAL WASTES, ANIMAL WASTES, COMMUNITY WASTES, AND WASTES ARISING FROM THE CHEMICAL, MINERAL AND METALLURGICAL INDUSTRIES. THE ARTICLE CONCLUDES THAT ALTHOUGH WASTE UTILIZATION POLICIES CAN BE IMPLEMENTED WITH THE HELP OF NEW AND IMPROVED TECHNOLOGY, MUCH WILL HAVE TO BE DONE IN THE SOCIOECONOMIC AREA TO IMPROVE THE EFFICIENCY OF THE USE OF RAW MATERIALS, AND THIS WILL REQUIRE JOINT COOPERATION BETWEEN GOVERNMENT AND INDUSTRY.

SOLID WASTE

INTERNATIONAL
ST( )
BOOKS ON AIR POLLUTION, NOISE AND SOLID WASTES
NAT'L. CENTER FOR SCIENTIFIC AND TECHNICAL DOCUMENTATION EPA
ENGLISH 09/10/76 PGS 1-151 ID# 04700A
ALSO PMB, LRB
*AIR NOISE

SWEDEN
PM(B)
ENVIRONMENTAL PROBLEMS CONNECTED WITH SOLID WASTE DISPOSAL. STATENS NATURVARDSVERK PUBLIKATIONER 1976:13
SWEDEN. NATIONAL ENVIRONMENT PROTECTION BOARD EPA
SWEDISH 00/00/77 PGS 1-152 ID# 04709A

THIS BOOKLET CONTAINS A REPORT ON ENVIRONMENTAL PROBLEMS CONNECTED WITH SOLID WASTE TREATMENT, SUBMITTED BY A WORKING GROUP WHICH WAS ORGANIZED BY THE NATIONAL ENVIRONMENT PROTECTION BOARD. THE FOLLOWING TOPICS ARE DISCUSSED: LOCATING A WASTE DUMP; PLANNING, CARE AND CONTROL OF A WASTE DUMP, INCLUDING MEASURES TAKEN TO ELIMINATE DISTURBANCES OF THE ENVIRONMENT; MEASURES FOR RETURNING THE DUMP TO A USEFUL PART OF THE ENVIRONMENT; TYPES AND AMOUNTS OF SOLID WASTES; PHYSIOLOGICAL, CHEMICAL, AND BIOLOGICAL CHANGES OF SOLID WASTE AND ITS HYDROLOGY; HYDROGEOLOGICAL FACTORS INFLUENCING THE SELECTION OF A DUMPING SITE; AND QUESTIONS PERTAINING TO WATER PROTECTION. APPENDED ARE THE FOLLWOING SPECIAL REPORTS: TREATMENT METHODS FOR WASTE; REGIONAL TREATMENT OF WASTE; LAWS, REGULATIONS, AND BASES FOR APPEALS; AND A LIST OF REFERENCES. THE BOOKLET ALSO CONTAINS NUMEROUS CHARTS AND MAPS.

SWEDEN
PM(B)
"DON'T FORGET THE DANGER FROM PHOSPHORUS." HUFVUDSTADSBLADET EPA
SWEDISH 04/06/77 PGS 9 ID# 04737A
ALSO LRB
*WATER

SOLIDWASTE

SWEDEN
PM(A)
ENVIRONMENTAL POLICY IN SWEDEN EPA
ENGLISH 00/00/77 PGS 1-444 ID# 04702A
ALSO LRB, SE
*GENERAL TOXIC SUBS LAND USE AIR

TOXIC SUBS

CANADA
ARSENIC: A BIBLIOGRAPHY OF RECENT LITERATURE. EPS3-NW-75-2
WALLACE, RON R. EPA
ST( ) ENGLISH 04/00/75 PGS 1-134 ID# 04683A

THIS BIBLIOGRAPHY OF RECENT LITERATURE ON ARSENIC AND ITS COMPOUNDS WAS PREPARED BY THE ENVIRONMENTAL PROTECTION SERVICE OF ENVIRONMENT CANADA TO ASSIST THE SEVERAL RESEARCHERS WHO ARE TO INVESTIGATE THE ASPECTS OF ARSENIC POLLUTION AFFECTING THE AIR, WATER, SOILS, SEDIMENTS AND BIOTA (INCLUDING HUMANS) NEAR YELLOWKNIFE, N.W.T. IN ORDER TO FACILITATE THE ACCESS TO THE PAPAERS AND TEXTS CITED, THE BIBLIOGRAPHY HAS BEEN SUBDIVIDED INTO TOPIC HEADINGS WHICH ROUGHLY CORRESPOND TO THE BROAD AREAS OF CONCERN TO BE INVESTIGATED. THE EIGHT SUBDIVISIONS ARE AS FOLLOWS: ANALYTICAL METHODS; REVIEWS; BIOLOGICAL--GENERAL--AQUATIC; BIOLOGICAL--SOILS/SEDIMENTS: HUMAN HEALTH; AIR POLLUTION; AND STUDIES IN AND AROUND YELLOWKNIFE.

CANADA
AQUATIC ENVIRONMENTAL QUALITY: TOXICOLOGY. FISHERIES RESEARCH OF CANADA
REPORT NO. 13
HAMILTON, R.D. EPA
ST( ) ENGLISH* 11/00/76 PGS 1-18 ID# 04739A
*ALSO FRENCH
*WATER

DENMARK
"MARCH 17, 1976 ORDER NO. 121 ON CHEMICAL WASTE." LOVTIDENDE FOR KUNGERIGET
DANMARK, PART A, NO. XVII
EPA
LR(A) DANISH 03/27/76 PGS 320-324 ID# 01445B
*WATER AIR SOLID WASTE

EUROPEAN COMMUNITIES
PATHWAY OF MERCURY AND THE IMPACT OF DIFFERENT ENVIRONMENTAL POLICIES ON THE FUTURE MERCURY CONTENT IN SOIL, AIR AND SEDIMENTS IN EUROPE. EUR 568E
VAN ENK, R.H., AND P. ZEGERS EPA
ST( ) ENGLISH 00/00/77 PGS 1-61 ID# 04699A
WATER AIR

THIS REPORT DEALS WITH THE CONSTRUCTION OF A TIME-DEPENDENT COMPUTER MODEL FOR THE PREDICTION OF THE FUTURE MERCURY POLLUTION OF AIR, SOIL AND SEDIMENTS IN EUROPE. INFORMATION CONCERNING THE DIFFERENT PROCESSES UNDERLYING THE MERCURY PATHWAY IN THE ENVIRONMENT HAS BEEN OBTAINED FROM A LITERATURE STUDY PUBLISHED PREVIOUSLY AND USED IN A NATURAL MODEL FOR EUROPE TO EVALUATE THE TIME-CONSTANTS FOR THE VARIOUS PROCESSED IN THE INDUSTRIAL MODEL. VALUES FOR THE MERCURY LEVELS IN THE ENVIRONMENT, AS A FUNCTION OF TIMES, BETWEEN 1900 AND 2050, GIVEN BY THE INDUSTRIAL MODEL ARE AVERAGES AND ONLY INDICATE THE GENERAL TREND. NO LOCALIZED POLLUTION PREDICTION CAN BE OBTAINED FROM THIS MODEL. FINALLY IT DEALS WITH THE EFFECT OF DIFFERENT POLITICAL DECISIONS CONCERNING MERCURY DISCHARGE MEASURES TODAY ON THE FUTURE MERCURY POLLUTION OF AIR, SOIL AND SEDIMENTS IN EUROPE. (AUTHOR ABSTRACT.)

TOXIC SUBS

GERMANY,FED REP OF — LUFTQUALITAESKRITERIEN FUER CADMIUM (AIR QUALITY CRITERIA FOR CADMIUM).
BERICHTE 4/77
GERMANY,FED REP OF. FEDERAL ENVIRONMENTAL AGENCY — EPA
ST( ) — GERMAN — 00/00/77 PGS 1-158 — ID# 04744A
ALSO PMB

THE FEDERAL NUISANCES CONTROL LAW EMPOWERS THE FEDERAL GOVERNMENT TO SET MAXIMUM AMBIENT LEVELS FOR SUBSTANCES POTENTIALLY HARMFUL TO MAN, ANIMALS, PLANTS AND MATERIALS. IT IS THE TASK OF THE FEDERAL ENVIRONMENTAL AGENCY TO PROVIDE SCIENTIFIC SUPPORT FOR THE ESTABLISHMENT OF SUCH MAXIMUM VALUES. THIS VOLUME IS INTENDED TO PROVIDE A SCIENTIFIC BACKGROUND FOR LEGALLY LIMITING THE QUANTITY OF CADMIUM IN THE ENVIRONMENT AS WELL AS TO REVIEW THE CURRENT SITUATION REGARDING ENVIRONMENTAL CADMIUM. INITIALLY REVIEWED ARE CADMIUM'S PHYSICAL AND CHEMICAL PROPERTIES AND METHODS OF INVESTIGATION AND ANALYSIS. ALSO CONSIDERED ARE THE SOURCES AND MEANS OF REDUCING CADMIUMEMISSIONS; THE CURRENT AMBIENT AIR QUALITY SITUATION; AND CADMIUM POLLUTION OF FOOD AND DRINKING WATER. THE EFFECTS OF CADMIUM ON MAN, ANIMALS AND MATERIALS ARE INVESTIGATED. FINALLY, ATTENTION IS GIVEN TO CADMIUM IN THE ECOSPHERE AND TO NATIONAL AND INTERNATIONAL EFFORTS TO LIMIT CADMIUM IN THE ENVIRONMENT.

SWEDEN — ENVIRONMENTAL POLICY IN SWEDEN
EPA
PM(A) — ENGLISH — 00/00/77 PGS 1-444 — ID# 04702A
ALSO LRB, SE
*GENERAL SOLIDWASTE LAND USE AIR

UNITED NATIONS — "UNEP TOXIC CHEMICALS REGISTER." MARINE POLLUTION BULLETIN, VOL. 7, NO. 4
EPA
PM(B) — ENGLISH — 04/00/77 PGS 50-60 — ID# 04767A

THIS ARTICLE DESCRIBES THE ATTRIBUTES OF THE NEWLY CREATED INTERNATIONAL REGISTER OF POTENTIALLY TOXIC CHEMICALS (IRPTC) OF THE UNITED NATIONS ENVIRONMENT PROGRAM (UNEP). TOGETHER WITH THE INTERNATIONAL REFERRAL SYSTEM (IRS) AND THE GLOBAL ENVIRONMENTAL MONITORING SYSTEM (GEMS), THE REGISTER FORMS THE THIRD COMPONENT OF "EARTHWATCH," A NEW UNEP PROGRAM. THE ARTICLE BRIEFLY DESCRIBES HOW TOXIC CHEMICAL INFORMATION WILL BE COLLECTED AND ASSIMILATED INTO THE REGISTER AS WELL AS THE INTENDED USE OF THE INFORMATION, CRITERIA FOR SELECTION OF DATA, AND THE PROCESSING OF INFORMATION REQUESTS. THE INTENDED USER OF THE IRPTC ARE MEMBER STATES OF THE UNITED NATIONS, PUBLIC HEALTH AUTHORITIES, RESEARCH WORKERS, AND INDUSTRIES WHICH USE PRODUCTS OF POTENTIAL DANGER TO THE ENVIRONMENT.

TOXIC SUBS

WHO ENVIRONMENTAL HEALTH CRITERIA 2: POLYCHLORINTED BIPHENYLS AND TERPHENYLS
WORLD HEALTH ORGANIZATION EPA
PM(B) ENGLISH 00/00/76 PGS 1-85 ID# 04714A
ALSO ST

THIS VOLUME, PUBLISHED UNDER THE JOINT SPONSORSHIP OF THE UNITED NATIONS ENVIRONMENT PROGRAMME AND THE WORLD HEALTH ORGANIZATION, REVIEWS AND EVALUATES INFORMATION ON PCBS AND PCTS WITH REGARD TO BIOLOGICAL AND OTHER ENVIRONMENTAL FACTORS THAT MAY INFLUENCE HUMAN HEALTH. AN INITIAL SUMMARY DISCUSSES THE MAJOR ISSUES AND MAKES RECOMMENDATIONS FOR FURTHER RESEARCH. THE FOLLOWING CHARTERS CONTAINS THE INFORMATION ON WHICH THE EVALUATION OF HEALTH RISKS WAS BASED. THEY DEAL WITH: THE CHEMICAL COMPOSITION OF PCBS AND PCTS; DETERMINATION OF RESIDUES; SOURCES OF POLLUTION; THEIR TRANSPORT AND ENVIRONMENTAL LEVELS IN AIR, SOIL, WATER AND LIVING ORGANISMS, WITH PARTICULAR REFERENCE TO FOOD CHAINS OR WEBS; THE EXTEND OF HUMAN EXPOSURE THROUGH FOOD, OCCUPATION OR OTHER SOURCES; THE METABOLISMS OF THESE SUSTANCES; EXPERIMENTAL STUDIES OF THEIR EFFECTS ON ANIMALS; AND EPIDEMIOLOGICAL AND CLINICAL STUDIES OF THEIR EFFECTS ON MAN. THE FINAL CHAPTER EVALUATES THE HEALTH RISKS TO MAN OF EXPOSURE TO PCBS AND PCTS.

