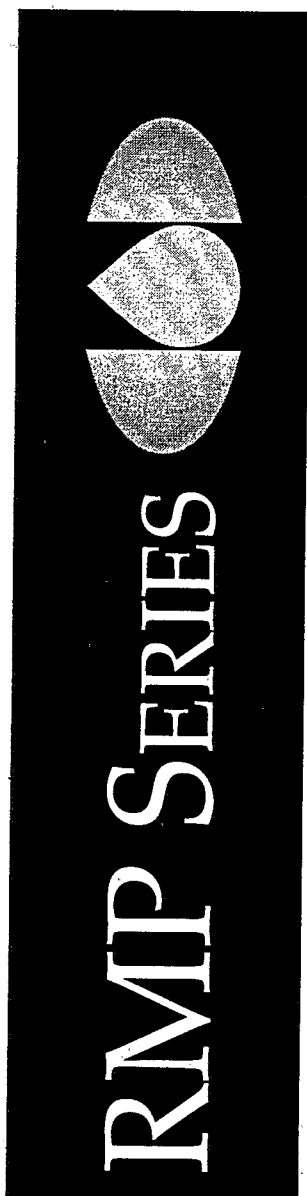
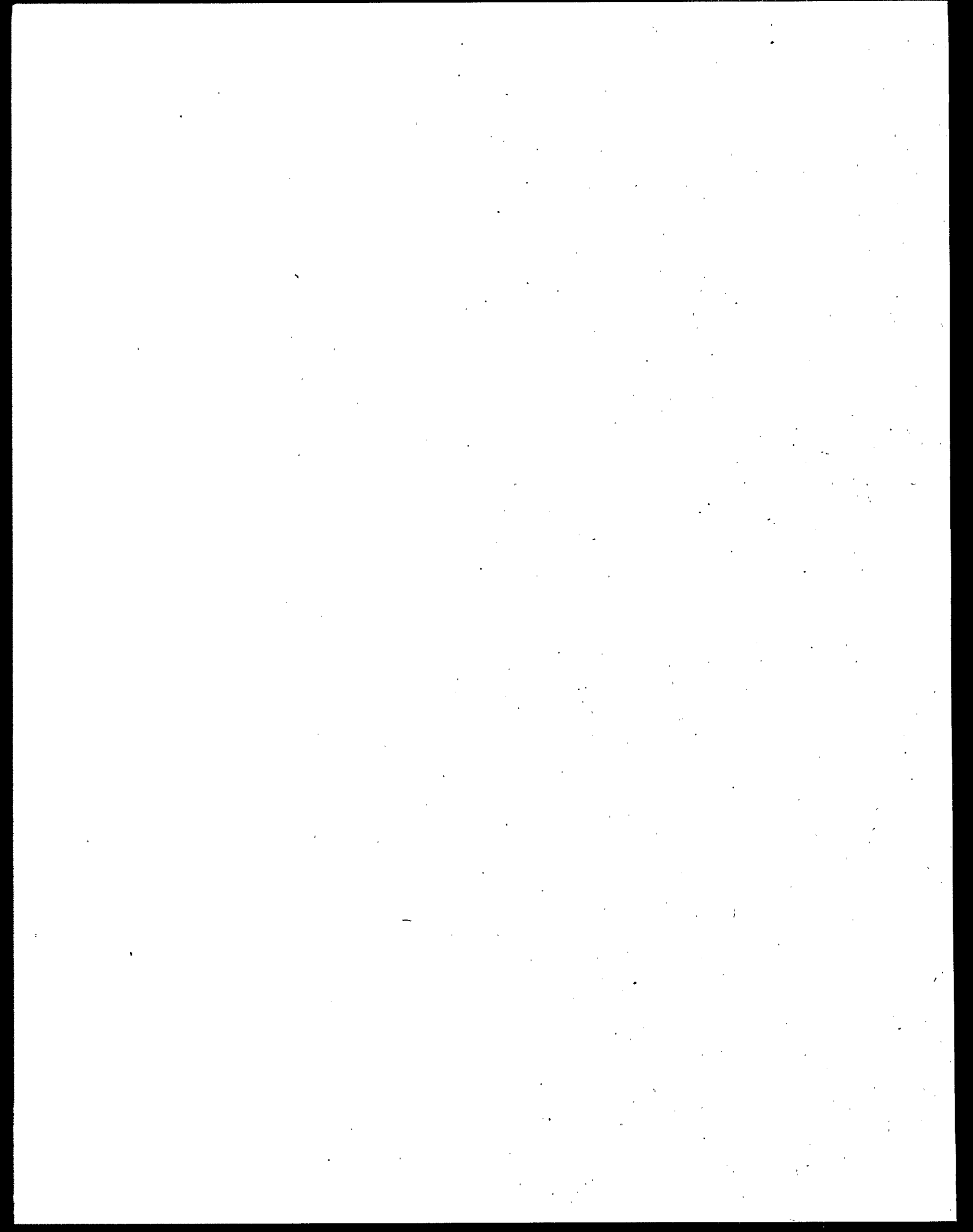




Risk Management Programs under Clean Air Act Section 112(r)

Guidance for Implementing Agencies

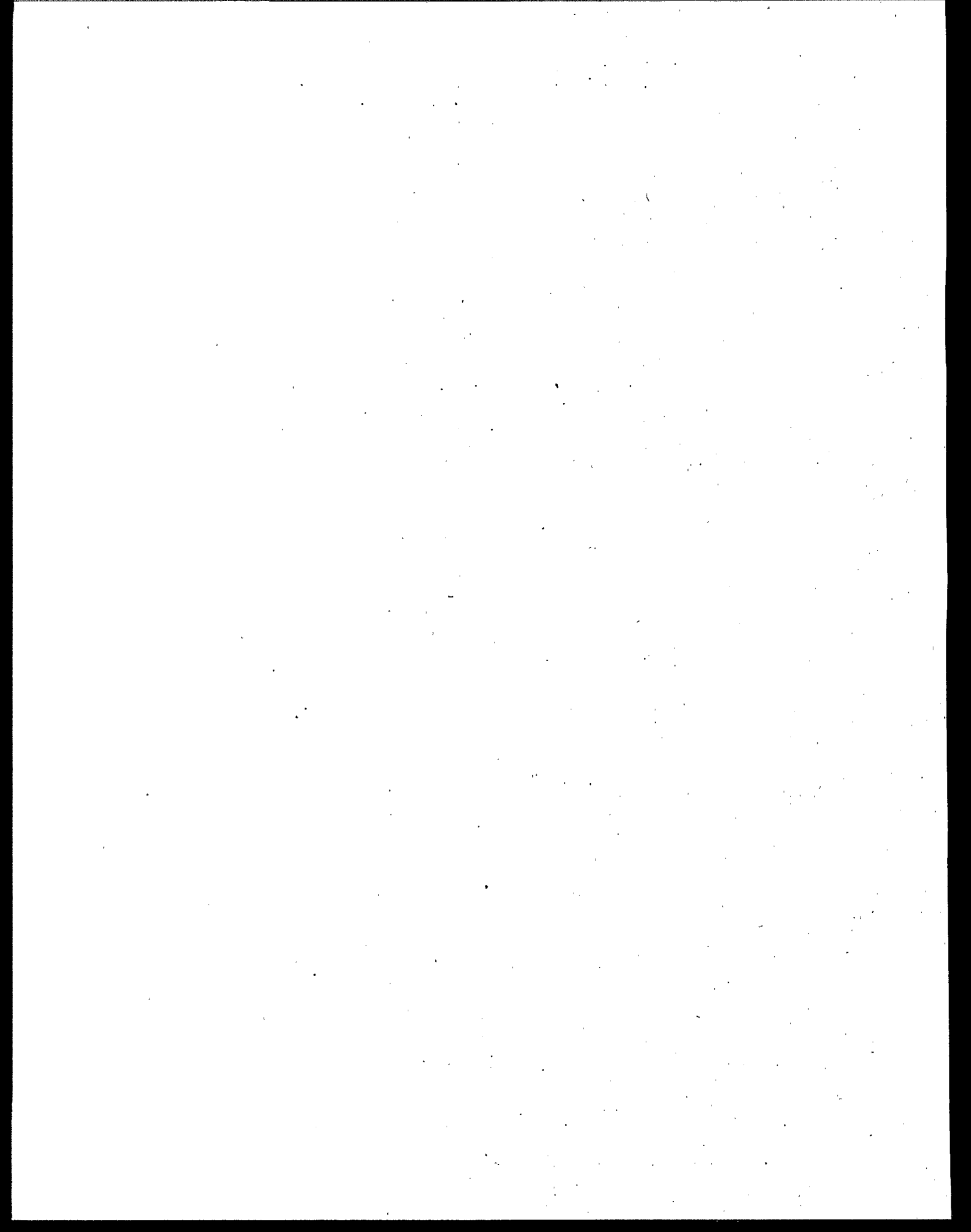




**Risk Management Programs under
Clean Air Act Section 112(r)**

Guidance for Implementing Agencies

February 1998



FOREWORD

EPA will be proposing changes to its rules in 40 CFR part 68 (risk management program requirements) and also those in part 63, subpart E (delegation of Clean Air Act programs to State and local agencies). Although these rules are not yet final, some of these proposed changes are indicated in this guidance. In the meantime, the existing rule is in effect.

EPA also expects to modify the contents of this guidance as we gain experience with specific State and local agencies carrying out implementation activities. For the most up-to-date information, contact the Emergency Planning and Community Right-to-Know Hotline at (800) 424-9346 or (703) 412-9810 TDD (800) 553-7672; Monday-Friday, 9 am to 6 pm, EST, or visit the Chemical Emergency Preparedness and Prevention Office (CEPPO) home page: <http://www.epa.gov/ceppo/>.