WHO ENVIRONMENTAL HEALTH CRITERIA 1: MERCURY
WORLD HEALTH ORGANIZATION EPA
PM(B) ENGLISH 00/00/76 PGS 1-131 ID# 94713A
ALSO ST

THE WHO ENVIRONMENTAL HEALTH CRITERIA PROGRAMME WAS ESTABLISHED IN 1973 TO ASSESS THE EFFECTS ON HUMAN HEALTH OF TOTAL EXPOSURE TO POLLUTANTS FROM VARIOUS MEDIA. THIS BOOKLET ON MERCURY, PUBLISHED UNDER THE JOINT SPONSORSHIP OF THE UNITED NATIONS ENVIRONMENT PROGRAMME AND THE WORLD HEALTH ORGANIZATION, IS A RESULT OF THE PROGRAM. IT OPENS WITH A SUMMARY OUTLINING THE MAJOR ISSUES AND MAKING RECOMMENDATIONS FOR FURTHER RESEARCH. THE SECOND PART OF THE PUBLICATION CONTAINS THE FINDINGS ON THE BASIS OF WHICH THE HEALTH RISKS WRE EVALUATED. THERE ARE CHAPTERS ON: CHEMICAL AND PHYSICAL PROPERTIES OF MERCURY AND ITS COMPOUNDS, SAMPLING PROCEDURES AND ANALYTICAL METHODS; SOURCES OF POLLUTION; TRANSPORT AND DISTRIBUTION OF MERCURY; EXPERIMENTAL STUDIES ON ITS EFFECT ON ANIMALS; AND EPIDEMIOLOGICAL AND CHEMICAL STUDIES OF ITS EFFECT ON MAN. THE FINAL CHAPTER PROVIDES AN EXPERT EVALUATION OF THE HEALTH RISKS TO MAN FROM EXPOSURE TO MERCURY AND PROVIDES GUIDELINES ON EXPOSURE AND DOSE LIMITS.

WATER

AUSTRALIA

LR(A)

DESIGN CRITERIA FOR OCEAN DISCHARGE. ENVIRONMENTAL DESIGN GUIDE WP-1
AUSTRALIA. NEW SOUTH WALES. STATE POLLUTION CONTROL COMM. EPA
ENGLISH 00/00/00 PGS 1-5 ID# 04736A
ALSO PMB

THIS DESIGN GUIDE PAMPHLET OUTLINES THE CRITERIA THAT THE STATE POLLUTION CONTROL COMMISSION OF NEW SOUTH WALES, AUSTRALIA, IS TO CONSIDER BEFORE ISSUING AN OCEAN DISCHARGE PERMIT PURSUANT TO THE CLEAN WATER ACT OF 1970. THESE CRITERIA PERTAIN TO: THE CLASSIFICATION OF THE RECEIVING WATERS; THE REQUIREMENT TO MAINTAIN OCEAN WATERS VISUALLY FREE OF OIL, GREASE AND OTHER FLOATABLE MATTERS; MAINTENANCE OF A VARIETY OF MARINE LIFE; AND THE PROTECTION OF BEACHES IN THE INTEREST OF PUBLIC HEALTH. TO ACHIEVE THESE ENDS, MAXIMUM PERMISSIBLE CONCENTRATIONS OF SPECIFIED SUBSTANCES AT THE BOUNDARY OF THE INITIAL DILUTION ZONE ARE GIVEN AS WELL AS MAXIMUM PERMISSIBLE COLIFORM CONCENTRATIONS AT SPECIFIED DISTANCES FROM BEACHES. OTHER CONSIDERATIONS INVOLVE THE REMOVAL OF SETTABLE MATTER FROM DISCHARGES, THE PROVISION OF INFORMATION FROM INDIVIDUAL DISCHARGE WORKS TO THE COMMISSION, AND THE DISCHARGE CONDITIONS WHICH MAY BE IMPOSED BY THE COMMISSION BEFORE ISSUING INDIVIDUAL LICENSES.

AUSTRALIA

ST( )

TREATMENT PROCESSES FOR WATER POLLUTION CONTROL IN NEW SOUTH WALES.
ENVIRONMENTAL DESIGN GUIDE WP-3
AUSTRALIA. NEW SOUTH WALES. STATE POLLUTION CONTROL COMM. EPA
ENGLISH 00/00/76 PGS 3-21 ID# 04743A

THIS ENVIRONMENTAL DESIGN GUIDE, PUBLISHED BY THE STATE POLLUTION CONTROL COMMISSION OF NEW SOUTH WALES, AUSTRALIA, DESCRIBES THE WASTEWATER TREATMENT PROCESSES WHICH CAN BE APPLIED UNDER THE NEW SOUTH WALES CLEAN WATER ACT. PHYSICAL AND BIOLOGICAL TREATMENT PROCESSES ARE DESCRIBED FOR PRIMARY, SECONDARY AND TERTIARY TREATMENT STATES. PRIMARY TREATMENT IS DESCRIBED AS THE PHYSICAL SEPARATION OF SETTLEABLE, FLOATING SUSPENDED SOLIDS FROM WASTEWATER. UNDER SECONDARY TREATMENT PROCESSES, ACTIVATED SLUDGE, TRICKLING FILTRATION AND WASTE STABILIZATION PONDS ARE DESCRIBED. UNDER TERTIARY TREATMENT PROCESSES, SURFACES AND IN-DEPTH FILTRATION ARE DESCRIBED AS WELL AS MATURATION PONDS, CHEMICAL CLARIFICATION, NITROGEN AND PHOSPHATE REMOVAL, CARBON ADSORPTION AND DISINFECTION. SPECIAL TREATMENT METHODS ARE ALSO DESCRIBED AND INCLUDE FOAM FRACTIONATION, DISTILLATION, REVERSE OSMOSIS, ELECTRODIALYSIS, FREEZING AND HYDRATING, AND SOLVENT EXTRACTION.

BRAZIL

CONTROL DE QUALIDADE DE PRODUTO PARA SANEAMENTO BASICO. RETROSPECTIVA E PRESPECTIVA (PRODUCT QUALITY CONTROL FOR BASIC SANITATION. RETROSPECT AND PROSPECT)
CUNHA ANDRADE, LUIZ, AND LUIZ PAULO DE ABREU OLIVEIRA EPA
PM(B) PORTUGUESE 00/00/75 PGS 1-16 ID# 04685A

THIS PAPER, PRESENTED AT THE EIGHTH BRAZILIAN SANITARY ENGINEERING CONGRESS HELD IN RIO DE JANEIRO IN DECEMBER 1975, DISCUSSES THE EVOLUTION AND CONCEPT OF PRODUCT QUALITY CONTROL AS A MEANS OF ENSURING SANITARY WATER SUPPLY AND SEWAGE DISPOSAL IN BRAZIL, ESPECIALLY IN THE SAO PAULO REGION. THE INSTITUTIONAL ARRANGEMENTS FOR BASIC SANITATION LEADING UP TO THE CREATION OF THE STATE COMPANY FOR TECHNOLOGY, BASIC SANITATION AND ENVIRONMENTAL PROTECTION (CETESB) AS WELL AS RELATED AGENCIES AND PROGRAMS ARE DISCUSSED. THE CURRENT SYSTEM OF QUALITY CONTROL EMPLOYED BY CETESB, TOGETHER WITH ITS SHORTCOMINGS, IS DESCRIBED, AND THE POSSIBLE APPLICATION OF NEW TECHNIQUES TO ACHIEVE TOTAL QUALITY CONTROL IN SANITARY PRODUCTS AND SERVICES IS DISCUSSED.

BRAZIL

ELEMENTOS BASICOS PARA O ESTUDO PRELIMINAR DE UM LANCAMENTO DE ESGOTOS SUBMARINO (BASIC ELEMENTS FOR A PRELIMINARY STUDY OF SUBMARINE SEWAGE DISCHARGE)
VICTORETTI, BENOIT ALMEIDA EPA
PM(B) PORTUGUESE 12/00/75 PGS 1-31 ID# 04687A
ALSO ST

THIS PAPER WAS PRESENTED AT THE EIGHTH BRAZILIAN SANITARY ENGINEERING CONGRESS HELD IN RIO DE JANEIRO IN DECEMBER 1975. IN VIEW OF THE GROWING TENDENCY OF BRAZILIAN URBAN COASTAL AREAS TO DISPOSE OF SEWAGE THROUGH SUBMARINE DISCHARGE PIPES, THE PAPER ATTEMPTS TO CLARIFY SOME OF THE FACTORS WHICH NEED TO BE CONSIDERED FROM A SANITARY AND ENVIRONMENTAL POINT OF VIEW. THE FOLLOWING TOPICS ARE DISCUSSED: CONSEQUENCES OF SEWAGE ON THE RECEIVING WATERS; HYDRAULIC, SANITARY AND CONSTRUCTION ASPECTS OF SUBMARINE DISCHARGE WORKS; PROBLEMS OF INITIAL DILUTION OF SEWAGE; DIFFUSION PROVIDED BY CURRENTS; AND BACTERIOLOGICAL DECAY OF SEWAGE. THE PAPER ALSO DIAGRAMS, WITH THE USE OF SEVERAL GRAPHS AND EQUATIONS, THE APPROPRIATE DIMENSIONS OF A DISCHARGE WORKS AND SPECIFIES THE CONSIDERATIONS WHICH SHOULD BE OBSERVED IN A PRELIMINARY PROJECT STUDY OF SUBMARINE SEWAGE DISCHARGE.

BRAZIL

ESTUDOS NA BAI DE SANTOS... (STUDIES IN SANTOS BAY TO ASSES THE FUTURE IMPACT OF UNDERWATER SEWAGE DISCHARGES ON ECOLOGICAL AND SANITAR CONDITIONS)
NAVAS PEREIRA, DENISE, AND OTHERS EPA
PM(B) PORTUGUESE 12/00/75 PGS 1-180 ID# 04689A
ALSO ST

THIS PAPER WAS DELIVERED AT THE EIGHTH SANITARY ENGINEERING CONGRESS HELD IN RIO DE JANEIRO IN DECEMBER 1975. IT DESCRIBES THE STUDIES BEING CARRIED OUT BY THE STATE COMPANY FOR TECHNOLOGY, BASIC SANITATION AND ENVIRONMENTAL PROTECTION (CETESB) OF SAO PAULO, BRAZIL TO ASSESS THE PRESENT ECOLOGICAL CONDITION OF SANTOS BAY, WHERE AN UNDERWATER SEWAGE DISCHARGE SYSTEM IS BEING CONSTRUCTED. THE DATA COLLECTED FROM THESE STUDIES WILL BE CORRELATED WITH ECOLOGICAL DATA TAKEN AFTER THE SEWAGE SYSTEM IS IN OPERATION TO ASSESS THE ECOLOGICAL IMPACT OF THE SEWAGE ON THE BAY. THE MATERIALS AND METHODS, RESULTS AND GENERAL CONCLUSIONS OF THE PRELIMINARY STUDIES ARE GIVEN. COLLECTED DATA, PRESENTED IN NUMEROUS TABLES AND FIGURES APPENDED TO THE TEXT, DESCRIBE THE PHYSICAL AND CHEMICAL QUALITIES OF THE BAY AND INCLUDE AN INVENTORY OF PLANKTON, BENTHOS AND MICROORGANISMS INTHE BAY. (TITLE IN PROTUGUESE: ESTUDOS NA BAIA DE SANTOS PARA AVALIAR, NO FUTURO, O IMPACTO DO LANCAMENTO SUBMARINO DE ESGOTOS SOBRE AS CONDICOES ECOLOGICAS E SANITARIAS.)

WATER

BRAZIL

SOLUCOES PRACTICAS PARA DESINFECCAO DE AGUA (PRACTICAL SOLUTIONS FOR THE DISINFECTION OF WATER)
ROSSIM, ANTONIO CARLOS, AND SILVIO JOSE BUSO EPA
ST( ) PROTUGUESE 12/00/75 PGS 1-35 ID# 04705A

THIS PAPER, PRESENTED AT THE EIGHTH BRAZILIAN SANITARY ENGINEERING CONGRESS HELD IN RIO DE JANEIRO IN DECEMBER 1975, DEALS WITH THE DISINFECTION OF PUBLIC WATER SUPPLIES BY MEANS OF CHLORINATION. THE INTRODUCTION TO THE PAPER DESCRIBES THE NECESSITY AND CONTROL OF DISINFECTION AS WELL AS FACTORS WHICH AFFECT THE DEGREE OF DISINFECTION OF DRINKING WATER. THE MAIN TEXT OF THE PAPER, SUPPORTED BY SEVERAL TABLES, FIGURES AND ANNEXES, DISCUSSES THE THEORETICAL ASPECTS OF CHLORINATION, THE CHEMICAL PRODUCTS USED IN CHLORINATION, DEVICES EMPLOYED IN THE APPLICATION OF CHLORIANTED PRODUCTS, DOSAGES OF CHLORINATION, MEASUREMENT OF RESIDUAL CHLORINE, AND FIRST AID PROCEDURES FOR ACCIDENTS INVOLVING CHLORINE.

BRAZIL

CRITERIO ESTATISTICO SIMPLIFICADO PARA CLASSIFICACAO DE PRAIAS EM TERMOS DE COLIMETRIA (SIMPLIFIED STATISTICAL CRITERIA FOR THE COLIMETRIC CLASSIFICATION OF BEACHES)
RIBEIRO DE ASSIS BASTOS, CARAI EPA
ST( ) PORTUGUESE 00/00/75 PGS 1-10 ID# 04686A

THIS PAPER, PRESENTED AT THE EIGHTH BRAZILIAN SANITARY ENGINEERING CONGRESS HELD IN RIO DE JANEIRO IN DECEMBER 1975, WAS PREPARED AS AN ATTEMPT TO FACILITATE THE IMPLEMENTATION OF STANDARDS PROMULGATED BY THE BRAZILIAN SPECIAL SECRETARIAT OF THE ENVIRONMENT (SEMA) CONCERNING THE PUBLIC HEALTH CLASSIFICATION OF BEACHES IN TERMS OF THE PRESENCE OF COLIFORMS IN THE WATER. (SEE ID NO. 02037H.) POINTING OUT THE DIFFICULTIES IN TH CLASSIFICATIONS OF BEACHES, TH PAPER TABULATES SEMA'S COLIMETRIC CLASSIFICATIONS FOR BEACHES AND PROVIDES A SIMPLIFIED STATISTICAL METHOD FOR DERIVING THESE COLIMETRIC CLASSIFICATIONS BASED UPON THE NUMBER AND CONTENT OF WATER SAMPLES TAKEN.

BRAZIL

ESTUDOS DA CORRELACAO ENTRE ORGANISMOS INDICADORES DE POLUICCAO DE ORIGEM FECAL E PATOGENICOS (CORRELATIVE STUDIES BETWEEN FECAL AND PATHOGENIC ORGANISMS INDICATIVE OF POLLUTION)
MARTINS, MARIA T., AND PETRA S. SANCHES EPA
ST( ) PORTUGUESE 12/00/75 PGS 1-16 ID# 04688A
ALSO PMB

THIS PAPER, PRESENTED AT THE EIGHTH BRAZILIAN SANITARY ENGINEERING CONGRESS HELD IN RIO DE JANEIRO IN DECEMBER 1975, DESCRIBES STUDIES BEING CARRIED OUT BY THE MICROBIOLOGY DIVISION OF THE STATE COMPANY FOR TECHNOLOGY, BASIC SANITATION AND ENVIRONMENTAL PROTECTION (CETESB), WHICH ARE AIMED AT MEASURING TOTAL AND FECAL COLIFORMS IN BRAZILIAN BEACH WATERS AND CORRELATING THESE MEASUREMENTS WITH THE OCCURENCE OF PATHOGENIC ORGANISMS, ESPECIALLY SALMONELLA, IN THE SAME WATERS. THE MATERIALS AND METHODS OF THE STUDIES ARE DESCRIBED, AND PRELIMINARY DATA OBTAINED FROM THE SAMPLING OF BEACH WATERS ARE DISCUSSED AND TABULATED. RESULTS INDICATE A DIRECT RELATIONSHIP BETWEEN THE NUMBER OF COLIFORMS AND SALMONELLA IN THE TESTED WATERS AND POINT OUT THE NEED FOR FURTHER TESTING IN THIS AREA.

WATER

CANADA

LE CADRE JURIDIQUE DE LA PARTICIPATION DU PUBLIC.... (LEGAL FRAMEWORK FOR PUBLIC PARTICIPATION IN THE CANADIAN WATER MANAGEMENT). SERIE DES SCIENCES SOCIALES. ETUDE NO. 14
MORLEY, C. G.
EPA
RB( ) FRENCH 00/00/76 PGS 1-68 ID# 04706A
ALSO SE
*GENERAL

CANADA

"FEBRUARY 25, 1977 METAL MINING LIQUID EFFLUENT REGULATIONS." CANADA GAZETTE, PART II, VOL. 111, NO. 5
EPA
LR(A) ENGLISH* 03/09/77 PGS 667-674 ID# 00512G
*ALSO FRENCH

THESE REGULATIONS, MADE PURSUANT TO THE CANADA FISHERIES ACT, SPECIFY THE MAXIUM PERMISSIBLE PH LEVELS AND THE MAXIUM PERMISSIBLE CONCENTRATIONS OF ARSENIC, COPPER, LEAD, NICKEL, ZINC, TOTAL SUSPENDED MATTER, AND RADIUM 226 IN THE EFFLUENT DISCHARGES FROM NEW MINES, EXPANDED MINES, OR REOPENED MINDS IN CANADA, WITH THE EXCEPTION OF GOLD MINES. THE REGULATIONS ALSO CONTAIN A LIST OF PERTINENT DEFINITIONS APPLICABLE TO EFFLUENT DISCHARGES AND PROVISIONS GOVERNING THE FREQUENCY OF SAMPLING AND ANALYSIS, ANALYTICAL TEST METHODS, FLOW MEASUREMENT, AND REPORTING OF TESTED RESULTS. THE PERMITTED VARIATIONS OF THESE CONDITIONS ARE ALSO GIVEN.

CANADA

"GUIDELINES FOR THE MEASUREMENT OF ACUTE LETHALITY IN LIQUID EFFLUENTS FROM METAL MINES." CANADA GAZETTE, PART I
EPA
LR(A) ENGLISH* 03/19/77 PGS 1353-56 ID# 00512H
*ALSO FRENCH

THESE GUIDELINES, APPLICABLE TO EVERY METAL MINE IN CANADA, EXCEPT GOLD MINES, WERE ISSUED BY THE CANADIAN MINISTRY OF FISHERIES AND ENVIRONMENT TO OFFER SUGGESTED PROCEDURES FOR MEASURING THE ACUTE LETHALITY IN LIQUID EFFLUENT FROM METAL MINES FOR THE PURPOSE OF THE METAL MINING LIQUID EFFLUENT REGULATIONS. (SEE ID NO. 00512G.) THE MINISTER CAN ASCERTAIN THE LETHALITY OF EFFLUENTS ON FISH BY APPLYING THE PROCEDURES DESCRIBED IN SHCEDULE I OF THE GUIDELINES, "FINAL EVALUATION TEST PROCEDURE FOR ACUTE LETHALITY (96-HOUR FLOW THROUGH TEST)." MINING OPERATORS SHOULD ALSO CONDUCT PERIODIC LETHALITY TESTS IN ACCORDANCE WITH THE "SCREENING TEST PROCEDURE FOR ACUTE LETHALITY (96-HOUR STATIC TEST)." AS SET FORTH IN SCHEDULE II OF THE GUIDELINES. THE TESTING PROCEDURES DELINEATED IN THESE SCHEDULES FOLLOW CLOSELY THOSE SET FORTH IN THE AMERICAN PUBLIC HEALTH ASSOCIATION'S "STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER," 13TH EDITION, 1971.

WATER

CANADA "GUIDELINES FOR THE CONTROL OF LIQUID EFFLUENTS FROM EXISTING METAL MINES." CANADA GAZETTE, PART I

EPA

LR(A) ENGLISH* 03/19/77 PGS 1357-62 ID# 00512J
ALSO FRENCH*

THESE GUIDELINES OFFER SUGGESTED OBJECTIVES AND PROCEDURES FOR CONTROLLING LIQUID EFFLUENTS FROM EXISTING METAL MINES (EXCEPT GOLD MINES) IN CANADA. ALTHOUGH NOT BINDING REGULATIONS, THE GUIDELINES ARE SIMILAR IN PURPOSE AND INTENT TO THE METAL LIQUID EFFLUENT REGULATIONS, WHICH ARE APPLICABLE TO NEW, EXPANDED AND REOPENED MINES. (SEE ID NO. 00512G.) SCHEDULE I OF THE GUIDELINES ESTABLISHES ACCEPTABLE PH LEVELS AND MAXIMUM CONCENTRATIONS OF ARSENIC, COPPER, LEAD, NICKEL, ZINC, TOTAL SUSPENDED MATTER, AND RADIUM 226 IN LIQUID MINE EFFLUENTS. SCHEDULES II AND III SPECIFY THE FREQUENCY AND METHODS OF EFFLUENT SAMPLING AND TESTING. THE GUIDELINES ALSO CONTAIN PROVISIONS RELATING TO THE REPORTING OF TESTED RESULTS AND ACCEPTABLE MODIFICATIONS OF PROCEDURES. THE TESTING PARAMETERS USED IN THESE GUIDELINES ARE TAKEN FROM THE AMERICAN PUBLIC HEALTH ASSOCIATION'S "STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER," 13TH EDITION, 1971.

CANADA METAL MINING LIQUID EFFLUENT REGULATIONS AND GUIDELINES. REGULATIONS, CODES AND PROTOCOLS. REPORT EPS 1-WP-77-1

EPA

LR(A) ENGLISH* 04/00/77 PGS 1-27 ID# 00512K
*ALSO FRENCH. VARIOUSLY PAGINATE

THIS PUBLICATION, ISSUED BY THE WATER POLLUTION CONTROL DIRECTORATE OF ENVIRONMENT CANADA, REPRINTS FROM THE CANADA GAZETTE THE FOLLOWING REGULATIONS AND GUIDELINES PERTAINING TO THE CONTROL OF LIQUID EFFLUENTS FROM METAL MINES, EXCEPT GOLD MINES: 1) METAL MINING LIQUID EFFLUENT REGULATIONS, WHICH ARE APPLICABLE TO NEW, EXPANDED AND REOPENED MINES; 2) GUIDELINES FOR THE CONTROL OF LIQUID EFFLUENTS FROM EXISTING METAL MINES; AND 3) GUIDELINES FOR THE MEASUREMENT OF ACUTE LETHALITY IN LIQUID EFFLUENTS FROM METAL MINES. (SEE ALSO ID NOS. 00512G-00512J.) EXPLANATORY NOTES ON EACH OF THE ABOVE REGULATIONS AND GUIDELINES ARE ALSO PROVIDED. LASTLY, THE PUBLICATION SETS FORTH AN ENVIRONMENTAL CODE OF PRACTICE FOR MINES, WHICH DEALS WITH MINIMIZATION AND TREATMENT OF WATER-BORNE WASTES, MONITORING OF THE DISPOSAL OF WASTE ROCK AND MILL TAILINGS, CONTINGENCY PLANNING, AND REHABILITATION OF EXHAUSTED MINING AREAS.

CANADA TECHNIQUES ET METHODES DE LA PARTICIPATION DU PUBLIC (RESUME) (TECHNIQUES AND METHODS OF PUBLIC PARTICIPATION). SERIE DES SCIENCES SOCIALES. ETUDE NO. 12
VINDASIUS, DANA EPA
PM(B) FRENCH 00/00/76 PGS 1-34 ID# 04682A
ALSO SE

THIS REPORT STEMS FROM A PRELIMINARY PHASE OF RESEARCH AND FROM ACTION PROJECTS CONCERNING THE PARTICIPATION OF THE PUBLIC IN THE PLANNING PROCESS OF WATER MANAGEMENT PROGRAMS BOTH IN THE UNITED STATES AND IN CANADA. A REVIEW OF PAST EXPERIENCES IN PBULIC PARTICIPATION IS CONSIDERED AS A BASIS FOR THE DEVELOPMENT OF GUIDELINES FOR FUTURE PROGRAMS. TWELVE CASES, DEMONSTRATING VARIOUS DEGREES OF SUCCESS IN PUBLIC PARTICIPATION, ARE EXAMINED, AND THE ROLE OF PUBLIC PARTICIPATION IN PLANNING AND ITS VARIOUS TECHNIQUES AND MECHANISMS ARE ANALYZED. A GENERAL MODEL FOR PUBLIC PARTICIPATION IS THEN PRESENTED. (THIS IS A PUBLICATION OF ENVIRONMENT CANADA.)