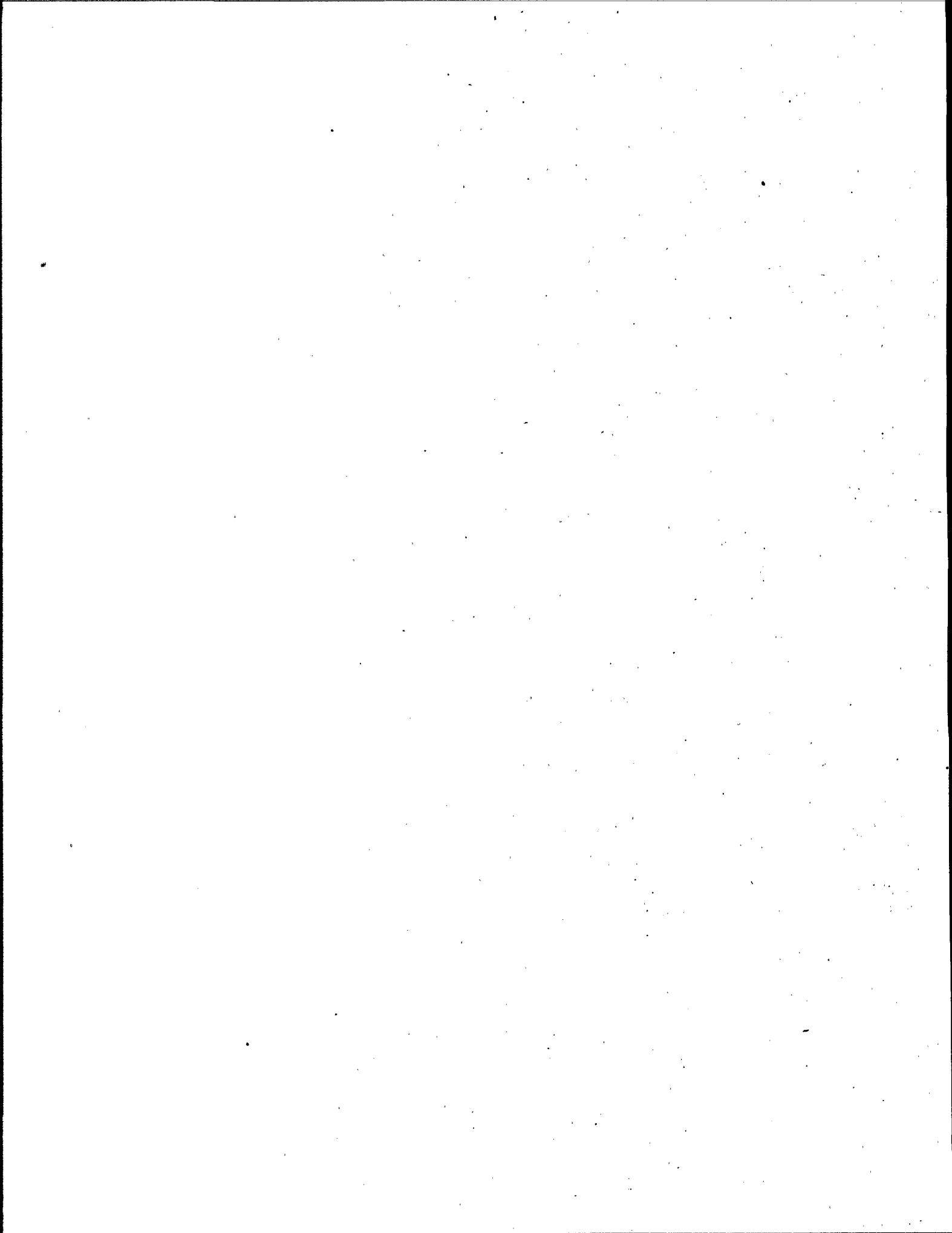


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CHAPTER 1: OVERVIEW

This publication provides guidance on developing accidental release prevention programs under section 112(r) of the Clean Air Act (CAA). Although the rules published under section 112(r) are part of the CAA, they are related to and build on activities conducted under the Emergency Planning and Community Right-to-Know Act (EPCRA) and the Occupational Safety and Health Administration (OSHA) standards.

Regulatory requirements by themselves will not ensure safety. Accident prevention requires a State/local/Federal/industrial partnership and a focus at the local level (where the risks and the solutions are). This chapter provides a brief history of the section 112(r) rules and places them in the context of other environmental programs. Chapter 2 describes the activities that are part of an implementation program and details possible approaches for building an implementation program. Chapter 3 discusses approaches for developing implementation partnerships among EPA, States, and local governments, including the requirements for delegation.

BACKGROUND

After the 1984 chemical tragedy at Bhopal, India, EPA and other stakeholders began programs to improve emergency planning at the local level. In 1986, Congress adopted many aspects of these programs as the Emergency Planning and Community Right-to-Know Act (EPCRA). As its title indicates, EPCRA has two major concerns: improved emergency planning at the local level, where emergency response occurs, and improved information to the public about hazardous chemicals in the community.

EPCRA focuses on understanding hazards and planning for emergencies to ensure that when an accidental release occurs, the local responders will be able to take quick, effective actions to protect public health and the environment. EPA recognized, however, that for hazardous gases and liquids that rapidly become gases when released, emergency response was not enough. These hazardous substances move quickly into the community when an accident occurs; emergency response actions can limit the release, but may not be sufficient to protect the public. Public and environmental protection demands that these accidents be prevented or, if they do occur, that there be no adverse consequences. In 1986, EPA began a prevention program to work with industry and others to identify ways to improve safety practices. Congress, in 1990, included prevention requirements in its amendments to the Clean Air Act to address the dangers of hazardous chemicals released to air.

Under CAA section 112(r), EPA must adopt regulations for the prevention and detection of accidental releases of chemicals and response to releases that occur. On June 20, 1996, EPA published its final rule on accidental release prevention. The regulations (40 CFR part 68) require covered facilities to develop and implement a risk management program that includes analyses of offsite consequences of accidental chemical releases to the air, a five-year accident history, a prevention program, and an emergency response program. In addition, the facility must submit a risk management plan (RMP) that describes its hazards and prevention activities and indicates its compliance with the regulations.

Although the primary responsibility for accident prevention is the facility's, government agencies and the public have important roles to play in accident prevention. The mandates of the CAA focus on the facility, but Congress recognized the critical interests and influence of the community when it made the RMPs available to the States, local planners and responders, and the public. If chemical accidents are to be prevented, it is vital that the State and local governments and the public become involved in implementation of the rule and work with industry to ensure the protection of public health and the environment.

RISK MANAGEMENT PLANS

The RMPs, which must be submitted to a central location specified by EPA prior to June 21, 1999, will provide new information that will help government agencies and the public understand the hazards at facilities and the steps being taken to address those hazards. Under EPCRA, facilities submit to the State and local community annual inventories of hazardous chemicals they handle, produce, or store. The RMPs will add considerably more information about these processes. The offsite consequence analyses will present information on the areas that could be seriously affected by accidental releases. The five-year accident history will provide, in a single record, a review of each facility's accidents, which will help communities identify facilities with continuing problems and allow them to track progress in accident prevention. The prevention program information will include data on process hazards that could lead to accidental releases as well as information on steps being taken to control the hazards.

EPA will make all RMPs available electronically on the Internet. Government agencies and the public will be able to review RMPs for all facilities. RMPs will be useful to local emergency planners and responders because the plans will provide new information on potential hazards and facility capabilities to detect and mitigate releases. In addition, the community will be able to review RMPs from facilities in other parts of the country that handle a chemical and use the

same types of processes as local facilities. This ability will allow communities to compare safety records and practices within an industry. They may learn that their local facilities are using practices that are typical for their industry or that exceed industry standards. If their local facilities seem to be using different controls and safety practices, the community will have a starting point to discuss possible improvements with the facility.

The availability of RMPs will place considerable responsibility on both the facility and government agencies to develop ways to communicate risk information to the public. The offsite consequence analysis data will provide information on areas around facilities that could be affected by an accidental release; the data, however, will not address the likelihood that the releases or the impacts will occur. In many cases, particularly for the mandated worst-case release scenario, the likelihood will be very low. The prevention program data will reflect the processes and hazards at a specific site. Similar processes and hazards at other sites filing RMPs may require different levels of control based on site-specific factors, such as distance to the public. It will be important for government agencies and the facilities to reach a common understanding of what the data do and do not mean and explain that to the public. State and local agencies need to work with facilities and the public to ensure that the information is interpreted reasonably. The modeling information for worst-case and alternative release scenarios should be viewed as the basis for discussion among interested parties, rather than a precise prediction of potential accident effects.

WHO IS COVERED?

The CAA states that the risk management program regulations cover the owner or operator of a stationary source with more than a threshold quantity of a section 112(r) regulated substance in a process. The section 112(r) chemicals and thresholds overlap with chemicals listed under other rules, but are not identical to those on any other list. The section 112(r) list includes 77 acutely toxic chemicals listed on the EPCRA extremely hazardous substance (EHS) list, but also includes 63 flammable gases and liquids. The thresholds generally are higher than the EPCRA thresholds. Section 112(r) thresholds are determined by process, not by site; consequently, sources may list more than a section 112(r) threshold quantity in EPCRA reports, based on maximum quantity on site, and not be subject to section 112(r). The section 112(r) chemical list and corresponding thresholds for each chemical are published at 40 CFR 68.130, Tables 1 and 2 (toxic substances) and Tables 3 and 4 (flammable substances) and are available on the Chemical Emergency Preparedness and Prevention Office (CEPPO) website: <http://www.epa.gov/ceppo/>.

The CAA specifically covers any facility with a section 112(r) substance above the section 112(r) threshold in a process, regardless of whether the owner or operator is a State, its political subdivision, the Federal government, or a private entity. EPA expects that the rule will cover all petroleum refineries, many chemical manufacturers (mostly manufacturers of basic chemicals), food processors and distributors who have ammonia refrigeration systems, other manufacturers such as pulp and paper mills and primary and secondary metal manufacturers, propane and agricultural retailers, chemical wholesalers, drinking water and wastewater treatment systems, electric utilities, and Federal installations, such as military bases and Department of Energy facilities. EPA estimates that about 64,000 facilities will be subject to the rule. Appendix A provides State-by-State estimates of the number and type of these facilities.

THE RULE, RELATED STATUTES, AND REGULATIONS

The section 112(r) rule requires covered facilities to develop and implement a risk management program to prevent accidental releases of regulated substances. The specific steps required for the prevention program depend on the level of risk posed by a process and the complexity of the process. The rule establishes three program levels, with different required elements; Appendix D presents a table that outlines the requirements for each program level. Program 1 covers a limited number of processes that pose comparatively low risks to the public. Program 2 processes are mainly at retail facilities, at public drinking water or wastewater treatment plants in States that do not have delegated OSHA programs, at facilities that use propane as a fuel, and other facilities not eligible for Program 1 or subject to Program 3. Program 3 processes are in certain industrial sectors with substantial accident histories or are subject to the OSHA process safety management (PSM) standard. Program 3 processes are mainly at manufacturing facilities, plants with cold storage systems, utilities, and public drinking water or wastewater treatment plants in States that have delegated OSHA programs. (Federal OSHA rules do not apply to State and local employees; OSHA rules in States with delegated programs do apply to State and local employees).

The rule is related to a number of Federal and State programs, either because it builds upon them (e.g., EPCRA and OSHA) or because the other programs are part of the CAA. This section discusses the relationships among these programs.