CANADA STORM WATER MANAGEMENT MODEL STUDY. VOLUME I. RESEARCH REPORT NO. 47
PROCTOR AND REDFERN LTD., AND JAMES F. MACLAREN LTD. EPA
PM(B) ENGLISH 09/00/76 PGS 1-295 ID# 04724A
ALSO ST

THIS VOLUME, VOLUME I OF A THREE-VOLUME REPORT, DOCUMENTS THE FINDINGS AND CONCLUSIONS OF A STUDY, CONDUCTED UNDER THE SPONSORSHIP OF THE RESEARCH PROGRAM FOR THE ABATEMENT OF MUNICIPAL POLLUTION UNDER PROVISIONS OF THE CANADA-ONTARIO AGREEMENT ON GREAT LAKES WATER QUALITY, FOR THE DEVELOPMENT OF A STORM MANAGEMENT MODEL. AMONG THE OBJECTIVES OF THE STUDY WERE: THE REVIEW AND MODIFICATION OF THE U.S. EPA'S STORM WATER MANAGEMENT MODEL (SWMM) FOR CANADIAN CONDITIONS; THE SELECTION AND MODIFICATION OF A SUBMODEL FOR THE SIMULATION OF QUALITY AND QUALITY OF RUNOFF RESULTING FROM SNOWMELT; AND THE DEVELOPMENT OF A DATA ANALYSIS SUBMODEL CAPABLE OF EXTRACTING THE SWMM METEOROLOGICAL DATA INPUT FROM EXISTING DATA BANKS. THIS STUDY HAS EXPANDED THE CAPABILITIES OF THE SWMM AND INDICATED NEW AREAS FOR ITS USE. THE USE OF THE SWMM IS RECOMMENDED FOR THE SIMULATION OF FLOWS IN A VARIETY OF INVESTIGATIONS.

CANADA STORM WATER MANAGEMENT MODEL STUDY. VOLUME II. RESEARCH REPORT NO. 48
PROCTOR AND REDFERN LTD., AND JAMES J. MACLAREN LTD. EPA
PM(B) ENGLISH 09/00/76 PGS 1-147 ID# 04724B
ALSO ST

THIS PUBLICATION, VOLUME II OF A THREE-VOLUME REPORT, WAS PREPARED UNDER THE AUSPICES OF THE RESEARCH PROGRAM FOR THE ABATEMENT OF MUNICIPAL POLLUTION UNDER PROVISIONS OF THE CANADA-ONTARIO AGREEMENT ON GREAT LAKES WATER QUALITY AND CONTAINS SUPPLEMENTARY TECHNICAL MATERIAL USED IN PREPARING THE FINAL REPORT, VOLUME I. COMPARATIVE ANALYSES OF SIX STORM WATER ROUTING MODELS AND FOUR WATER QUALITY MODELS ARE DESCRIBED. LITERATURE SURVEYS ARE INCLUDED FOR MATERIAL DEALING WITH URBAN RUNOFF QUALITY AND SNOWMELT QUANTITY AND QUALITY. SOURCES OF DATA REQUIRED FOR STORM WATER MODELING HAVE BEEN ASSESSED, AND STUDY AREAS IN CANADA AND THE U.S. ARE DESCRIBED. A SUMMARY OF THE TREATMENT PROCESSES AVAILABLE IN THE U.S. ENVIRONMENTAL PROTECTION AGENCY'S STORM WATER MANAGEMENT MODEL (SWMM) IS GIVEN, AND CURRENT LITERATURE AND MODIFICATIONS TO THE TREATMENT MODEL ARE DESCRIBED.

WATER

CANADA "ARCTIC MARINE OIL SPILL PROGRAM (AMOP)." SPILL TECHNOLOGY NEWSLETTER.
VOL. 2, NO. 1
ROSS, S.L. EPA
PM(B) ENGLISH 02/00/77 PGS 23-30 ID# 04741A
ALSO PMA

THIS ARTICLE, PUBLISHED IN THE BIMONTHLY SPILL TECHNOLOGY NEWSLETTER OF THE ENVIRONMENTAL PROTECTION SERVICE OF ENVIRONMENT CANADA (SEE ID 03509A), DESCRIBES THE ATTRIBUTES OF THE FIVE-YEAR ARCTIC MARINE SPILL PROGRAM (AMOP) INITIATED BY THE CANADIAN GOVERNMENT IN 1976. THE PURPOSE OF THIS SEVEN-MILLION DOLLAR PROGRAM IS "TO DEVELOP OIL SPILL COUNTERMEASURES FOR USE IN OFFSHORE ARCTIC WATERS." THE PRODUCT OF THIS PROGRAM WILL BE GREATER KNOWLEDGE FOR THE OPERATIONAL AGENCIES SUCH AS THE CANADIAN COAST GUARD AND OIL COMPANY COOPERATIVE IN ACQUIRING SKILLS AND EQUIPMENT TO DEAL SUCCESSFULLY WITH A (MAJOR) SPILL IN THESE WATERS. THE ARTICLE NOTES THE JUSTIFICATION AND NEED FOR AMOP, DESCRIBES THE STRUCTURE AND RESPONSIBLILITES OF AMOP, IDENTIFIES PROJECT DIRECTORS AND GIVES AN ORGANIZATIONAL CHART. ALSO DISCUSSED ARE PROGRAM OPERATIONAL POLICIES, THE AREAS OF RESEARCH AND DEVELOPMENT IN WHICH AMOP WILL CONCENTRATE, AND THE INTERRELATIONSHIPS BETWEEN AMOP AND OTHER OIL SPILL CONTAINMENT ORGANIZATIONS.

CANADA STUDY ON THE QUALITY OF THE WATER OF LAKE MEMPHREMAGOG (SUMMARY OF REPORT)
QUEBEC WATER BOARD EPA
ST( ) ENGLISH* PGS 1-38 ID# 00953B

IN APRIL 1969 IN THE WAKE OF A SUDDEN PROLIFERATION OF ALGAE, AN IN-DEPTH STUDY OF CONDITIONS IN LAKE MEMPHREMAGOG AND A SURVEY OF ITS DRAINAGE BASIN WERE UNDERTAKEN BY THE QUEBEC WATER BOARD TO PINPOINT THE PROBLEM. BECAUSE THE LAKE IS USED AS A SOURCE OF DRINKING WATER AND AS A RECREATIONAL SITE, IT WAS CONSIDERED IMPERATIVE TO PRESERVE THE QUALITY OF ITS WATER. THIS SUMMARY OF THE RESULTING REPORT CONTAINS A DESCRIPTION OF THE MAIN CHARACTERISTICS OF THE RIVER BASIN; THE ORGANIZATION OF THE SURVEY (SAMPLING POINT LOCATIONS AND SCHEDULE); THE ASPECTS OF POLLUTION (SEWAGE DISPOSAL, DRAINAGE AND TRIBUTARIES, ALONG WITH THEIR EFFECTS ON WATER QUALITY); THE EVALUATION OF THE QUALITY OF THE WATER; AND, FROM THE RESULTS, THE CONCLUSIONS AND RECOMMENDATIONS. APPENDIXES CONTAIN A GLOSSARY OF TECHNICAL TERMS AS WELL AS A BIBLIOGRAPHY.

CANADA THE EFFECTIVENESS AND TOXICITY OF THE OIL DISPERSANT, OILSPERSE 43, IN LARGE
OUTDOOR TANKS. SURVEILLANCE REPORT EPS 5-AR-75-8
KEIZER, P.D., AND P. G. WELLS EPA
ST( ) ENGLISH 04/00/75 PGS 1-24 ID# 04684A

THIS REPORT DESCRIBES A 31-DAY EXPERIMENT CONDUCTED BY THE ENVIRONMENTAL PROTECTION SERVICE OF ENVIRONMENT CANADA AND THE MARINE ECOLOGY LABORATORY TO DETERMINE THE EFFECTIVENESS AND TOXICITY OF AN OIL SPILL DISPERSANT MIXED WITH CRUDE OIL IN MARINE CONDITIONS, SIMULATED USING LARGE-VOLUME OUTDOOR TANKS. DESCRIBED ARE THE METHODS, MATERIALS AND RESULTS OF THE EXPERIMENT. A GENERAL DISCUSSION OF THE FINDINGS INDICATES THAT THE USE OF THE DISPERSANT, OILSPERSE 43, INCREASED THE DISPERSION OF VENEZUELAN GUANIPA CRUDE OIL AND THAT THE RESULTING MIXTURE WAS MORE HOMOGENEOUS AND THE OILSS_ICK LESS VISCOUS THAN IN THE OIL TANK. A WEATHERED CRUDE OIL PLUS DISPERSANT MIXTURE WITH AN OIL CONCENTRATION OF 250 MICROGRAMS/LITER WAS LETHAL TO OVER 50 PERCENT OF THE TEST ORGANISMS, GREEN SEA URCHINS, WITHIN FOUR DAYS. NO MORTALITIES OCCURED AMONG URCHINS EXPOSED TO THE CRUDE OIL TREATMENT.

CANADA CHEMICAL AND BIOLOGICAL CHARACTERISTICS OF SEEPAGES FROM TAILINGS AREAS AT GIANT YELLOWKNIFE MINES, LTD., INTO GREAT SLAVE LAKE, N.W.T., IN 1974. EPS 5-NW-74-1
WALLACE, RON R., AND M.J. WALLACE EPA
ST( ) ENGLISH 11/00/74 PGS 1-35 ID# 04690A

THE MONITORING AND SURVEILLANCE PROGRAM DESCRIBED IN THIS REPORT AND CONDUCTED BY THE ENVIRONMENTAL PROTECTION SERVICE WAS CONCERNED, AS WERE SEVERAL EARLIER STUDIES, WITH THE CONTAINMENT, TREATMENT AND ENVIRONMENTAL EFFECTS OF WASTEWATERS FROM YELLOWKNIFE MINES, LTD. THREE MAJOR EFFLUENT SEEPAGES FROM THE MINES' TAILINGS PONDS ENTERED YELLOWKNIFE BAY DURING THE COURSE OF THIS INVESTIGATION IN THE PERIOD FROM MARCH TO JULY 1974. EACH OF THESE UNCONTROLLED RELEASED WAS STUDIED TO DETERMINE ITS CHEMICAL CHARACTERISTICS AND TO ASSESS ITS POTENTIAL IMPACT ON THE BIOTA OF THE RECEIVING WATERS. TH CONCLUSIONS STATE THAT HIGH CONCENTRATIONS OF ARSENIC, COPPER, CYANIDE, ZINC AND IRON WERE PRESENT AND THAT STATIC BIOASSAYS SHOWED THESE WASTES TO BE EXTREMELY TOXIC TO RAINBOW TROUT. RECOMMENDATIONS CALL FOR A MODICATION OF THE DISPOSAL SYSTEM AND FOR A REDUCTION OF THE CONCENTRATIONS OF TOXICANTS IN THE FINAL EFFLUENT. (THIS IS A SURVEILLANCE REPORT OF ENVIRONMENT CANADA.)

CANADA CHEMICAL AND BIOLOGICAL CHARACTERISTICS OF SEEPAGES FROM TAILINGS AREAS AT COMINCO CON MINE INTO KAM LAKE, N.W.T., IN 1974. SURVEILLANCE REPORT EPS 5-NW-75-3
WALLACE, R. R., AND M.J. HARDIN EPA
ST( ) ENGLISH 02/00/75 PGS 1-23 ID# 04697A

THE MONITORING PROGRAM DESCRIBED IN THIS REPORT AND CONDUCTED BY THE ENVIRONMENTAL PROTECTION SERVICE OF ENVIRONMENT CANADA WAS CONCERNED WITH THE ESCAPE OF EFFLUENT FROM THE TAILINGS DISBOSAL AREA AT COMINCO CON MINE INTO NEARBY KAM LAKE DURING THE PERIOD FROM APRIL TO SEPTEMBER 1974. SAMPLINGS WERE COLLECTED FOR CHEMICAL ANALYSIS IN ORDER TO CHARACTERIZE THE CHEMICAL PROPERTIES OF THIS EFFLUENT AND ASSESS ITS POTENTIALLY TOXIC EFFECTS ON THE BIOTA OF KAM LAKE. THE CONCLUSIONS STATE THAT ELEVATED CONCENTRATIONS OF ARSENIC, COOPER, CYANIDE, ZINC AND IRON WERE FOUND AND THAT ONE OF THREE SAMPLES OF EFFLUENT ANALYZED FOR TOXIC PROPERTIES WAS SHOWN TO BE ACUTELY TOXIC TO RAINBOW TROUT IN A STATIC EXPOSURE OF 96 HOURS. RECOMMENDATIONS CALL FOR A MODIFICATION OF THE TAILINGS DISPOSAL SYSTEM AND A REDUCTION OF THE TOXICANT CONCENTRATION IN THE FINAL DISCHARGE.

CANADA AN ASSESSMENT OF KRAFT BLEACHERY EFFLUENT TOXICITY REDUCTION USING ACTIVATED SLUDGE. TECHNOLOGY DEVELOPMENT REPORT NO. EPS 4-WP-77-3
EPA
ST( ) ENGLISH 05/00/77 PGS 1-109 ID# 04711A
ALSO PMB

THIS REPORT DESCRIBES A PILOT STUDY TO ASCERTAIN THE PRACTICABILITY OF A TWO-STAGE BIOLOGICAL TREATMENT SYSTEM USING ACTIVATED SLUDGE TO REDUCE THE TOXICITY OF KRAFT BLEACH PLANT EFFLUENT FROM A PULP AND PAPER MILL PROCESS. FOR COMPARISON A SINGLE-STAGE TREATMENT SYSTEM WAS OPERATED. TOXICITY REDUCTION WAS MEASURED IN TERMS OF THE EFFECT OF TREATED EFFLUENT ON JUVENILE RAINBOW TROUT. RESULTS SHOWED THAT TREATMENT EFFICIENCY AND TOXICITY REDUCTION WERE BOTH AFFECTED BY THE WOOD SPECIES USED IN THE PULP AND PAPER PROCESS. THE TWO-STAGE SYSTEM CONSISTENTLY ACHIEVED GREATER TOXICITY REDUCTIONS AS WELL AS GREATER REMOVAL OF BOD THAN THE SINGLE-STAGE SYSTEM. HOWEVER, EFFLUENTS FROM BOTH TREATMENT SYSTEMS FAILED TO MEET THE TOXICITY REQUIREMENTS SPECIFIED IN THE CANADIAN PULP AND PAPER EFFLUENT REGULATIONS OF 1971. (THIS IS AN ENVIRONMENT CANADA REPORT.)

WATER

CANADA

CONTROLLED COMBUSTION TESTS CARRIED OUT NEAR RIMOUSKI. TECHNOLOGY DEVELOPMENT REPORT EPS-4-EC-76-2
COUPAL, BERNARD EPA
ST( ) ENGLISH 00/00/76 PGS 1-15 ID# 04712A

THIS REPORT WAS PREPARED FOR THE ENVIRONMENTAL PROTECTION SERVICE OF ENVIRONMENT CANADA TO REVIEW A FIELD TRIAL METHOD OF DISPOSING OF OIL BY BURNING. SIX COMBUSTION TESTS WERE PERFORMED ON OIL IN A SMALL BAY ON THE ST. LAWRENCE RIVER NEAR RIMOUSKI, QUEBEC. CEUTA CRUDE OIL AND BUNKER C OIL WERE BURNED BOTH ON WATER AND ICE. THE BURNING OF THESE OILS WAS EFFECTED BY USING PEAT MOSS AS A WICKING AGENT AND DIESEL FUEL AS A PROMOTER. COMBUSTION EFFICIENCIES ON THE ORDER OF 85 PERCENT WERE ATTAINED. IT WAS CONCLUDED THAT THIS COMBUSITON TECHNIQUES IS A FEASIBLE METHOD OF DISPOSING OF OIL SPILLS. RECOMMENDATIONS ARE MADE FOR FUTURE RESEARCH.

CANADA

URBAN DRAINAGE MODEL COMPARISON FOR A CATCHMENT IN HALIFAX, NOVA SCOTIA.
RESEARCH REPORT NO. 43
WALLER, D. H., AND OTHERS EPA
ST( ) ENGLISH 08/00/76 PGS 1-35 ID# 04720A

THE RESEARCH PROGRAM FOR THE ABATEMENT OF MUNICIPAL POLLUTION UNDER PROVISIONS OF THE CANADA-ONTARIO AGREEMENT ON GREAT LAKES WATER QUALITY FUNDED THIS COLLECTION OF RAINFALL-RUNOFF DATA FOR A 167.2 ACRE COMBINED SEWER DRAINAGE AREA AT HALIFAX, NOVA SOCTIA. THESE DATA WERE USED TO COMPARE THE PERFORMANCE OF THE U.K. ROAD RESEARCH LABORATORY (RRL) RUNOFF MODEL AND THE RUNOFF BLOCK OF THE U.S. ENVIRONMENTAL PROTECTION AGENCY STORM WATER MANAGEMENT MODEL. CHARTS AND TABLES PROVIDE A DESCRIPTION OF THE DRAINAGE BASIN, RUNOFF MODELS, PROGRAM OPERATIONS, AND RESULTS. BOTH MODELS WERE FOUND TO BE CAPABLE OF PRODUCING CREDITABLE RESULTS FOR A SEWERAGE SYSTEM THAT INCLUDED SURCHARGED PIPES AND YIELDED RUNOFF FROM PREVIOUS AREAS IN MAJOR STORMS. CALCULATED PEAKS WERE GENERALLY EARLIER AND HIGHER THAN OBSERVED VALUES. AGREEMENT IMPROVED WITH THE MAGNITUDE OF STORM EVENTS. HYDROGRAPHS FROM THE MODELS WERE MORE SIMILAR THAT WERE CALCULATED AND OBSERVED RESULTS, ESPECIALLY IN LARGER STORM EVENTS.

CANADA

PHOSPHORUS REMOVAL WITHIN EXISTING WASTEWATER TREATMENT FACILITIES.
RESEARCH REPORT NO. 44
BOYKO, BORIS I., AND GERALD RUPKE EPA
ST( ) ENGLISH 08/00/76 PGS 1-43 ID# 04721A

THIS REPORT DESCRIBES THE RESULTS OF VARIOUS PROJECTS WHICH WERE UNDERTAKEN WITH FUNDS FROM THE RESEARCH PROGRAM FOR THE ABATEMENT OF MUNICIPAL POLLUTION UNDER PROVISIONS OF THE CANADA-ONTARIO AGREEMENT ON GREAT LAKES WATER QUALITY TO IMPLEMENT ONTARIO PROVINCE'S 5-YEAR PROGRAM TO CONTROL PHOSPHORUS DISCHARGES FROM MORE THAN 170 EXISTING WASTEWATER TREATMENT PLANTS. REQUIRED WERE: THE DEVELOPMENT OF A METHODOLOGY FOR THE PREDICTION OF THE BEST SUITED COAGULANT FOR THE REMOVAL, AS WELL AS THE DETERMINATION OF ANY PHYSICAL OR PROCESS EFFECTS ON WASTEWATER TREATMENT FACILITIES OR PROCESS FROM THE CHEMICALS USED. COAGULATION PREDICTION AND PRIME COAGULANT SELECTION, OPERATIONAL RESULTS, RROBLEM AREAS, AND DESIGN CONSIDERATIONS DERIVED FROM THE FULL SCALE STUDIES CONDUCTED ARE DISCUSSED IN THE REPORT. THE STUDY CONCLUDED THAT PHOSPHORUS REMOVAL MAY BE READILY IMPLEMENTED WITH MINIMUM CAPITAL EXPENDITURE AT OPERATING MUNICIPAL WASTEWATER TREATMENT FACILITIES OF ALL DESIGNS CURRENTLY IN USE IN ONTARIO.

CANADA PRACTICES, POLICIES AND TECHNOLOGY OF STORM AND COMBINED SEWERS IN FOREIGH COUNTRIES. RESEARCH REPORT NO. 45
ALBERY, PULLERITS, DICKSON AD ASSOCIATES LTD. EPA
ST( ) ENGLISH 00/00/76 PGS 1-169 ID# 04722A

THIS PUBLICATION REPORTS ON AN INVESTIGATION, FUNDED BY THE RESEARCH PROGRAM FOR THE ABATEMENT OF MUNICIPAL POLLUTION UNDER PROVISOONS OF THE CANADA-ONTARIO AGREEMENT ON GREAT LAKES WATER QUALITY, WHICH WAS UNDERTAKEN TO ASSESS THE MAGNITUDE OF POLLUTION PROBLEMS ASSOCIATED WITH STORM SEWER DISCHARGES AND COMBINED SEWER OVERFLOWS IN A NUMBER OF EUROPEAN COUNTRIES AND THE U.S. ALSO EXAMINED WERE THE METHODS CURRENTLY USED TO REDUCE THIS TYPE OF POLLUTION, AS WELL AS RESEARCH INTO DEVELOPMENT OF NEWER METHODS. BECAUSE OF VARIANCES IN THE SCOPE OF THE PROBLEM AND DIFFERENCES IN THE APPROACHES TO ITS SOLUTION IN EACH COUNTRY STUDIES, A REVIEW OF THE GOVERNMENTAL STRUCTURES, HISTORICAL ASPECTS, AND PRESENT DESIGN CRITERIA IS PROVIDED. THIS REPORT EVALUATES THE FINDINGS WHICH WERE OBTAINED IN EACH COUNTRY AND PROVIDES A COMPARATIVE REVIEW OF THE RESULTS, PARTICULARY IN REGARD TO CANADIAN PRACTICE.

CANADA COMPUTER-AIDED PLANNING OF REGIONAL SLUDGE DISPOSAL SYSTEMS. USER'S MANUAL
RESEARCH REPORT NO. 46
B AND P SILVESTON, ENGINEERS, AND OTHERS EPA
ST( ) ENGLISH 09/00/76 PGS 1-409 ID# 04723A

THIS MANUAL, WHICH WAS COMPILED UNDER THE AUSPICES OF THE RESEARCH PROGRAM FOR THE ABATEMENT OF MUNICIPAL POLLUTION UNDER PROVISIONS OF THE CANADA-ONTARIO AGREEMENT ON GREAT LAKES WATER QUALITY, IS INTENDED TO SERVE A NUMBER OF PURPOSES. IT IS FIRST A TRAINING MANUAL WHICH INTRODUCES POTENTIAL USERS TO THE CONCEPTS OF COMPUTER-AIDED PLANNING. THE MANUAL IS ALSO A SOURCE BOOK FOR SETTING UP A DATA COLLECTION PROGRAM TO BE USED IN COMPUTER-AIDED PLANNING. THIRDLY, IT POVIDES DETAILED INFORMATION ON THE STRUCTURE OF THE COMPUTER PROGRAM. THE MANUAL IS THE FINAL PRODUCT OF A PROJECT WHICH WAS SET UP FOR THE DEVELOPMENT OF COMPUTER-BASED PLANNING PROCEDURE AND THE WRITING OF A COMPUTER PROGRAM TO HANDLE THE ECONOMIC EVALUATION OF DISPOSAL ALTERNATIVES. A GENERAL PURPOSE COMPUTER PROGRAM APPLICABLE TO THE OPTIMIZATION OF REGIONAL SLUDGE DISPOSAL SYSTEMS IS DESCRIBED. THE MODEL UPON WHICH THE COMPUTER PROGRAM IS BUILT IS ALSO DISCUSSED. A NUMBER OF APPENDIXES PROVIDE ADDITIONAL INFORMATION.