THE OSHA PSM STANDARD

EPA has adopted the OSHA PSM standard as its prevention program for processes in Program 3. Processes in Program 3 already are subject to the PSM

standard or are in industrial sectors with a high incidence of accidental releases. For a process already in compliance with OSHA PSM, an owner or operator generally will not need to take additional steps or create new documentation to comply with EPA's Program 3 prevention program. Compliance with the OSHA standard, however, is not sufficient to meet all risk management program elements, which cover areas that are not part of the OSHA PSM (e.g., the hazard assessment). If the process is in one of the Standard Industrial Classification (SIC) code categories set out in § 68.10(d) (see Appendix D), the owner or operator must implement the same prevention program as if the process was subject to the PSM standard.

Adopting the PSM standard language will make compliance with this rule easier for sources because it will eliminate the potential for conflicting Federal requirements applying to the same regulated community. EPA and OSHA are working together to interpret and enforce the PSM and chemical accident prevention programs consistently.

EMERGENCY PLANNING AND COMMUNITY RIGHT-TO-KNOW ACT (EPCRA)

The Congressional intent of section 112(r) is to prevent and minimize the consequences of an accidental release of a section 112(r) listed substance or any other extremely hazardous substance. The RMP documents compliance with the section 112(r) regulations. In requiring that RMPs be made available to State and local entities and the public, Congress also established a "right-to-know" provision in CAA section 112(r).

Local emergency planning committees (LEPCs) and State emergency response commissions (SERCs) should integrate EPCRA activities with the risk management program rule requirements to the extent possible. Granted that LEPCS have different capabilities and resource levels, whenever possible LEPCs should play a central role to maximize the benefits obtained from RMP data. RMP information, which EPA will make available electronically, will help emergency planners and should support an expanded prevention-related dialogue between source owners and operators and the public.

Many facility owners and operators will be familiar with the hazards associated with section 112(r) listed chemicals due to EPCRA reporting requirements. For example, all section 112(r) listed substances are substances for which OSHA requires a material safety data sheet (MSDS) under the Hazard Communication Standard. Therefore, many facilities already must report the hazards associated with section 112(r) listed substances in the annual inventories filed under EPCRA.

section 312. Furthermore, most regulated refineries and chemical plants meet the separate EPCRA section 313 (toxic release inventory) thresholds for substances common to the EPCRA section 313 and CAA section 112(r) lists; facilities in these sectors must report annual air emissions under EPCRA section 313.

TITLE V

In Title V of the CAA, section 502(b)(5)(A), Congress says that a permitting authority must have the authority to "assure compliance by all sources required to have a permit under this title with each applicable standard, regulation or requirement under this Act." The section 112(r) rule is an "applicable requirement." The requirements for a permitting authority related to part 68 are set out in § 68.215. In general, the permitting authority must ensure that permits include conditions relative to part 68 compliance and must ensure that the RMP is submitted and complete. The permitting authority may ensure compliance through audits or checks of some RMPs; the authority may designate another State agency to conduct these checks or, with EPA's concurrence, may develop a written agreement with EPA to have EPA serve this function. The designated agency is not necessarily the implementing agency for section 112(r).

CAA SECTION 112(l)

CAA section 112(l) and 40 CFR part 63, subpart E, set out a process for State or local agencies who wish to seek delegation from EPA to implement and enforce the section 112(r) regulations. Chapter 3 discusses this delegation process.

STATE IMPLEMENTATION PLANS (SIPs)

State Implementation Plans address the control of substances for which there are national ambient air quality standards (NAAQSs). There is no relationship between the section 112(r) program and SIPs. The CAA specifically bars EPA from listing a substance under section 112(r) if it has a NAAQS, except for a few substances, such as sulfur dioxide and sulfur trioxide, that are mandated for listing in section 112(r).

INTEGRATED CONTINGENCY PLANS (ICPs)

Although the section 112(r) rules cover far more than emergency response, the rules, as mandated by the CAA, include requirements for an emergency response program and plan. In 1996, the National Response Team issued guidance for the development of an integrated contingency plan, also known as "one plan." The

guidance is intended to help facilities subject to multiple Federal contingency planning requirements to develop a single plan that will satisfy all Federal requirements. A plan developed using the ICP guidance will meet the emergency response plan requirements of the section 112(r) rule. Copies of the ICP guidance are available from the hotline or the CEPPO website ((800) 424-9346; <http://www.epa.gov/ceppo/>).

CONFIDENTIAL BUSINESS INFORMATION IN RMPs

Under the CAA, facilities may claim some limited RMP data as confidential business information (CBI). Facilities will be required to submit to EPA both "sanitized" RMPs (with CBI data omitted) and "unsanitized" versions (with all data reported).

EPA will make sanitized versions of the RMPs available to the public, States, and local governments by including them in RMP*Info (see Appendix E). Should States or LEPCs want to obtain the unsanitized version from EPA, they may do so by filing a written request with EPA for the information. EPA will respond to such requests consistent with 40 CFR 2.301(h)(3), which governs disclosures to States and local agencies having duties or responsibilities under the Clean Air Act and its implementing regulations. A State or local government may, under this provision, obtain CBI from EPA under two circumstances: (1) it provides EPA a written opinion from its chief legal officer or counsel stating that the State or local agency has the authority under applicable State or local law to compel the business to disclose the information directly; or (2) the businesses whose information is disclosed are informed and the State or local government has shown to an EPA legal office's satisfaction that its use and disclosure of the information will be governed by State or local law and by "procedures which will provide adequate protection to the interests of affected businesses."

Notwithstanding the foregoing process, State and local governments may always obtain the unsanitized versions of the RMP by enacting regulations to require sources in their jurisdiction to submit the CBI directly to State and local entities. EPA encourages those State and local authorities wishing to receive the unsanitized RMPs to use their own authority to require such information, rather than seeking it under EPA's disclosure regulations.

CHAPTER 2:

BUILDING A SECTION 112(r) IMPLEMENTATION PROGRAM

IMPLEMENTATION ACTIVITIES

There are many different ways Regions, States, and local agencies can work together to implement section 112(r). One size definitely does not fit all for section 112(r) implementation. States may implement all or parts of the 112(r) program (e.g., for selected facilities, selected functions, by program level, by industry) under a number of options discussed in Chapter 3. Implementation activities include outreach, technical assistance, training, reviews of RMPs, audits of RMPs, and inspection of risk management programs at facilities. A list of RMP implementation products being developed by EPA, and their current status, is available on the Internet at <http://www.epa.gov/ceppo/>. State programs to protect public health and safety already include many oversight activities that are essential to an effective section 112(r) implementation program.

Outreach. Facilities, local agencies, and the public need to be informed about the section 112(r) regulations and the information that will be available. Through EPCRA section 312 reports, stakeholders already have information on the facilities that are likely to be covered by this rule. This information can be used to target both covered facilities and affected communities for outreach. Examples of outreach activities are:

- Contacting facility owners and operators with covered processes and letting them know about the program and the deadlines.
- Arranging public meetings to begin or continue a dialogue between the communities and local industry subject to the risk management program. This action can help regulated industries and the community work together to understand accident risks and consequences, plan for the best disposition of response resources, and cooperate in chemical accident prevention.
- Setting up a State or local hotline to answer questions from the public and industry. EPA has an EPCRA hotline (1-800-424-9346), and it is a resource frequently used by various stakeholders to help them keep current on EPCRA and section 112(r) compliance issues. Setting up a hotline as a section 112(r) resource for the community is useful both to answer questions and to determine which issues most confuse people. The most frequently asked questions can be the basis for directing further outreach efforts such as a question-and-answer document that applies to industries

in a Region, State, or locality. Agencies also can use EPA's hotline and documents by building computer links between their own home pages and Chemical Emergency Preparedness and Prevention Office home page (<http://www.epa.gov/ceppo/>).

Technical Assistance. Facilities, State and local agencies, and the public are likely to need information about the program, rule interpretations, and submission guidelines. The implementing agency is responsible for providing this assistance to covered facilities, but other agencies may be able to provide technical support to community stakeholders. (State-subsidized or State-funded programs for specific chemical users may have restrictions on how these funds can be used.) Examples of activities that meet various stakeholder needs for technical assistance are:

- Preparing fact sheets on a range of subjects related to compliance. For example, many of the industry sectors subject to this rule consist primarily of small businesses that may not have a regulatory support staff. These sectors may be uncertain whether the section 112(r) rule applies to their processes. Fact sheets targeted to a specific sector can explain the rule requirements for that sector quickly and answer sector-specific questions. Fact sheets developed by one EPA Region or State should be shared to help other agencies; EPA will develop a website or bulletin board to facilitate the sharing of such information.
- Identifying technical expertise. Local fire marshals already have process knowledge concerning ammonia and propane storage operations. In a State that implements Federal OSHA requirements, someone already has substantial chemical process knowledge. Where a State has instituted a chemical risk management program, there likely will be facility inspectors with sector-specific knowledge. Trade associations may keep a list of technical experts, and these experts may form the core of the technical assistance support.

Training. Facilities and any agency taking part in the program could benefit from training on particular topics related to section 112(r). EPA will provide some training (including train-the-trainer courses), so Regions, States, or local groups could then present the training locally. Not only will implementation program staff get a useful learning experience, but in taking the training back to Regions and localities, there is a chance to establish a true partnership with industry sectors in your jurisdiction. Other examples of training initiatives are:

- Developing or disseminating a home study course. Without incurring the cost of travel, environmental management staff (especially at small businesses) can use the material to learn about the risk management program and test their knowledge of compliance issues. This may be a good way for implementation staff to get up to speed, too. There are several courses to build upon. For example, EPA continues to give its chemical safety audit course. U.S. OSHA offers a one-week overview course on chemical processing industries. Anyone can copy those materials freely for use in a course developed to suit the processes and industries in a State and its localities.
- Finding out what other training is available for owners and operators in the area and posting the information electronically or on an office public bulletin board. In addition to the training described above, some industry organizations may offer training on process safety management for facilities in their sector. A number of organizations, such as the American Institute of Chemical Engineers and the Chemical Manufacturers Association, have videos that can help people understand some of the technical aspects of the EPA rule (e.g., safe handling of flammables).

RMP Reviews. In subpart G, the risk management program rule specifies what information the source must include in its risk management plan (RMP). The RMP submission system that EPA is developing will check each RMP filed to ensure that all the required data elements have been completed; any RMP that is not complete will not be accepted. Agencies may want to review the executive summary and check registration data, with data submitted to the State under EPCRA section 312 to identify any discrepancies. Agencies also may want to review RMPs to identify internal inconsistencies in data submitted, facilities with potential problems based on their accident histories, and unusual data (e.g., failure to list appropriate hazards under the prevention program).