CANADA EXAMINATION OF SEWAGE AND SEWAGE SLUDGE FOR ENTEROVIRUSES. VOLUME II.
RESEARCH REPORT NO. 52
SUBRAHMANYAN, T. P. EPA
ST( ) ENGLISH 00/00/77 PGS 1-35 ID# 04725A

THE SPREADING OF SEWAGE SLUDGE ON AGRICULTURAL OR GRASSLAND IN RURAL AREAS CARRIES AN INHERENT RISK OF POLLUTING THE ENVIRONMENT WITH HARMFUL VIRUSES OR HEAVY METALS CONTAINED IN THE SEWAGE. SLUDGE UTILIZATION PROGRAMS SHOULD, THEREFORE, INCLUDE VIRUS MONITORING, IN CONJUNCTION WITH THE DETERMINATION OF OTHER HAZARDOUS SUBSTANCES, TO DETERMINE THE EXTENT OF THE VIRUS CONTAMINATION OF SLUDGE AND THE VIRUS INACTIVATING EFFICIENCY OF CURRENT METHODS OF SLUDGE FORMATION. THE PRESENT REPORT, DEALING WITH A VIRUS MONITORING PROGRAM ON SEWAGE SLUDGE, WAS CARRIED OUT UNDER THE AUSPICES OF THE RESEARCH PROGRAM FOR THE ABATEMENT OF MUNICIPAL POLLUTION UNDER PROVISIONS OF THE CANADA-ONTARIO AGREEMENT ON GREAT LAKES WATER QUALITY AT THE ENTEROVIRUS LABORATORY, ONTARIO MINISTRY OF HEALTH. RESULTS INCLUDE VIRUS SURVEILLANCE STUDIES AT FIVE PLANTS USING DIFFERENT PHOSPHATE REMOVAL TECHNIQUES AND RELATED LABORATORY STUDIES.

WATER

CANADA UPGRADING OF SEWAGE LAGOON EFFLUENTS. RESEARCH REPORT NO. 54
RUPKE, J.W. G., AND K. CHISHOLM EPA
ST( ) ENGLISH 00/00/77 PGS 1-27 ID# 04726A

THIS REPORT DESCRIBES THE RESULTS OF INVESTIGATIONS FUNDED UNDER THE RESEARCH PROGRAM FOR THE ABATEMENT OF MUNICIPAL POLLUTION WITHIN THE PROVISIONS OF THE CANADA-ONTARIO AGREEMENT ON GREAT LAKES WATER QUALITY. THE OBJECTIVE OF THE STUDY, UNDERTAKEN AT THE STRATHROY, ONTARIO LAGOON FROM JANUARY TO AUGUST 1975, WAS TO DETERMINE IF THE EFFLUENT QUALITY OF A STANDARD LAGOON COULD BE SIGNIFICANTLY IMPROVED BY THE ADDITION OF A POST-TREATMENT UNIT AT THE EFFLUENT END OF THE SYSTEM, THEREBY ELIMINATING THE NEED FOR SEASONAL DISCHARGE. UNIT PROCESSES WHICH WERE INVESTIGATED AND EVALUATED INCLUDED PHYSICAL-CHEMICAL TREATMENT FOLLOWED BY FILTRATION, AIR FLOTATION, MICROSTRAINING AND THE ROTATING BIOLOGICAL CONTACTOR. IT WAS FOUND THAT A SUITABLE SYSTEM FOR UPGRADING LAGOON EFFLUENT QUALITY WOULD INVOLVE A ROTATING BIOLOGICAL CONTACTOR FOR AMMONIA NITROGEN AND SOLUBLE BOD REDUCTION, FOLLOWED BY CHEMICAL COAGULATION-SEDIMENTATION AND MULTIMEDIA FILTRATION.

CANADA TO ESTABLISH VIABLE METHODS OF MAINTAINING WASTE TREATMENT FACILITY
EFFICIENCIES WITH REFERENCE TO FLOW VARIATIONS. VOLUME II. RESEARCH REPORT NO. 55
JAMES F. MACLAREN LIMITED EPA
ST( ) ENGLISH 00/00/77 PGS 1-67 ID# 04727A

THIS VOLUME IS A CONTINUATION OF THE STUDY REPORTED IN RESEARCH REPORT NO. 11, PUBLISHED IN 1974, WHICH POINTED OUT THAT EQUALIZATION OF SEWAGE FLOW VARIATIONS WOULD HAVE SEVERAL POTENTIAL BENEFITS WITH RESPECT OT MAINTAINING EFFICIENCIES IN WASTE TREATMENT FACILITITES. ALTERNATIVES TO BYPASSING WERE STUDIED AND A METHODOLOGY WAS DEVELOPED TO ASSESS FLOW VARIATIONS AND PREDICT THE EFFECT OF CYCLIC DIURNAL FLOW ON THE PERFORMANCE OF EACH WASTE TREATMENT PROCESS. THE PRESENT STUDY, FUNDED BY THE RESEARCH PROGRAM FOR THE ABATEMENT OF MUNICIPAL POLLUTION UNDER PROVISIONS OF THE CANADA-ONTARIO AGREEMENT ON GREAT LAKES WATER QUALITY, SERVES AS AN EXTENSION OF THE PREVIOUS STUDY TO FURTHER ANALYZE WASTE FLOW FLUCTUATIONS AND ESTABLISH A BASIS FOR SIZING EQUALIZATION BASINS FOR DESIGN PRUPOSES. SEWAGE FLOW RECORDS FROM ELEVEN INDIVIDUAL SEWAGE SYSTEMS OF VARYING SIZES WERE EXAMINED. ON THE BASIS OF THE FINDINGS A NEW AND SIMPLIFIED METHOD IS SUGGESTED FOR SIZING AND OPERATION OF EQUALIZATION BASINS.

CANADA DESIGN AND PERFORMANCE CRITERIA FOR SETTLING TANKS FOR THE REMOVAL OF
PHYSICAL-CHEMICAL FLOCS. VOLUME II. RESEARCH REPORT NO. 56
HEINKE, G. W., AND OTHERS EPA
ST( ) ENGLISH 00/00/77 PGS 1-115 ID# 04728A

THIS PUBLICATION REPORTS ON A RESEARCH PROGRAM, FUNDED BY THE RESEARCH PROGRAM FOR THE ABATEMENT OF MUNICIPAL POLLUTION UNDER PROVISIONS OF THE CANADA-ONTARIO AGREEMENT ON GREAT LAKES WATER QUALITY, WHOSE MAIN OBJECTIVE WAS TO STUDY THE SETTLING BEHAVIOR OF PHYSICAL-CHEMICAL SUSPENSIONS, ON BOTH A LABORATORY AND PLANT BASIS, IN ORDER TO SUGGEST DESIGN GUIDELINES AND METHODS TO PREDICT THE PERFORMANCE OF SETTLING TANKS TREATING SUCH SUSPENSIONS. A BRIEF LITERATURE SEARCH WAS CONDUCTED TO COLLECT RELEVANT BACKGROUND INFORMATION. CONCLUSIONS AND RECOMMENDATIONS ARE BASED ON THE RESULTS OBTAINED IN THE LABORATORY AND AT THE TREATMENT PLANTS AT SARNIA AND WINDSOR AND THE PILOT PLANT AT BURLINGTON. TENTATIVE GUIDELINES HAVE BEEN SUGGESTED FOR THE DESIGN OF SETTLING TANKS. THE USE OF THESE GUIDELINES WILL RESULT IN SMALLER SETTLING TANKS THAN WOULD BE REQUIRED BY THE CURRENT GUIDELINES.

CANADA MALVERN URBAN TEST CATCHMENT. VOLUME I. RESEARCH REPORT NO. 57
MARSALEK, J. EPA
ST( ) ENGLISH 00/00/77 PGS 1-55 ID# 04729A

THE PROBLEM OF DEFINING POTENTIAL SOLUTIONS FOR THE CONTROL OF URBAN RUNOFF HAS BEEN ADDRESSED BY THE URBAN DRAINAGE SUBCOMMITTEE (UDS) OF THE TECHNICAL COMMITTEE FOR THE CANADA-ONTARIO AGREEMENT ON GREAT LAKES WATER QUALITY. UNDER THE RESEARCH PROGRAM OF THE UDS, AN URGENT NEED FOR URBAN RUNOFF DATA HAS BEEN IDENTIFIED. ONE OF ITS PROJECTS, FUNDED BY THE RESEARCH PROGRAM FOR THE ABATEMENT OF MUNICIPAL POLLUTION UNDER PROVISIONS OF THE CANADA-ONTARIO AGREEMENT ON GREAT LAKES WATER QUALITY, IS DESCRIBED IN THIS REPORT. AN URBAN TEST CATCHMENT (MALVERN), REPRESENTING A MODERN RESIDENTIAL DEVELOPMENT OF 58 ACRES, WAS ESTABLISHED IN BURLINGTON, ONTARIO. THE CATCHMENT TOPOGRAPHY, LAND USE, HYDROLOGICAL CHARACTERISTICS, STORM DRAINAGE AND INSTRUMENTATION ARE EXAMINED. A NUMBER OF PRECIPITATION-RUNOFF EVENTS WERE MONITORED ON THE CATCHMENT IN 1973, AND SOME OF THE EVENTS WERE SIMULATED WITH THE STORM WATER MANAGEMENT MODEL OF THE U.S. ENVIRONMENTAL PROTECTION AGENCY.

CANADA AEROBIC DIGESTION OF ORGANIC SLUDGES CONTAINING INORGANIC PHOSPHORUS PRECIPITATES. VOLUME II. RESEARCH REPORT NO. 58
GANCZARCZYK, P., AND OTHERS EPA
ST( ) ENGLISH 00/00/77 PGS 1-81 ID# 04730A

THIS PUBLICATION REPORTS ON A STUDY FUNDED BY THE RESEARCH PROGRAM FOR THE ABATEMENT OF MUNICIPAL POLLUTION UNDER PROVISIONS OF THE CANADA-ONTARIO AGREEMENT ON GREAT LAKES WATER QUALITY TO INVESTIGATE AEROBIC DIGESTION OF LIME-PRECIPITATED SLUDGES. THE STUDY WAS UNDERTAKEN IN RESPONSE TO A RECENT INCREASE IN THE UTILIZATION OF LIME TREATMENT OF RAW SEWAGE FOR PHOSPHORUS REMOVAL AND/OR FOR BETTER CLARIFICATION IN MANY WASTEWATER TREATMENT PLANTS. THE GOAL OF THE STUDY WAS TO OBTAIN INFORMATION ON THE FEASIBILITY OF THE AEROBIC DIGESTION OF SLUDGES RESULTING FROM LIME-PRECIPITATION OF RAW SEWAGE AND THE PERFORMANCE OF AEROBIC DIGESTERS USED IN THE TREATMENT OF THOSE SLUDGES UNDER BATCH AND SEMICONTINUOUS LOADING CONDITIONS. THESE AIMS WERE MET BY AN INVESTIGATION OF THE PROCESS IN FIVE SERIES OF EXPERIMENTS. IT WAS FOUND THAT SUCH AEROBIC DIGESTION WAS FEASIBLE BUT AERATION PERIODS OF AT LEAST 15 DAYS AT 20 DEGREE C WERE REQUIRED FOR EFFECTIVE TREATMENT. RECOMMENDATIONS BASED ON RESULTS ARE INCLUDED.

CANADA AQUATIC ENVIRONMENTAL QUALITY: PROBLEMS AND PROPOSALS. FISHERIES RESEARCH BOARD OF CANADA REPORT NO. 12
HARVEY, H.H. EPA
ST( ) ENGLISH* 11/00/76 PGS 1-37 ID# 04733A
*ALSO FRENCH; ALSO PMB

THIS PUBLICATION REPORTS ON A STUDY COMMISSIONED BY THE FISHERIES RESEARCH BOARD TO EVALUATE CURRENT RESEARCH AND MONITORING PROGRAMS ON AQUATIC ENVIRONMENTAL QUALITY BY FEDERAL AND PROVINCIAL AGENCIES, UNIVERSITIES, AND THE PRIVATE SECTOR. THIS STUDY IS TO SERVE AS A BACKGROUND DOCUMENT FOR AN OVERVIEW OF GOVERNMENT POLICY IN RELATION TO AQUATIC ENVIRONMENTAL POLICY AND, THEREFORE, CATEGORIZES THE OVERALL RESEARCH EFFORT AND IDENTIFIES AREAS OF STRENGTH AND WEAKNESS. SPECIFIC PROBLEMS OF AQUATIC ENVIRONMENTAL QUALITY ARE DISCUSSED BY ECONOMIC SECTOR, INCLUDING: AGRICULTURE, FORESTRY, MINING, POWER GENERATION, TRANSPORTATION, AND RECREATION. THE STUDY POINTS OUT THAT THE TOTAL EFFORT DEVOTED TO MONITORING IS NOT WELL BALANCED AND INCORPORATES MUCH DUPLICATION. IT STRESSES THE NEED FOR AN EMPHASIS ON THE INTERPRETATION OF DATA AND THE DEVELOPMENT OF NEW APPROACHES IN ENVIRONMENTAL MONITORING. AREAS IN NEED OF ADDITIONAL RESEARCH ENDEAVORS ARE ALSO DESIGNATED.