Review of an RMP does not constitute approval of an RMP. Implementing agencies are not required to "approve" RMPs.

RMP Audits. Under the CAA and § 68.220, RMPs are subject to audit to assess whether the plans are adequate or need revision to comply with the rule. The implementation program must include some audits. No minimum number or percentage of RMPs has been set. States are not required to audit all RMPs, although some may elect to do so. Congress considered a requirement that 1.4 percent of the RMPs be audited annually, but dropped that provision. Each

implementing agency will have to decide what is a reasonable level of auditing, based on local needs and resources.

Section 68.220 provides criteria for selecting stationary sources for audits. An audit may be a paper review and does not necessarily require on-site inspection, although the two may be combined. Audits of RMPs are reviews of the contents of the RMP to determine whether it indicates a complete risk management program and appears to reflect adequate compliance (as opposed to review, which may simply determine whether all required data have been reported). An example of the kinds of issues to evaluate in an audit is whether dates listed for activities seem to be internally consistent (e.g., date of the last review of prevention elements is before the date reported for the most recent major change). An audit also could focus on accident histories and offsite consequence analyses results and whether these reflect reasonable results. Audits could be useful in comparing the accident history with the accidents reported to the SERC and LEPCs under EPCRA section 304. Audits also may compare practices among facilities within the same industry sector to determine if particular facilities within the State seem to be meeting industry standards.

As a result of an audit, which may be combined with an inspection, a facility may be required to revise its RMP and correct deficiencies in its underlying program. For example, if an audit indicated that a facility had not reviewed and updated operating procedures after a change and that such updates were needed, the facility could be required to update the procedures, retrain workers in the new procedures, and submit a revised RMP indicating the new information.

An implementing agency may audit all or a part of the covered sources in a State or Region to help identify potential problems. It may target some industry sectors or chemicals. This is a good way to enhance partnerships with industries; audits will help industry better understand what the agency is looking for and how well they are meeting compliance objectives.

Inspections. Inspections complement RMP audit activities and are valuable for evaluating compliance with the substantive elements of the section 112(r) rule. Many State and Regional programs for the protection of public health and safety already include on-site inspections. For example, water permitting agencies visit treatment plants; fire inspectors check on propane distributors. With proper training, it may be highly efficient to have these regulators and inspectors add section 112(r) compliance elements to their inspection checklist. Further, if inexperienced inspectors partner with an experienced inspector as a team leader,

this can be an efficient way to educate others and expand the pool of technical experts available to industry and the community. This approach means the implementing agency may not need to conduct inspections that other authorities are performing already. (Again, there may be restrictions on how funds in existing State programs may be used.)

BUILDING AN IMPLEMENTATION PROGRAM

EPA is striving for a common-sense implementation of the section 112(r) rule that builds upon existing health and safety programs already in place in a State or Region. This section discusses some sectors where existing programs can be used as a basis for implementing some or all of the elements of an implementation program.

PROPANE RETAILERS AND USERS

In all of the States but one, propane use is subject to State laws based on National Fire Protection Association (NFPA) standard 58. This standard will help many facilities comply with the section 112(r) prevention program requirements. (The facility also must meet the hazard assessment, emergency response, and RMP requirements.) EPA's model risk management program for propane is based on NFPA-58. The State fire marshal and local fire departments may want to add section 112(r) requirements to their regular fire inspections. After having received appropriate training in the model risk management program for propane facilities and technical support from EPA, local inspectors then would check for elements of the program as part of routine inspections. If problems exist, the fire inspectors could work directly with the facility to resolve them. If the facility refuses to address problems, the fire department could refer the problem to the implementing agency for appropriate action.

DRINKING WATER SYSTEMS AND POTWS

State water authorities issuing National Pollutant Discharge Elimination System (NPDES) and other water quality permits probably inspect wastewater and drinking water treatment facilities to look at discharges into surface water or underground injection wells and test water quality. States that have delegation of the pretreatment program may be able to work with their local wastewater treatment facilities to include some section 112(r) inspection elements in their annual inspection of regulated facilities. Model risk management programs are being developed for drinking water systems and wastewater treatment systems. With training, and presuming no funding restrictions exist for State inspection

programs, water quality facility inspectors could add section 112(r) requirements to their inspection protocols. Again, if a State inspector identifies problems with section 112(r) compliance, the inspector could work with the facility to resolve the problems, using referral to the implementing agency as a backup if the facility refuses to take the steps the inspectors believe are needed to protect the community.

OSHA PSM FACILITIES

EPA's Program 3 prevention program (40 CFR part 68 subpart D) largely includes the same requirements as the PSM standard, so that oversight under the PSM standard should serve many section 112(r) compliance objectives. (See Appendix D.) For example, in a State with a delegated OSHA program, the State OSHA already is overseeing the Program 3 prevention program for facilities subject to both sets of requirements.

There are some differences, however, between the EPA and OSHA programs. For example, although the prevention requirements of Program 3 are substantially the same as the PSM standard, the two programs vary slightly to address the different statutory authority of EPA and OSHA. Further, EPA's risk management program rule covers elements beyond the PSM standard, such as an accident history and offsite consequence analysis. The chemical lists that trigger PSM and section 112(r) applicability are substantially similar, but not identical. Finally, EPA's rule covers some processes (all Program 2 processes and some Program 3 processes in specific SIC codes) that OSHA PSM does not.

Despite the differences, the State OSHA program already has the authority to oversee compliance with the Program 3 prevention elements for most processes. It generally will be preferable for this agency to work with the implementing agency through a memorandum of understanding (MOU) to ensure that actions are not duplicated and are consistent.

TARGETED SECTORS

Targeting particular industrial sectors of facilities based on past accident history can be a good way to start building an implementation program. For example, if reports under EPCRA section 304 or 313 reveal large air releases from certain sectors of the chemical manufacturing industry, focusing compliance efforts on that industrial sector may have the most potential for chemical accident prevention

and air emissions reduction in that Region or locality. There are many criteria set out in § 68.220(b) to target a facility sector.

CAA SECTION 507 - SMALL BUSINESS ASSISTANCE PROGRAM (SBAP)

CAA section 507 requires States to establish a small business stationary source technical and environmental compliance assistance program. This program can be a key link for working with small businesses. The program includes mechanisms for collecting and coordinating information on compliance methods and technologies for small businesses; mechanisms for assisting small businesses with accident prevention and detection; a State ombudsman to help small businesses; a compliance assistance program; mechanisms for ensuring that small businesses are informed of their rights and obligations under the Act; and procedures to consider small business requests. Small businesses are defined as facilities with 100 or fewer employees that are not major sources. More information is available at the SBAP home page: <http://www.epa.gov/ttn/sbap/>.

HAZARD ASSESSMENT AND EMERGENCY RESPONSE

The offsite consequence analysis and emergency response sections of the section 112(r) rule are likely to be of particular interest to local responders. Local response organizations may want to serve as the reviewer of these analyses and facility response plans. EPA is providing guidance on the offsite consequence analysis and the rule in general and will provide guidance for local agencies on how to interpret and use this information. Having LEPC member agencies serve as primary reviewer of these parts of the RMP will enhance local planning efforts, encourage more contacts between the community and industry, and provide local agencies with a general introduction to the risk management program rule.

FUNDING

State or local agencies seeking to implement all or part of the CAA section 112(r) program will need to identify funding sources. A number of potential options are available to support some or all of your implementation activities.

EPA GRANT PROGRAMS

The EPA's Chemical Emergency Preparedness and Prevention Office funds technical assistance grants (TAG) to help States and local agencies develop chemical accident prevention programs as well as to integrate their chemical accident prevention activities with related activities under EPCRA, pollution

Chapter 2
Building a Section 112(r) Implementation Program

prevention, and other environmental and safety programs. Examples of projects that will be considered for an award include, but are not limited to, the following:

- Development of a comprehensive implementation strategy for an accidental release prevention program which includes how CAA section 112(r) will be integrated with other State and local programs, possible funding mechanisms, how the information will be managed, and enforcement approaches. (EPA will accept proposals that include an incremental approach to implementing a CAA section 112(r) program. More comprehensive programs will be eligible for more funding.)
- Development of legislative authority, regulations, and/or documentation needed for full or partial delegation of a State or local accident prevention program under CAA section 112(r). (The TAG program will not fund projects intended to set up a CAA Title V permitting program.)
- Development of guidance and/or training materials to assist States and/or LEPCs and other agencies in reviewing risk management plans and using information in the risk management plans to protect public health and the environment.
- Development of innovative local approaches to including facility audits and inspections within existing LEPC activities.
- Development of a local or Statewide risk communication project to prepare communities to use, understand, and act upon information available under EPCRA and CAA section 112(r).

Check the CEPPO website (<http://www.epa.gov/ceppo/>) for current information on the grant program.

The Pollution Prevention Act of 1990 authorizes EPA to make matching grants to States for programs to promote the use of source reduction techniques by businesses. If a State gets funding under this Act, it can use the money to make specific technical assistance (including expert technical advice) available to businesses seeking information about source reduction opportunities. Pollution Prevention Act grants will primarily be useful as funding sources to support technical assistance and outreach projects, such as hotlines, training courses, workshops, websites, and printed informational materials. Further information on

pollution prevention grants can be obtained from the grant program website at <http://www.epa.gov/opptintr/p2home/grants.htm>.

Under CAA section 105, EPA provides grants to cover up to three-fifths of the cost of planning, developing, establishing, carrying out, improving, or maintaining programs that address the prevention and control of air pollution. Further information on section 105 grants can be obtained from EPA's Office of Air Quality Planning and Standards (<http://www.epa.gov/ttn/uatw>).

OTHER FUNDING SOURCES

States and local agencies also may seek to support a section 112(r) program through fees or appropriations from the State legislature or local authorities. States that have accident prevention programs under State laws generally have supported these programs through fees on the regulated community. The fees have been assessed per source, per process, per chemical, or per quantity of chemical. Use of permit fees collected under CAA Title V is limited to carrying out the requirements of § 68.215, which provides the responsibilities of the air permitting authorities in relation to part 68. Appropriations from the State or local general fund may be another possible source of funding to support some or all parts of a section 112(r) program.

Chapter 2
Building a Section 112(r) Implementation Program

CHAPTER 3:

IMPLEMENTATION PARTNERSHIPS FOR THE SECTION 112(r) PROGRAM

EPA is ready to be an implementation partner in coordinating Federal and State chemical accident prevention program requirements, in obtaining program delegation, and in developing resources to fund State or local programs. EPA is willing to enter into cooperative agreements with States and localities for section 112(r) implementation, including written memoranda of understanding describing, for example, when EPA will intervene to inspect a facility or initiate enforcement action. EPA also is willing to entertain appropriate informal agreements with State entities. EPA and the States can work together through workshops, seminars, and pilot studies designed to foster local program implementation and to build a support network. In other words, our approach is flexible. We want to keep as much of the section 112(r) program as possible in the localities where chemical accident prevention problems and solutions will arise.