WATER

CANADA

AQUATIC ENVIRONMENTAL QUALITY: TOXICOLOGY. FISHERIES RESEARCH OF CANADA
REPORT NO. 13
HAMILTON, R.D. EPA
ST( ) ENGLISH* 11/00/76 PGS 1-18 ID# 04739A
*ALSO FRENCH
TOXIC SUBS

THIS REPORT REVIEWS AND ASSESSES CANADIAN ACTIVITIES REGARDING TOXIC CHEMICALS IN THE AQUATIC ENVIRONMENT. SPECIFIC RESEARCH PROGRAMS ARE NOT EVALUATED BUT AN ATTEMPT IS MADE TO RAISE AND DISCUSS ISSUES COMMON TO THE PROBLEM POSED BY THE USE OF TOXIC CHEMICALS. A GENERAL EXAMINATION OF THE SCOPE AND SCALE OF THE PROBLEM IS FOLLOWED BY CONSIDERATION OF THE QUESTIONS OF RESPONSIBILITY AND COORDINATION IN THE AREA OF RESEARCH. THE LEVEL OF CANADIAN EFFORT IS STUDIED IN TERMS OF MANPOWER AND FINANCES. THE RESEARCH COMMUNITY'S SETTING OF PRIORITIES IS DISCUSSED, AS ARE THE AVAILABILITY OF INFORMATION AND THE IMPLEMENTATION OF THE RESEARCH OR CONTROL PROGRAMS.

CANADA

URBAN HYDROLOGICAL MODELING AND CATCHMENT RESEARCH IN CANADA, TECHNICAL
BULLETIN NO. 98
MARSALEK, J. EPA
ST( ) ENGLISH 06/00/76 PGS 1-52 ID# 04745A

THIS PUBLICATION, THE CANADIAN CONTRIBUTION TO THE UNESCO INTERNATIONAL HYDROLOGICAL PROGRAM'S PROJECT 7: EFFECTS OF URBANIZATION ON THE HYDROLOGICAL REGIME AND ON THE QUALITY OF WATERS, PRESENTS THE RESULTS OF A CRITICAL SURVEY OF URBAN TEST CATCHMENT RESEARCH AND URBAN HYDROLOGICAL MODELING IN CANADA. A CATALOG OF SELECTED URBAN TEST CATCHMENTS AND RELATED RESEARCH PROJECTS WAS PREPARED. INFORMATION ON CATCHMENT CHARACTERISTICS, INSTRUMENTS, DATA ACQUIRED, ANALYSIS PERFORMED AND DTA APPLICATIONS WAS INCLUDED IN THE CATALOG. THE SECTION ON URBAN HYDROLOGICAL MODELING INCLUDES DESCRIPTIONS OF NEWLY DEVELOPED MODELS, MODIFICATIONS AND REFINEMENTS OF SOME EXISTING MODELS AND SELECTED CANADIAN ENGINEERING APPLICATIONS OF URBAN RUNOFF MODELS. (AUTHOR ABSTRACT.)

DENMARK

"MARCH 17, 1976 ORDER NO. 121 ON CHEMICAL WASTE." LOVTIDENDE FOR KONGERIGET
DANMARK, PART A, NO. XVII EPA
LR(A) DANISH 03/27/76 PGS 320-324 ID# 01445B
AIR SOLID WASTE TOXIC SUBS

THIS ORDER, PURSUANT TO THE 1972 ACT ON THE DISPOSAL OF OIL AND CHEMICAL WASTES AND THE 1973 ENVIRONMENTAL PROTECTION ACT, REGULATES THE STORAGE, TRANSPORTATION, COLLECTION, RECEPTION, AND DISPOSAL OF CHEMICAL WASTES, A LIST OF WHICH IS APPENDED. ANYONE ENGAGED IN THESE ACTIVITIES MUST ENSURE THAT POLLTION OF AIR, SOIL, GROUNDWATER AND SURFACE WATER, INCLUDING THE SEA, IS PREVENTED. CHEMICAL WASTE POLLUTION IS TO BE REPORTED TO MUNICIPAL AUTHORITIES AND THE POLLUTER MUST REMOVE THE POLLUTION. THE MUNICIPAL AUTHORITIES MAY GRANT DISPENSATION UNDER CERTAIN CIRCUMSTANCES, AND THEY MAY ALSO ISSUE ADDITIONAL REGULATIONS. DECISIONS BY THE MUNICIPAL AUTHORITIES MAY BE APPEALED FIRST TO THE ENVIRONMENTAL PROTECTION AGENCY AND THEN, IF DESIRED, TO THE ENVIRONMENTAL APPEAL BOARD. VIOLATIONS ARE PUNISHABLE THROUGH FINES OR IMPRISONMENT. THIS ORDER, EFFECTIVE AS OF APRIL 1, 1976, DOES NOT APPLY ON BOARD SHIPS.

WATER

EUROPEAN COMMUNITIES

PATHWAY OF MERCURY AND THE IMPACT OF DIFFERENT ENVIRONMENTAL POLICIES ON THE FUTURE MERCURY CONTENT IN SOIL, AIR AND SEDIMENTS IN EUROPE. EUR 568E
VAN ENK, R.H., AND P. ZEGERS EPA
ST( ) ENGLISH 00/00/77 PGS 1-61 ID# 04699A
*TOXIC SUBS AIR

FINLAND

"BOARD OF WATERS: ENVIRONMENT AND WATER PROTECTION BELONG TOGETHER."
HUFVUDSTADSBLADET EPA
PM(B) SWEDISH 04/29/77 PGS 12 ID# 04749A

THE BOARD OF WATERS IS CRITICAL OF PLANS TO REDUCE ITS ACTIVITIES IN CONJUNCTION WITH THE ORGANIZATION OF A NEW MINISTRY OF ENVIRONMENT. THE BOARD WOULD COME UNDER THE JURISDICTION OF THE NEW MINISTRY BUT ITS DIVISIONS OF DRAINAGE AND TIMBER FLOATING, FOR INSTANCE, WOULD BE MOVED TO OTHER AGENCIES. THE BOARD POINTS OUT THAT A U.N. CONFERENCE ON WATERS IN ARGENTINA RECENTLY EMPHASIZED THE IMPORTANCE OF KEEPING THE ADMINISTRATION OF WATERS WITHIN ONE AGENCY. IN ADDITION TO ITS REGULAR DUTIES, THE BOARD HAS ALSO WORKED IN THE AREAS OF AIR AND NATURE PROTECTION AND HAS PROMOTED PROPER WASTE HANDLING AND FEELS THAT WITH A NOMINAL INCREASE IN FUNDS, IT WOULD BE ABLE TO ADMINISTER MATTERS IN THESE FIELDS AS WELL. THE ALLOCATION OF THESE TASKS TO OTHER AGENCIES WOULD, IN SOME CASES, BE A DUPLICATION OF THE BOARD'S PRESENT SERVICES AND THUS A WASTE OF MONEY. THE PROPOSALS CONCERNING THE NEW ENVIRONMENTAL MINISTRY SHOULD, ACCORDING TO THE BOARD, BE INCLUDED IN THE BUDGET FOR 1979.

FRANCE

"TESTS SHOW 77 PERCENT OF FRENCH COASTAL WATERS TO BE OF GOOD OR VERY GOOD QUALITY AND ONLY 4 PERCENT TO BE OF BAD QUALITY." PRESSE ENVIRONNEMENT, NO. 243
EPA
PM(B) FRENCH 06/17/77 PGS PETN 8-9 ID# 04763A

DURING A JUNE 15, 1977 PRESS CONFERENCE, THE MINISTER OF CULTURE AND THE ENVIRONMENT TOGETHER WITH THE MINISTER OF HEALTH PRESENTED A REVIEW OF FRENCH GOVERNMENT MEASURES AIMED AT PROMOTING THE CLEANLINESS AND ENVIRONMENTAL QUALITY OF BEACHES. CLAIMS OF IMPROVEMENTS IN THE CLEANLINESS OF THE COASTLINE WERE SUBSTANTIATED WITH STATISTICS ON REDUCTIONS IN UNTREATED DOMESTIC AND INDUSTRIAL EFFLUENT DISCHARGES. GOALS OF THE VIITH ECONOMIC PLAN REGARDING DOMESTIC AND INDUSTRIAL EFFLUENTS WERE DISCUSSED. MEASUREMENT FIGURES FOR PAST AND FUTURE EFFORTS WERE STATED TO BE DEPENDENT ON THE CONTROL OPERATIONS OF BOTH MINISTRIES. EXAMINED WERE THE SURVEILLANCE NETWORKS OF THE MINISTRY OF CULTURE AND THE ENVIRONMENT (MARINE ENVIRONMENTAL QUALITY) AND THE MINISTRY OF HEALTH (BEACH WATERS). FINALLY MENTIONED WAS THE PUBLICATION OF TWO BROCHURES FOR DISTRIBUTION TO FRENCH MAYORS AS A MEANS OF ASSISTING THEM IN THEIR WATER PURIFICATION EFFORTS.

GERMANY,FED REP OF "WATER PROTECTION IN THE FEDERAL REPUBLIC." WASSER, LUFT UND BETRIEB
EPA
PM(B) GERMAN 05/00/77 PGS 254-255 ID# 04765A
ALSO LRB

PASSAGE OF THE 1957 WATER MANAGEMENT LAW MARKED A TURNING POINT IN THE WATER MANAGEMENT POLICY OF THE FEDERAL REPUBLIC. THIS FRAMEWORK LAW, TO BE EXPANDED BY LAND (STATE) LAWS, WAS FOLLOWED BY OTHER FEDERAL LEGISLATION FOR THE REGULATION OF WATER-ENDANGERING SUBSTANCES TRANSPORTED IN PIPELINES, THE REMOVAL OF WASTE OIL, AND THE LIMITATION OF POLLUTING DETERGENTS. THE GOVERNMENT'S 1971 ENVIRONMENTAL PROGRAM EXPRESSED DETERMINATION TO CONQUER THE WATER POLLUTION PROBLEM. SINCE THEN, THE FOURTH AMENDMENT TO THE WATER MANAGEMENT LAW HAS ENDORSED A WATER CLEAN-UP PROGRAM WITH A TARGET OF 1985 AND REITERATED THE POLLUTER PAYS PRINCIPLE. A NEW SEWAGE FEE LAW SEEKS TO REMOVE ANY ECONOMIC ADVANTAGE FROM POLLUTING. STILL, MUCH REMAINS TO BE DONE. IN SPITE OF INCREASED EFFORTS TO COMBAT POLLUTION, WATER QUALITY DETERIORATED IN SOME AREAS BETWEEN 1957-1969. THE FEDERAL GOVERNMENT HAS ALSO NOT ACHIEVED FEDERAL LEGISLATIVE COMPETENCE FOR WATER AFFAIRS NOR NATIONAL WATER QUALITY STANDARDS.

GERMANY,FED REP OF "THE STATION FOR CONTINUOUS MONITORING OF RHINE WATER QUALITY IN MAINZ."
WASSER UND BODEN
KALWEIT, H.
EPA
PM(B) GERMAN 11/00/76 PGS 283-287 ID# 04769A
ALSO ST

THIS ARTICLE DESCRIBES IN SOME DETAIL A STATION FOR THE CONTINUOUS AUTOMATIC MONITORING OF RHINE RIVER WATER QUALITY WHICH HAS RECENTLY BEGUN OPERATION NEAR THE CITY OF MAINZ. UNDERWATER PUMPS FORCE WATER FROM FOUR MEASURING POINTS INTO THE MONITORING STATION WHERE IT IS TESTED AND EVALUATED FOR UP TO 14 PARAMETERS ON A SEMI-CONTINUOUS BASIS. THE COLLECTION AND MEASURING PROCEDURES ARE DIRECTED BY COMPUTER, AND RESULTS ARE AUTOMATICALLY TRANSMITTED TO THE ENVIRONMENTAL MONITORING SYSTEM OF THE LAND OF HESSE. THE STATION, WHICH COSTS ABOUT 2.41 MILLION MARKS, WAS PLANNED AND CONSTRUCTED BETWEEN 1973 AND 1976. OPERATION COSTS ARE ESTIMATED AT APPROXIMATELY 0.2 MILLION MARKS PER YEAR PLUS THE COST OF PERSONNEL. IT IS FELT THAT THESE EXPENSES ARE JUSTIFIED BY THE IMPORTANCE OF THE LOCATION AND THE FUNCTIONS OF THE STATION. MOREOVER, THE STATION WILL BE ABLE TO PROMOTE FURTHER AUTOMATIC MONITORING OF WATER BODIES THROUGH ITS TECHNOLOGICAL INNOVATIONS.