EPA will provide needed technical support and grants to assist State and local agencies to begin implementing all or part of the section 112(r) program, will be the implementing agency for any State that does not obtain section 112(l) delegation for part 68 provisions, and will publish general technical guidance to help States, localities, and sources understand or comply with the risk management program rule.

EPA is working with industry groups to develop model programs for industries with many small businesses and with well-understood processes and practices. Right now, documents under development include industry-specific guidance for ammonia refrigeration, propane handling, warehouses, chemical distributors, wastewater treatment, and water treatment. These models can be used to help build programs for specific industry sectors.

WHY ADOPT A STATE RISK MANAGEMENT PROGRAM?

Many benefits are accrued when the section 112(r) program is implemented at the State and local level. For example, there are increased prospects of identifying the most probable high risk or high consequence accidents that may happen in a community and spreading response resources appropriately. Preventing the accident before it happens can help avoid the property and health damage, business shut-downs, higher insurance rates, and other costs that come when there is no effective accident prevention program.

Further, accident prevention, pollution prevention, environmental protection, and worker and public health and safety requirements are best integrated at the

community level. In all likelihood, State regulatory agencies already have established partnerships and close working relationships with sources in their jurisdiction. Further, where State and local, publicly owned sources are covered by the risk management program rule, implementation at the State and local level can serve to enhance compliance that otherwise may require increased Federal coordination and involvement.

IMPLEMENTATION APPROACHES

As discussed in Chapter 2, there are many ways to build a section 112(r) implementation program. With the flexibility of the final 112(r) rule, State and local agencies have several implementation options. States may select any State or local agency to implement this program, including an air permitting authority. State and local agencies can take on some or all of the implementation activities for some or all of the covered facilities. Multiple agencies may want to participate. For example, the State environmental agency may want to provide technical assistance and training while other State and local agencies, such as State OSHA, the fire marshals, and LEPCs focus on auditing, inspections, and RMP reviews. The State Emergency Response Commission (SERC) provides the ideal situation for multi-agency involvement. EPA is willing to work with States and local agencies to develop an approach that is tailored to the specific situations in the area. Arrangements between EPA and State and local agencies may be informal or formal.

INFORMAL AGREEMENTS

Informal agreements may be verbal or written, but would impose no legally binding responsibilities. (Ultimately, of course, it is better for all involved parties when issues and/or agreements are clearly stated in writing. Some Regions may prefer that even informal agreements be written.) Such agreements may be particularly appropriate in the early stages of building an implementation program, when State or local agencies need to determine whether they have the capabilities to fulfill certain roles. Informal agreements may be between the EPA Region and State and local agencies or they may be between the State and local agencies, with only one State agency working directly with the Region. Such agreements would not change the requirements for facilities under section 112(r).

MEMORANDUM OF AGREEMENT (MOA)

When a State or local agency is certain that it will be able to carry out specific functions, it should formalize responsibilities by developing a Memorandum of

Agreement with EPA, specifying the role and responsibility of EPA and the agency. The Region will discuss the details of particular components with the individual State to tailor the MOA to the specific needs and aspects of the State program. Generally, a State official and the Regional Administrator negotiate the MOA, with the Region exercising discretion in deciding whether it or the State drafts the document. If there is a lead State agency responsible for coordinating implementation activities, it should sign the MOA and execute a Memorandum of Understanding with any other State entity that may have a necessary implementation role.

There are many advantages to an MOA. In complying with the MOA terms, a State can demonstrate its commitment to the section 112(r) program and earn political support among its citizens. Regional and State staff should recognize the MOA as a flexible way to "customize" the division of the State and Federal responsibility. As with informal agreements, such agreements would not change the requirements for facilities under section 112(r).

FORMAL DELEGATION

Formal delegation is the way Congress has provided for a State to take over primary responsibility for implementation and enforcement of the accident prevention programs under section 112(r). A formal delegation may be full or partial. Full delegation means the State takes over the entire section 112(r) program for all covered sources. Partial delegation means the State takes the entire section 112(r) program for Title V permitted sources only, or takes the entire program for some discrete universe of sources covered by the section 112(r) rule. In other words, under partial delegation, a State may request implementation authority for a defined universe of sources, but may not take less than the entire section 112(r) program for that defined universe. Title V funds are available only to pay for implementing § 68.215 of the section 112(r) rule.

Under the formal delegation process, a State adopts a chemical accident prevention program under State law and submits it to EPA for approval. EPA adopts the State rules, which then become Federally enforceable in that State. Because the CAA provides specific requirements for delegation, the details of how to gain delegation are described in the next section.

DELEGATION UNDER CAA SECTION 112(I)

Section 112(I) of the CAA establishes the framework for formal delegation — whether full or partial. Section 112(I) allows EPA to approve a State's program

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for implementing and enforcing an accident prevention rule or program that is *at least as stringent as the Federal section 112(r) program*. EPA can approve a State request for delegation when:

- The authorities in the State program are adequate to ensure compliance by all sources within the State;
- The State demonstrates that it has adequate authority and adequate resources to implement the program; and
- The State's schedule for implementing the program is sufficiently expeditious.

STATE RULES

In 40 CFR part 63, subpart E, EPA has issued regulations to define the delegation process provided in section 112(l) and identify the elements that a State request must address. Under part 63, subpart E, a State has three options, in terms of the rules it adopts to implement section 112(r):

- Adopt the Federal rule.
- Adopt the Federal rule and make adjustments.
- Adopt a program that differs from the Federal rule.

Adopting Part 68. If a State adopts part 68 and wants delegation authority to implement it as the State's own program, it must comply with §§ 63.91 and 63.95 to request approval. If there is no chemical accident prevention program in the State, this is the most direct approach to establishing one and has the secondary benefit of ensuring that the State program is "at least as stringent" as EPA's.

Adopting Part 68 with Some Adjustments. The CAA allows a State to adopt requirements that are more stringent than EPA's. For example, a State could adopt part 68 as its own, but add a few specific requirements aimed at an industry sector with an unusually high incidence of accidental releases. States choosing to take this option must make all the showings in §§ 63.91 and 63.95, and some others as specified under § 63.92. Section 63.92 describes allowable adjustments to the section 112(r) rule and further requirements that must be met. Chief among these other requirements are demonstrations that the State rules are at least as stringent as EPA's with respect to applicability, level of control for each affected source, compliance and enforcement measures, and compliance assurance for each covered source. Table 3-1 describes the approval criteria for State programs also subject to § 63.92.

Adopting a Program Entirely Different From Part 68. Substituting a State rule or program for EPA's section 112(r) rule requires the most showings, but it is an available option. For example, a State may have a full chemical accident prevention program which it is confident will meet the same elements of the Federal rule and is at least as stringent. States choosing this option must make all the showings in §§ 63.91 and 63.95, and some others specified in § 63.93. Where § 63.92 establishes what showings a State must provide to make adjustments to the part 68 programs, § 63.93 sets out similar requirements where the State wants to substitute its own program elements for some or all of the section 112(r) rule elements. Table 3-1 describes the approval criteria for State programs also subject to § 63.93.

A State program that simply adopts part 68 (either by reference or adopting part 68 verbatim into State law) requires the fewest showings, and a program that differs from part 68 requires the most. A State program, however, must be as stringent as part 68; it must cover the same processes with at least the same level of requirements. A State may add sources or requirements, but it may not exclude sources covered by EPA or reduce requirements for covered sources.

Every State seeking delegation authority for the section 112(r) program must address the elements in §§ 63.91 and 63.95, and must submit:

- A letter from the State Attorney General addressing the State's legal authorities to enforce the program for which it seeks delegation (see Exhibit 2 for an example);
- Copies of all statutes and regulations pertaining to the program;
- A schedule for ensuring expeditious implementation and a plan for expeditious compliance; and
- Documents that demonstrate the State's compliance authority.

Table 3-1 describes the approval criteria that apply to any State program for which section 112(l) delegation is sought.

One of the elements every State must address according to § 63.91 is to have at least the same legal authorities as 40 CFR 70.11 requires. Table 3-2 describes the requirements of § 70.11.

EPA is in the process of amending 40 CFR part 63, subpart E. This guidance reflects some of the amendments that will be proposed. Specifically, EPA is proposing to eliminate the requirements in existing § 63.95 for registration and submission of the RMP and documentation of coordination with the SERC,

LEPC, and Chemical Safety and Hazard Investigation Board. Registration and submission of the RMP will be handled by EPA. Although EPA encourages States to coordinate activities with the SERC and LEPCs, the Agency is proposing that this coordination should not be a requirement for delegation. Up-to-date information about the part 63 revisions is available on EPA websites: <http://www.epa.gov/ceppo/> and <http://www.epa.gov/ttn/uatw>.

AUTHORITY RETAINED BY EPA

Certain section 112(r) authorities and program requirements will not be delegated to States. For example, although a State may require sources to submit RMPs to the implementing agency, that requirement will not replace the part 68 requirement that the RMP must be submitted to a central location in the form and manner EPA specifies. Therefore, subpart G of part 68 is not available for delegation. Also, the General Duty clause (CAA section 112(r)(1)) is non-delegable; the order authority in CAA section 112(r)(9) is not a required part of the program.

In setting up the RMP*Submit and RMP*Info (see Appendix E), EPA will try to accommodate additional State data elements if practicable. However, State authorities should be prepared to handle data elements and filing requirements at variance with the Federal 112(r) program rule. Table 3-3 describes what authorities will and will not be delegated for section 112(r) and part 68.

DEMONSTRATION OF RESOURCES

Among the core elements of a delegation request is a clear demonstration that the State has adequate resources to implement and enforce the program for which it seeks delegation. Demonstrating adequate resources for running a successful 112(r) program means the State shows clearly that it has both the funding and a staff that is large enough and has the appropriate qualifications to implement the program being proposed. That program must include:

- Reviews of the RMPs;
- An audit and inspection strategy; and
- Technical assistance.

The first step a State may want to take is to estimate the number and type of facilities in the State that are subject to the rule. This information will help determine the qualifications needed for staff members and will provide a

framework for decisions about the level of effort the State intends for RMP review and audits, on-site inspections, and technical assistance.