GERMANY,FED REP OF
PRELIMINARY STUDIES ON THE MUNICIPAL ENGINEERING RESEARCH PROGRAMME.
ENVIRONMENT CANADA TRANSLATION DOENV TR-1230
GERMANY,FED OF. MINISTRY OF RESEARCH AND TECHNOLOGY EPA
ST( ) ENGLISH 00/00/77 PGS 1-31 ID# 04734A
ALSO PMB
*SOLID WASTE AIR NOISE

INDIA
"TOWARDS A WASTE UTILISAITON POLICY." SCAVENGER, VOL. 7, NO. 1
RAMACHANDRAN, A. EPA
PM(B) ENGLISH 01/00/77 PGS 6-10 ID# 04760A
ALSO SE
*SOLID WASTE

INTERNATIONAL
METALLIC EFFLUENTS OF INDUSTRIAL ORIGIN IN THE MARINE ENVIRONMENT
EUROPEAN OCEANIC ORGANIZATION EPA
ST( ) ENGLISH 00/00/77 PGS 1-216 ID# 04752A

THIS REPORT SUMMARIZES THE RESULTS OF STUDIES WHICH WERE CARRIED OUT IN ACCORDANCE WITH THE TERMS OF A CONTRACT GRANTED TO THE EUROPEAN OCEANIC ASSOCIATION BY THE COMMISSION OF EUROPEAN COMMUNITIES. THE COMMISSION HOPED TO MAKE A CONTRIBUTION TO THE STUDY OF A PREVENTIVE TECHNOLOGY TO ARREST THE DETERIORATION OF THE MARINE ENVIRONMENT BY LIMITING AND CONTROLLING PRESENT AND FUTURE WASTES. SPECIFIC AREAS OF STUDY DEAL WITH THE ORIGINS, FORMS AND CHARACTERISTICS OF CHROMIUM, CADMIUM-ZINC, AND CYANO-METALLIC COMPOUNDS, ALL OF WHICH CAN AFFECT THE MARINE ENVIRONMENT. ONE REPORT ALSO DISCUSSES MEASURING AND MONITORING SYSTEMS FOR METALLIC WASTE PRODUCTS; THE ECO-TOXICOLOGICAL RISKS INVOLVED WITH THE VARIOUS POLLUTANTS; AND GENERAL AND SPECIFIC RECOMMENDATIONS WITH REGARD TO PREVENTIVE MEASURES.

NORWAY
"SUBSIDY FOR THE CLEANUP OF LAKE MJOSA." AFTENPOSTEN
EPA
PM(B) NORWEGIAN 05/04/77 PGS 20 ID# 04125B

THE FIRST PHASE OF THE CLEANUP OF LAKE NJOSA HAS NOW BEEN COMPLETED, ACCORDING TO THE MINISTRY OF ENVIRONMENT. MUNICIPALITIES AROUND THE LAKE HAVE BEEN GRANTED 22.9 MILLON NORWEGIAN KRONER IN GOVERNMENT AID FOR THIS PURPOSE WITH PARTICULAR EMPHASIS ON DRAINAGE PROBLEMS. THE FUNDS WILL BE USED PRIMARILY FOR PROJECTS WHICH WERE PLANNED OR UNDERWAY BEFORE THE INCREASE OF BLUE ALGAE WAS DISCOVERED DURING THE SUMMER OF 1976. SO FAR, TOTAL SUBSIDIES OF 95 MILLION KRONER HAVE BEEN GRANTED. TOTAL INVESTMENTS TO CLEAN UP THE LAKE AMOUNT TO 270 MILLION KRONER.

WATER

SWEDEN "DON'T FORGET THE DANGER FROM PHOSPHORUS." HUFVUDSTADSBLADET
EPA
PM(B) SWEDISH 04/06/77 PGS 9 ID# 04737A
ALSO LRB
SOLID WASTE

THE CAMPAIGN WHICH WAS WAGED IN THE EARLY 1970'S TO USE PHOSPHORUS-FREE DETERGENTS IN ORDER TO DECREASE WATER POLLUTION SEEMS TO HAVE COME TO A HALT. MOST OF THESE DETERGENTS ARE NO LONGER PRODUCED DUE TO LACK OF INTEREST. EVEN MORE DISHEARTENING TO ENVIRONMENTALISTS IS THE FACT THAT DETERGENTS NOW HAVE LISTS OF CONTENTS STATING PHOSPHORUS LEVELS. CONSUMPTION HAS INCREASED TEN PERCENT ANNUALLY, AND THE NUMBER OF HOUSE HOLDS WITH DISWASHERS WHOSE DETERGENTS HAVE A HIGHER CONTENT OF PHOSPHORUS HAS INCREASED. IT IS FELT THAT THE CAMPAIGN IS TO EXPENSIVE TO CONTINUE AND THAT THE GENERAL GOAL SHOULD BE REACHED INSTEAD THROUGH LEGISLATION. THERE IS, HOWEVER, NO LAW FOR PRODUCT CONTROL WHATSOEVER IN FINLAND AT THE PRESENT TIME. A LAW PROPOSAL ON THE HANDLING OF WASTE, CURRENTLY UNDER CONSIDERATION IN PARLIAMENT, MAY BE INDIRECTLY APPLICABLE BECAUSE IT ALLOWS THE GOVERNMENT TO VETO THE IMPORTATION AND PRODUCTION OF MATERIALS WHOSE WASTE WOULD HAVE A DETRIMENTAL EFFECT ON THE ENVIRONMENT.

SWEDEN SEDIMENTS AS INDICATORS OF CONTAMINATION--INVESTIGATIONS IN THE FOUR LARGEST
SWEDISH LAKES. SNV PM 839; NLU REPORT 92
HAKANASON, LARS
EPA
ST( ) ENGLISH 05/00/77 PGS 1-159 ID# 04708A

THE AREAL AND VERTICAL DISTRIBUTION OF VARIOUS TRACE METALS, CHLORATED HYDROCARBONS, AND PHYSICAL SEDIMENT PARAMETERS AND CORRELATIONS BETWEEN THESE PARAMETERS HAVE BEEN STUDIED IN BOTTOM DEPOSITS FROM VANERN, VATTERN, MALAREN, AND HIALMAREN, THE FOUR LARGEST LAKES IN SWEDEN. A CLOSE RELATIONSHIP EXISTS BETWEEN SPATIAL AND VERTICAL DISTRIBUTION PATTERNS OF ELEMENTS; IN RIVER MOUTH AREAS OR CLOSE TO POLLUTION SOURCES, AREAL VARIATIONS TEND TO BE GREAT AS DO VERTICAL VARIATIONS AND VICE VERSA. THE CONTAMINATION STATUS AS GIVE BY THE CHEMICAL SEDIMENT PARAMETERS IS DOMINATED BY ANTHROPOGENIC FACTORS. NO GENERALLY VALID CORRELATIONS INVOLVING CHEMICAL SEDIMENT PARAMETERS ARE APPARENT WITH THE EXCEPTION OF THAT BETWEEN NITROGEN AND ORGANIC CONTENT. THE PHYSICAL PARAMETERS, ON THE OTHER HAND, ARE DISTRIBUTED IN PREDICTABLE MANNER IN MOST LAKES. AN APPENDIX INCLUDES DATA ON SEDIMENT TYPES AND VARIOUS SEDIMENT PARAMETERS IN LAKE VANERN. A LIST OF REFERENCES IS INCLUDED.

WATER

UNITED NATIONS THIRD WORLD AND ENVIRONMENTAL INTERESTS IN THE LAW OF THE SEA
JOHNSON, BRIAN EPA
LR(B) ENGLISH 00/00/00 PGS 1-37 ID# 04753A
ALSO SE; PROBABLY PUBLISHED 1974

THIS BOOKLET, PUBLISHED AS AN OCCASIONAL PAPER OF THE NON-PROFIT MAKING INSTITUTE FOR ENVIRONMENT AND DEVELOPMENT, DISCUSSES THE SIGNIFICANCE AND BACKGROUND OF THE 1974 UNITED NATIONS CONFERENCE ON THE LAW OF THE SEA IN CARACAS. CHAPTERS OF THE BOOKLET DEAL WITH: 1) SEA RESOURCES AND THE DEVELOPING WORLD; 2) PROTECTION OF THE MARINE ENVIRONMENT; AND 3) PROPOSAL FOR OCEAN MANAGEMENT. THE PROTECTION OF THE MARINE ENVIRONMENT IS CONSIDERED UNDER TWO MAJOR HEADINGS: 1) THE LIMITS TO WASTE, WHICH INCLUDES DISCUSSIONS ABOUT THE DUMPING OF TOXIC WASTES, OIL POLLUTION, AND POLLUTING NUTRIENTS AND ORGANIC MATTER AND 2) THE IMPACT OF SEABED EXPLOITATION. APPENDIXES LIST TOPICS TO BE DISCUSSED AT THE CONFERENCE, INCLUDING THOSE RELATING TO PRESERVATION OF THE MARINE ENVIRONMENT; A GLOSSARY OF TERMS; AND TERRITORIAL SEA CLAIMS.

UNITED NATIONS "CLEANING UP WORLD'S BIGGEST SEWER." THE TIMES
EPA
PM(B) ENGLISH 07/22/77 PGS 5 ID# 04758A

THIS NEWS ARTICLE DISCUSSES A 17-NATION CONFERENCE IN MONACO, SPONSORED BY THE UNITED NATIONS TO DEVELOP A POLLUTION INVENTORY OF THE MEDITERRANEAN SEA SO THAT THE ESTIMATED COST OF CLEAN-UP (2,500 MILLION POUNDS OVER THE NEXT 15 YEARS) CAN BE ADEQUATELY DISTRIBUTED AMONG THE COASTAL COUNTRIES WHICH CONTRIBUTE TO THE POLLUTION. THE UNITED NATIONS ENVIRONMENT PROGRAM (UNEP) HAS SET UP LABORATORIES ALL AROUND THE MEDITERRANEAN COAST TO MONITOR AND STUDY POLLUTION LEVELS WITH THE AIM OF BRINGING ABOUT INTERNATIONAL LAWS TO CONTROL THESE LEVELS. THE THREE MAIN POLLUTION PROBLEMS POSING SERIOUS THREATS TO THE ECONOMIC AND SOCIAL WELL-BEING OF THE MEDITERRANEAN COUNTRIES ARE MERCURY POLLUTION, OIL POLLUTION AND SEWAGE.

USSR "ON SUPPLEMENTARY MEASURES TO ASSURE THE RATIONAL USE AND PRESERVATION OF NATURAL RESOURCES OF LAKE BAYKAL BASIN." RESHENIYA PARTII I PRAVITEL' STVA PO KHOZ. VOPR., VOL. 8
EPA
LR(A) RUSSIAN 00/00/72 PGS 480-482 ID# 04681A

THIS JUNE 16, 1971 DECREE OF THE COMMUNIST PARTY CENTRAL COMMITTEE AND THE USSR COUNCIL OF MINISTERS OBLIGES THE USSR ACADEMY OF SCIENCES, MINISTRIES AND DEPARTMENTS THAT UTILIZE THE NATURAL RESOURCES OF LAKE BAYKAL TO ACCELERATE THE DEVELOPMENT OF PROJECTS FOR THE PROTECTION OF THE LAKE. THE USSR MINISTRY OF THE PULP AND PAPER INDUSTRY IS TO CONSTRUCT THE BAYKAL'SK SEWAGE TREATMENT PLANT IN 1971 AND, TOGETHER WITH THE USSR INDUSTRIAL CONSTRUCTION MINISTRY, IS TO FINISH THE SEWAGE PLANT AT THE SELENGA CELLUSE CARDBORD COMBINE IN 1972 BEFORE IT BECOMES OPERATIONAL. THE RSFSR COUNCIL OF MINISTERS AND MINISTRIES HAVING PLANTS IN THE AREA ARE TO DRAW UP A TIMETABLE BEFORE 1973 FOR THE CONSTRUCTION OF SEWAGE TREATMENT FACILITIES. THE CITY OF ULAN-UDE HAS UNTIL 1973 TO COMPLETE THESE FACILITIES. THE RSFSR COUNCIL OF MINISTERS IS RESPONSIBLE FOR GUARANTEEING THE RATIONAL USE AND PRESERVATION OF LAKE BAYKAL NATURAL RESOURCES AND THE USSR STATE COMMITTEE OF PEOPLE'S CONTROL IS TO MONITOR THE EFFECTIVENESS OF ENVIRONMENTAL EFFORTS.

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