Level of Effort. There are no hard-and-fast rules for what constitutes an adequate level of effort as this is likely to vary among States based on the number and type of facilities. Congress originally considered requiring that 1.4 percent of facilities be audited every year, but dropped that requirement when it passed the Clean Air Act amendments. Some States with existing accident prevention programs audit and inspect every facility once every three to five years, but that level of effort is not required under section 112(r) regulations. Each State must determine what constitutes an adequate level of effort to ensure compliance by its regulated community. Implementing agencies may want to develop a program that increases the level of effort over time; for example, the implementing agency may propose to start with a small number of annual audits, but over the first five to ten years of the program, increase the number until all RMPs are audited over a five-year RMP cycle.

RMP*Submit (see Appendix E) will review each RMP for basic adequacy — are all the required elements complete? — and will reject any RMP that is not complete. States will need to define additional reviews they will do. These may include checks of the RMP for internal inconsistencies and unusual entries. It will probably be possible to do many of these reviews using the RMP database; if a State or local implementing agency intends to use the database to do reviews, staff capable of using the systems should be included in the staffing plan.

States should develop an audit and inspection strategy that is tailored to the particular universe of facilities covered by the rule in the State. The State should define, using numbers or percentages, how many facilities they expect to audit and inspect each year and provide the basis for selection, using the criteria in § 68.220. In general, audits and inspections will take longer for chemical manufacturing and petroleum refining facilities than they will take for drinking water systems and retailers.

Implementing agencies also are required to provide technical assistance. The State or local agency will need to define what the technical assistance will consist of (e.g., workshops, training courses, hotlines, consultations) and who will deliver the services.

Adequate Staff Resources. The level of effort the State proposes will dictate the level of staffing required. The kind of staff expertise needed to implement and enforce the 112(r) program depends on the nature of the covered facilities within

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the State. For example, if a State has a substantial number of large chemical manufacturing sources with Program 3 processes, the 112(l) delegation request should show that the State has sufficient qualified staff to carry out the number of audits and inspections proposed for this industrial sector. If the majority of covered sources in the State are Program 2 propane retailers and public systems, with few Program 3 sources, the required staff expertise may be met through fire safety training and water treatment experts.

In documenting staff resources, the State must show that the staff it has are adequate, in terms of both numbers and qualifications, to fulfill the implementation strategy proposed. If the State will need to hire additional staff, particularly if the new staff have high levels of expertise, the State also may need to document that it can, in fact, hire such staff (i.e., that it has the authorization to hire additional staff at the appropriate level and that the salaries it can offer are sufficient to attract people with the needed level of expertise). If the State intends to use contractors to perform some of the functions, it must document that appropriate contractors are available and willing to provide the services at the rate the State is proposing to pay. Similarly, if the State plans to use local officials to carry out some functions, it must document that these officials have agreed to perform the tasks and have the necessary expertise.

In addition to the auditing and inspection staff, the State should identify administrative and enforcement staff needed, such as data management personnel and attorneys. If the State implementing agency is relying on the agency's general counsel or the State attorney general's office to provide program advice and enforcement support, the State must document the commitment of these offices to provide the level support the State is proposing to use.

Appendix C provides some cost estimates for implementing CAA section 112(r) programs. EPA plans to develop a spreadsheet that states will be able to use to estimate needed resources for varying levels of effort. Check the CEPPPO home page (<http://www.epa.gov/ceppo/>) for a copy that will be downloadable.

Adequate Funding Resources. The key to demonstrating adequate resources is ensuring that funding is sufficient to acquire the kind and number of experts needed to carry out the audit and inspection strategy. Title V permit fees are not available for implementing and enforcing the 112(r) program. Therefore, the State should have a mechanism such as a dedicated fee structure or appropriation from an identified revenue stream as the funding source for the 112(r) program.

THE SECTION 112(l) APPROVAL PROCESS

The State Governor or the Governor's designees generally should initiate the approval process. As Table 3-1 indicates, part 63 indicates what elements must be addressed and what documents must be submitted as part of a request for delegation authority under section 112(l). EPA staff are not as familiar as State personnel with State statutes and regulations, so the State's application should be clear and complete. Exhibits 1 and 2 provide sample letters from the governor and Attorney General. Section 112(l) documents provide guidance for a complete submittal.

Part 63 also sets out the time lines for EPA review and approval, and the process for public review and comment. If EPA disapproves a State program, we will notify the State of any revisions or modifications it can make to obtain the approval. The State then can revise its request and resubmit its rule or program according to part 63. Appendix B is a checklist that States can use to help ensure a complete and clear application.

SELECTING AN IMPLEMENTING AGENCY

A State that goes through the request and approval process and receives delegation under section 112(l) and part 63, subpart E, will be the "implementing agency" for section 112(r). This means that the State will have primary authority and responsibility to carry out all the elements of the section 112(r) rule for covered sources in the State — including on-site inspections, record keeping reviews, audits, enforcement, and all other delegable part 68 elements. A State has the flexibility to select any of its agencies to implement the risk management program, including the State environmental agency, the emergency management agency, or a State OSHA program. Of course, the selected agency must have the legal authority, resources, and expertise to implement the program; and the State must maintain enforcement responsibility.

A State may select multiple implementing agencies to handle separate parts of the program. States choosing this approach must be sure either that each agency has the legal authority to enforce the rule or that all enforcement actions can be carried out by one of the agencies or the State attorney general's office.

A single State or local agency could be the implementing agency. Three States — New Jersey, Delaware, and Nevada — are considering requesting section 112(l) delegation and taking this approach. The single implementing agency option

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promotes consistent implementation and enforcement of the risk management program.

An approach like the one described in Chapter 2, where many entities could be involved in implementing various elements of the program or in industry sectors, is also an option. However, a State should still appoint a lead or coordinating agency. (In many States, the SERC could serve as the lead or coordinating agency.) This agency should coordinate the program across all State agencies involved in implementing the section 112(r) rule to ensure consistency in interpretation and enforcement strategies. This agency also should oversee the application process by assembling the documentation and serving as the focal point for communication with EPA Headquarters or Regional offices.

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Table 3-1: Part 63, Subpart E Requirements

All States seeking section 112(l) delegation must submit under...	§ 63.91(b)	<ul style="list-style-type: none"> •Attorney General's or General Counsel's written finding that your State or agency has the necessary legal authority to implement and enforce your program; to assure compliance by all sources. At a minimum, must have the following legal authorities: 40 CFR § 70.11 authority; and authority to request information from regulated sources, to inspect the source and its records, and to enforce the program. •Documents. State statutes, regulations, and other documents that contain statements of authority to implement and enforce your program. •Demonstration that your State has adequate resources to implement and enforce the program. This includes a narrative describing your program's scope, coverage, structure, and processes; the organization and structure of the agencies that will administer your program; and of staff who will implement the program. •A plan for expeditious compliance. •Demonstration of adequate legal authority to assure compliance.
State wanting to adopt part 68 without changes, with adjustments, or to substitute its program for part 68 must meet § 63.91 and under...	§ 63.95(b)	<ul style="list-style-type: none"> •Demonstrate the State's authority and resources to implement and enforce regulations at least as stringent as the 112(r) regulations. •Describe procedures for reviewing any RMP and providing technical assistance to covered sources. •Demonstrate the State's authority to enforce all prevention program requirements, including an RMP auditing strategy. •Comply with §§ 63.92 or 63.93 (whichever is appropriate).
State wanting to adopt part 68 with adjustments must meet §§ 63.91 and 63.95, and under...	§ 63.92(b)	<ul style="list-style-type: none"> •Demonstrate that the public within the State has had adequate notice and opportunity to submit written comment on the State rule. •Demonstrate that the State's adjustments to part 68 result in requirements that are unequivocally no less stringent than the Federal rule regarding applicability, level of control for each affected source, compliance and enforcement measures, and compliance schedule. •Demonstrate that the adjustment either: adds a design, work practice, operational standard, or other such requirement; adds more information to record keeping and reporting requirements; adds an earlier date for compliance than does part 68; or makes any adjustment allowed in part 68.
State wanting to substitute its program for part 68 must meet §§ 63.91 and 63.95, and under...	§ 63.93(b)	<ul style="list-style-type: none"> •Supply detailed documentation that the State's authorities are no less stringent than the criteria in part 68 regarding applicability, level of control for each affected source, compliance and enforcement measures, and compliance schedule.

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Table 3-2: Part 70.11, Requirements for Enforcement Authority

State seeking to administer the 112(r) program must have the legal authority to...	•Restrain or enjoin a person immediately (by order or suit in court) from engaging in any activity that presents an imminent and substantial endangerment to the public health or welfare or the environment, in violation of a permit.
	•Seek injunctive relief in court to enjoin any violation of any program requirement without the necessity of a prior permit revocation.
	•Assess or sue in court to recover: –Civil penalties of at least \$10,000 per day per violation against any person for violation of any applicable requirement, permit condition, fee or filing requirement; and any duty to allow or carry out inspection, entry, or monitoring activities, or any regulation or orders issued by the permitting authority. –Criminal fines of at least \$10,000 per day per violation against any person who knowingly violates any applicable requirement, permit condition, or fee or filing requirement; makes a false material statement, representation, or certification in any notice or report required by a permit; or renders inaccurate any required monitoring device or method.

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Table 3-3: CAA section 112(r) and Part 68 Elements

112(r)(1) - General Duty Clause	Will not be delegated.
112(r)(9) Order authority	Not required as part of the program.
Part 68, Subparts A-E	All elements or equivalent must be included in State program. State rule elements must be at least as stringent. Applicability of rule and Program levels must be at least as stringent.
Part 68, Subpart F	State program must include all chemicals at thresholds no higher than EPA's. Threshold determinations must be at least as stringent as EPA's. Petition process is not required in State program.
Part 68, Subpart G	RMP will not be delegated. States may adopt separate reporting, but are not required to do so.
Part 68, Subpart H	68.200 (record keeping) and 68.220 (audits) must be part of a State program. 68.210 and 68.215 are not part of State section 112(r) programs (but States must comply with 68.215 for Title V sources).

Exhibit 1
GOVERNOR'S LETTER

A letter from the Governor transmits the State's application for approval of its chemical accident prevention program and acts as a formal request for EPA approval. The letter to EPA should include a reference to the Federal statute, a request for approval of the State program, and the Governor's signature. The letter is a formal tool to designate the responsible lead State agency.

Sample Letter

Ms. Jane Jones
Regional Administrator
Region XI, U.S. Environmental Protection Agency
Street Address
City, State, Zip Code

Dear Ms. Jones:

In accordance with section 112(l) and section 112(r) of the Clean Air Act as amended, I am forwarding an application for approval of the Chemical Accident Prevention Program of (State). I believe you will find it contains the provisions necessary to implement an effective Chemical Accident Prevention Program.

Should you require further information, please contact (Director) of (Lead Agency).
Thank you for your assistance.

Sincerely,

Jane Smith
Governor

Exhibit 2
ATTORNEY GENERAL'S CERTIFICATION AND STATEMENT

States applying for program approval must submit an Attorney General (AG)'s statement that certifies that the statutes and regulations of the State provide adequate authority to carry out the technical requirements in a "no less stringent" manner and for adequate enforcement of these requirements. All statutes and regulations cited by the AG must be fully effective by the time the program is approved. In addition, if the State has any authority over Indian lands, or agreements with a Tribe or Tribes to do so, this must be described. The AG's statement certifies to State authorities only. The requirement that the State have the authority to carry out the technical requirements and enforce those requirements does not change if certain aspects of the State program are implemented by local government agencies. The AG's statement must be signed by the State AG or the attorney for those State or interstate agencies that have independent legal counsel. This provision allows the following persons to sign the AG's statement: (1) the State or an attorney in his/her office who is authorized to sign for the AG; or, (2) a Deputy or Assistant AG if authorized to do so. Authorization should be in writing, case law, or statute. An independent counsel for the State may submit the "no less stringent" certification in place of the AG provided that the independent counsel has full authority to represent independently the State agency in court on all matters pertaining to the State program.

Where a State has incorporated by reference any Federal regulation, the AG should demonstrate the authority to adopt State regulations in this manner. The AG should cite the State statutes and regulations, listing the comparable CFR cite and date of incorporation. If the State's incorporation is intended to include any EPA revisions that may occur in the future, then the AG should cite State authority both to promulgate and to enforce regulations in this manner. The State should note that the AG's statement includes a certification that State statutes and regulations shall be fully effective by the time the program is approved. When a State adopts the Federal regulations by reference, the following standard phrase can be included in the AG's statement to demonstrate that the State has no less stringent requirements: "The State has adopted the Federal regulations by reference and therefore meets the no less stringent criterion for 40 CFR § 68." This statement is sufficient for demonstrating adequate stringency and will save States from writing lengthy and unnecessary justifications of how the Federal regulations (adopted by reference) meet the Federal objectives.

Sample Attorney General's Certification. Following is a suggested format for the State Attorney General's certification. The certification consists of two parts: (1) the Attorney General's letter of certification and (2) the Attorney General's statement. A form letter that certifies to the State's complete authorities is provided below.

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Exhibit 2 (continued)

Sample Letter

Ms. Jane Jones
Regional Administrator
Region XI, U.S. Environmental Protection Agency
Street Address
City, State, Zip Code

Dear Ms. Jones:

I hereby certify pursuant to my authority as [insert official title] and in accordance with sections 112(l) and 112(r) of the Clean Air Act, as amended, and 40 CFR Part 68 that in my opinion the laws of the (State) provide adequate authority to (1) carry out the "no less stringent" technical requirements submitted by the (Lead Agency), (2) adequately enforce compliance with such program, and (3) regulate, at a minimum, the same chemical accident prevention universe as the Federal program. I hereby certify, to the best of my knowledge, that the application submitted by (Lead Agency) is legally accurate. The specific authorities provided are contained in statutes or regulations lawfully adopted at the time this statement is signed and which will be effective by the time the program is approved, [or are provided by judicial decisions issued at the time this statement is signed].

Seal of Office

Signature

APPENDIX A

ESTIMATES OF SOURCES BY STATE

Table A-1 presents the universe estimates by State and Region, combining some sectors: SIC codes 28, 2911, and 2611, the sectors most likely to be OSHA PSM; all other manufacturers; all cold storage facilities (food processors, food wholesalers, and refrigerated public warehouses); propane retailers and users; and electric utilities. **All of these numbers are estimates. Actual numbers may vary considerably.**

For manufacturers:

- The "other manufacturer" estimates are based on TRI data for regulated substances, adjusted for non-compliance; compliance levels are generally assumed to be 70 percent.
- Estimates for SIC codes 26 (pulp and paper) and 28 (chemicals) are based on the 1992 Census of Manufacturers, the most recent Census numbers; in most cases, all facilities or all facilities with more than nine employees are assumed to be covered.
- SIC code 2911 (petroleum refining) is based on DOE/Energy Information Agency information; all refineries are assumed to be covered.

For cold storage systems:

- Specific food processors (e.g., meat, dairy, vegetables, beverages) are assumed to have ammonia refrigeration systems; all facilities in these sectors with more than 100 employees, based on 1992 Census of Manufacturers data, are assumed to be covered.
- Approximately ten percent of food distributors are assumed to have large refrigeration systems; 1992 Census data were used.
- An estimated 85 percent of food warehouses are assumed to be covered for refrigeration; estimates are based on USDA State figures.

Estimates for propane retailers and handlers were developed from industry information and Texas and New Jersey data; the estimates are distributed among States based on propane consumption per State.

Agricultural retailer (ammonia) total estimates are based on industry information and distributed among States where ammonia use as a fertilizer is expected.

Drinking water site estimates are based on the EPA Office of Water methodology for estimating the number of sites for systems of certain sizes and EPA data on the number of systems. POTW numbers are based on EPA data. These national numbers were distributed among the States based on population.

Electric utilities numbers are taken from the *Directory of Electric Utilities*, assuming that any system that produces more than 10 megawatts of power is subject to the rule.

Federal facilities are not included in the list; States should probably assume that any large military installation and large DOE facility will be covered.

Table A1: Universe by State and Sector

State	28/29/ 2611	Other Mfr	Cold Storage	Ag Retail	Propane	Util	Public	Wholesale	Total
CT	30	170	60	0	190	22	91	24	590
MA	40	320	150	0	290	36	168	37	1040
ME	1	40	50	0	210	14	34	3	350
NH	4	50	20	0	310	6	32	8	430
RI	10	6	20	0	60	61	27	7	140
VT	0	20	20	0	220	12	16	3	290
NJ	185	210	12	0	530	27	40	97	1100
NY	110	330	570	0	850	53	503	124	2540
PR	51	30	-	-	-	-	-	-	80
VI	1	0	-	-	-	1	-	-	2
DE	10	20	20	0	50	12	20	4	140
MD	30	70	90	0	315	18	140	16	680
PA	205	370	320	0	740	55	335	60	2085
VA	66	140	120	0	570	16	183	23	1120
WV	21	30	20	0	100	13	51	9	240
AL	96	125	90	0	640	14	120	17	1100
FL	163	130	320	0	1040	56	390	80	2180
GA	146	180	170	0	980	20	200	47	1740
KY	63	90	60	0	680	26	107	17	1040
MS	27	80	60	0	515	16	75	10	780
NC	123	260	140	0	1480	21	199	42	2270
SC	61	150	60	0	510	22	100	22	930
TN	51	150	110	0	460	9	146	29	960

State	28/29/ 2611	Other Mfr	Cold Storage	Ag Retail	Propane	Util	Public	Wholesale	Total
IL	206	390	290	1030	975	65	330	80	3360
IN	102	240	110	630	910	38	161	31	2220
MI	103	350	190	0	1470	74	265	48	2500
MN	32	170	140	670	1310	80	128	21	2550
OH	214	470	220	280	1520	52	310	62	3130
WI	47	150	300	0	1170	55	142	26	1890
AR	43	100	85	0	430	19	69	11	760
LA	108	60	90	0	230	35	120	39	680
NM	12	20	20	0	220	13	47	9	340
OK	45	60	60	150	440	27	91	27	900
TX	302	350	360	670	1860	112	520	155	4330
IA	40	130	140	950	1230	103	79	16	2690
KS	33	60	60	300	560	89	71	15	1190
MO	110	160	140	350	1490	80	148	33	2510
NE	10	40	90	530	400	63	45	9	1190
CO	22	80	80	200	450	34	104	21	990
MT	5	10	20	0	120	5	24	4	190
ND	3	4	20	160	175	17	18	6	400
SD	0	10	30	200	310	23	20	3	600
UT	25	50	50	0	100	17	54	12	310
WY	14	3	5	0	170	7	13	9	220
AZ	15	110	60	0	260	18	117	16	600
CA	367	960	770	0	1100	66	876	141	4280
NV	8	5	20	0	100	17	42	4	200
HI	12	10	40	0	90	13	33	4	200

State	28/29/ 2611	Other Mir	Cold Storage	Ag Retail	Propane	Util	Public	Wholesale	Total
AK	10	1	8	0	30	50	17	2	120
ID	10	30	50	0	100	2	32	5	230
OR	22	110	90	0	210	6	87	13	540
WA	81	100	180	200	390	14	151	18	1130

APPENDIX B
CHECKLIST FOR STATE PROGRAM SUBMITTAL

1. Does the State have statutory authority to adopt:
 - a. EPA's list of substances and thresholds?
 - b. Accident prevention regulations that are at least as stringent as EPA's?
 - c. State regulations to incorporate any changes or additions to EPA's accident prevention regulations?
 - d. Provisions to impose on facilities in violation of the regulations civil and criminal penalties equal to those specified in 40 CFR 70.11?
2. To which State agency will the program be delegated?
 - a. Is the statutory authority of the agency sufficient for it to implement the risk management program?
 - b. How will that agency/office coordinate with the State air permit program?
 - c. How will the agency/office coordinate with the SBAP?
3. If all or part of the program will be delegated to local agencies:
 - a. Which local agencies will be responsible for implementation?
 - b. Are the legal authorities available to the local agencies sufficient to carry out their role?
4. What strategy will the State use to develop its auditing program?
 - a. What criteria will the State use to select facilities for audits?
 - b. How many (number or percentage) facilities will the State audit annually?
 - c. If local authorities will conduct some or all audits, what strategy must they use to audit?
 - d. What mechanism does the State have to ensure that local authorities conduct the required number or percentage of audits annually?

5. Based on the number of facilities potentially covered and the auditing and inspections which are anticipated:
 - a. Specify the number and type of staff the program will need for inspection, data management, enforcement, and program management.
 - b. Specify the number of staff having the required expertise for all categories that are currently available to work on this program.
 - c. Specify plans for hiring or training staff to make up for any shortfall.
6. Based on the staffing requirements:
 - a. Estimate the annual budget requirements for the office implementing the program.
 - b. Specify how continued funding to meet the budget requirements will be accomplished.
 - c. If the program will be funded by State-specific fees, what legislation was adopted to collect the fees?
 - d. If the program will be funded by grants or general revenues, provide information on why these sources of funding will continue to be available at an adequate level.
7. If all or part of the program will be delegated to local authorities:
 - a. Specify the staff and financial resources that will be needed at the local level.
 - b. Specify the degree to which qualified staff are already available to local authorities.
 - c. If local authorities will need to hire staff, specify their plans for doing so.
 - d. Specify the State's mechanism for overseeing the local program to ensure that adequate staffing and resources are available.
 - e. If the State will not fund local programs, specify how such programs will be funded, including the legal authorities local agencies may use to impose fees or raise taxes to cover the costs.

8. Provide an implementation schedule that includes:
 - a. Milestones for completing regulations (if needed), staffing, data management systems, and training.
 - b. Schedule for any elements to be phased in and date of complete implementation.

APPENDIX C

COST OF AN IMPLEMENTATION PROGRAM

The cost of implementation will vary considerably depending on the number and type of facilities and the level of effort the implementing agency and cooperating agencies undertake. The information in this appendix is intended to provide estimates for types of activities to allow agencies to begin to estimate resource needs. The cost estimates presented for staff include wages, benefits, and a minimal overhead charge (17 percent). Because at least some of the staff may be dedicated to this program, the real cost of their time will be higher because the full cost of overhead would be incurred.

IMPLEMENTATION ACTIVITY COSTS

Technical assistance. In developing its economic analysis for the final rule, EPA assumed that technical assistance involved primarily answering questions from facilities and other agencies. Non-manufacturing sources were assumed to require 0.5 hours per facility; manufacturers and State and local agencies were assumed to require one hour per facility or agency. These numbers were considered averages if all facilities and agencies sought assistance; some facilities and agencies will take more time and may make multiple calls; others will never seek assistance. Some of these calls will be handled by EPA's hotline staff and, consequently, will not impose a cost on the implementing agency.

Training. Training courses for inspectors were assumed to take 10 days; courses on model RMPs probably will be considerably less extensive. Some model RMP training may be provided on videotape, which could substantially reduce the cost. The 10-day training course is based on OSHA's current inspector course for PSM; because the section 112(r) rule includes other requirements and different prevention programs, the section 112(r) course might need to be longer. The 10-day course, however, covers compliance issues that may not be needed for all agencies taking part in implementation. The degree to which a long inspector course is necessary also will depend on the expertise of the staff who will be serving as inspectors. If the staff are experienced in industrial processes, the course could be considerably shorter.

Developing and presenting a 10-day training course was estimated to cost approximately \$28,000; this cost covers course development and presentation, materials, and administrative costs (registration, facility rental, equipment).

If EPA provides this inspector course, the only cost to the trainees' agencies will be for the trainees' travel, room and board, and salaries. EPA's analysis assumed these costs would average \$4,200 per trainee. If training is obtained from private sources, the course fees also will have to be considered. Generally, private groups providing training charge \$300 to \$500 per day of training.

Workshops for facilities were assumed to last 4.5 days (similar to the Chemical Safety Audit training). The cost of developing and presenting a workshop such as this was estimated to be \$20,000. Using an EPA course (with appropriate modifications for the specific States) could significantly reduce this cost.

Other types of training may be needed, but in general these training courses probably will be shorter. For example, workshops on the RMP data may be presented to LEPCs and the public. Attorneys working on the program may require training on the rule and compliance issues. (The "rule of thumb" for training courses is that they require four hours of development time for each hour of training.)

RMP Review. Because RMPs will be submitted electronically, RMP reviews for completeness will be conducted automatically by EPA's submission system. These reviews may not need to be repeated by the implementation program. The reviews, which simply check to see that all RMP data have been submitted, may not require more than 0.25 to 0.5 hours per facility for simple facilities if done by an individual; facilities with multiple processes could take longer.

Audits. Audits are paper reviews of the adequacy of the RMP; audits may or may not be associated with on-site inspections discussed below. Some of the auditing function may be done by computer (e.g., checks for internal consistency of the numbers). EPA's analysis estimated the time for reviews to vary from 1 hour for most non-manufacturers to 12 hours for large complex chemical manufacturers. Additional time will be needed when problems are identified and RMPs need to be revised. In that case, the facility will have to be notified and problems discussed. If this process is being handled by the implementing agency, these discussions will have to be documented and responses may need to be in writing. Enforcement attorneys may be involved in this process; their time is not included in the estimate.

Inspections. The time required for on-site inspections will vary both by type of facility and the scope of the inspection. The average time for inspection of a simple facility may be no more than eight hours, including preparation time and report writing. For large chemical companies or refineries, a minimum of 80 hours may be required. In some cases, when the entire complex facility is inspected, inspections have taken teams of inspectors as much as four to six weeks (there are relatively few facilities of this size nationally).

Other Support. The implementing agency probably will require at least one to three senior staff to act as managers of the program, at least some portion of a staff attorney's time, and some administrative support to implement the program, develop budgets, oversee compliance and enforcement actions, report to senior management and legislative bodies, and track documentation. If enforcement actions will be handled by the attorney general's office, some support from that office will be needed. Computer support may also be required if the implementing agency creates a separate system to cover its RMPs and activities.

Agencies working with the implementing agency will have lesser support requirements, but will probably still need to document their activities to provide information to the implementing agency.

TOTAL COSTS

Total cost for an implementation program will depend on the types of facilities covered and the level of effort. A program that covers primarily simple facilities (retailers, public facilities, utilities) will have lower costs because training, technical assistance, audits, and inspections will take less time. A program with a high concentration of chemical manufacturers and petroleum refineries will have much higher costs because of the time required for training inspectors, audits, and inspections for complex facilities with multiple processes.

EPA has not specified a level of effort in regard to audits and inspections. Congress considered, but did not adopt, a level of 1.4 percent of facilities audited in a single year. This percentage would mean almost 1,000 audits per year nationally. Because inspections require much more time, the level of inspections is likely to be lower.

States with existing accident prevention programs have generally run more intensive programs. New Jersey and Delaware inspect each facility at least once every three to five years. The Delaware program spends an average of \$1,800 per facility per year. Assuming a less intensive program (fewer audits and inspections), EPA's economic analysis estimated a per facility cost at between \$85 and \$275 per year.

APPENDIX D
PART 68 PROGRAM LEVELS AND REQUIREMENTS

Table D- 1 Program Eligibility Criteria		
Program 1	Program 2	Program 3
No offsite accident history.		Process is subject to OSHA PSM.
No public receptors in worst-case circle.	The process is not eligible for Program 1 or subject to Program 3.	Process is in SIC code: 2611 - Pulp Mills 2812 - Chlor-Alkali Manufacturers 2819 - Industrial Inorganics 2821- Plastics and Resins 2865 - Cyclic Crudes and Intermediates 2869 - Industrial Organics 2873 - Nitrogen Fertilizer Manufacturers 2879 - Agricultural Chemicals 2911 - Petroleum Refineries
Emergency response coordinated with local responders.		

Note: EPA will revise part 68 to reflect the shift to the new North American Industrial Classification System (NAICS) codes. Check the hotline or the CEPPO home page for up-to-date information on the changes (<http://www.epa.gov/ceppo/>).

Table D-2 Comparison of Program Requirements		
Program 1	Program 2	Program 3
Hazard Assessment		
Worst-case analysis	Worst-case analysis	Worst-case analysis
	Alternative releases	Alternative releases
5-year accident history	5-year accident history	5-year accident history
	Document management system	Document management system
Prevention Program		
Certify no additional steps needed	Safety Information	Process Safety Information
	Hazard Review	Process Hazard Analysis
	Operating Procedures	Operating Procedures
	Training	Training
	Maintenance	Mechanical Integrity
	Incident Investigation	Incident Investigation
	Compliance Audit	Compliance Audit
		Management of Change
		Pre-Startup Review
		Contractors
		Employee Participation
		Hot Work Permits
Emergency Response Program		
Coordinate with local responders	Develop plan and program	Develop plan and program
Executive Summary	Executive Summary	Executive Summary

Table D-2
Comparison of Program Requirements

Program 1	Program 2	Program 3
Risk Management Program		
Registration	Registration	Registration
Worst-case data	Worst-case data	Worst-case data
	Alternative release data	Alternative release data
5-year accident history	5-year accident history	5-year accident history
	Prevention program data	Prevention program data
Emergency response program data	Emergency response program data	Emergency response program data
Certification	Certification	Certification

APPENDIX E

RMP*SUBMIT AND RMP*INFO

EPA is developing databases to collect RMPs and make them available to States, local agencies, and the public. RMP*Submit will be a software tool that sources can use to complete their RMPs and file them with EPA. RMP*Info will be a database of all RMPs; RMP*Info will be available through the Internet.

RMP*SUBMIT

RMP*Submit will provide RMP facilities with an automated tool for submitting RMPs. RMP*Submit will do the following:

- Provide a user-friendly, PC-based RMP Submission System available on diskettes and via the Internet;
- Require electronic submission on diskette; however, an "electronic waiver" is available for facilities that are unable to comply;
- Use a standards-based, open systems architecture so private companies can create compatible software;
- Perform data quality checks, accept limited graphics, and provide on-line help including defining data elements and instructions; and
- Accommodate, as appropriate, additional State chemicals (i.e., those listed under State, but not Federal EPA risk management program regulations) and lower thresholds.

The software will run on Windows 3.1 and above. There will not be a DOS or MAC version.

RMP*INFO

The RMP access system, named RMP*Info, will provide the public easy access to RMPs. RMP*Info will do the following:

- Establish a central system (RMP*Info) to provide access to RMPs for all stakeholders; however, a decision has not yet been made on whether the offsite consequence analysis data will be available on the Internet;
- Make RMP*Info available through EPA's EnviroFacts, a relational database that provides access to seven EPA program databases;

- Make RMP*Info available to the public on January 4, 1999, noting that it will not be complete until sometime after June 21, 1999;
- Allow RMP*Info to contain historical records for 15 years;
- Ensure that RMP*Info provides search, report, and help features;
- Automatically notify State and local implementing agencies when an RMP in their jurisdiction has been updated; and
- Develop a technical assistance help line that will distribute RMP*Info data on diskettes and paper for those who do not have Internet access.

STATE DATABASES

EPA also plans to make the full RMP database, in database format, available to States and local agencies. States and local agencies will obtain a password from EPA and then will be able to download the RMP database from the Internet. In this way, States will be able to gain access to the RMP database as frequently as they want to obtain up-to-date information and will be able to analyze the data in any way they need.

TIMELINE

1. *April 5-9, 1998* — The first demonstration of the RMP*Submit and RMP*Info prototype at the 1998 Hazardous Material Spills Conference (<http://www.nrt.org/nrt/hazmat98.nsf>).
2. *August 1998* — The final method and format for RMP submissions will be published in the *Federal Register*.
3. *January 4, 1999* — RMP*Submit diskettes and paper forms will be available to the regulated community.
4. *June 20, 1999* — Deadline for compliance with the Risk Management Program.
5. *After June 21, 1999* — RMP*Info will be available. All RMP data will be available on the Internet.