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

FEB 11 2011

MEMORANDUM

SUBJECT: Involvement of Employees and Employee Representatives in Clean Air Act (CAA) Section 112(r) On-site Compliance Inspections – Final Guidance

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CAA Section 112(r) Implementation Officials in Delaware, Florida, Georgia, Kentucky, Mississippi, New Jersey, North Carolina, Ohio, South Carolina, Allegheny County, Pennsylvania, Jefferson County, Kentucky, and Forsyth, Mecklenburg & Buncombe Counties, North Carolina

The purpose of this memorandum is to issue and make immediately effective, the attached document, "Guidance for Conducting Risk Management Program Inspections under Clean Air Act Section 112(r)." This document updates and supersedes the "Guidance for Auditing Risk Management Plans/Programs under Clean Air Act Section 112(r)" of August 1999. The document includes updated EPA policy on involvement of facility employees and employee representatives in EPA and delegated agency on-site compliance inspections as provided for in Clean Air Act (CAA) section 112(r)(6)(L).

While EPA staff may already engage employees and employee representatives during CAA section 112(r) inspections, the updated guidance provides formal EPA policy in this area. Additionally, the guidance reflects the Agency's focus on inspections as a means of facility oversight, and provides additional information on CAA section 112(r) inspection procedures.

The guidance preserves Risk Management Program audits as a facility oversight option. However, audits should supplement implementing agency inspection programs and not be done in lieu of inspections.

EPA requests that state and local agencies that have accepted delegation of the CAA section 112(r) program adopt procedures similar to those contained in this guidance in their 40 CFR Part 68 inspection programs. The interim policy on involvement of employees and employee representatives in CAA Section 112(r) on-site compliance evaluations established in our memo of April 2, 2010, is hereby superseded.

If you have any questions, please contact us or have your staff contact Jim Belke, in the Office of Emergency Management, at (202) 564-8023, or Rob Lischinsky, in the Office of Compliance, at (202) 564-2628.

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EPA 550-K-11-001
January 2011

www.epa.gov/emergencies
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Guidance for Conducting Risk Management Program Inspections under Clean Air Act Section 112(r)

Acronyms Used in This Guidance

AIChE	American Institute of Chemical Engineers
ANSI	American National Standards Institute
API	American Petroleum Institute
ASME	American Society of Mechanical Engineers
CAA	Clean Air Act
CBI	Confidential Business Information
CCPS	Center for Chemical Process Safety
CFR	Code of Federal Regulations
D&B	Dun and Bradstreet
EPA	Environmental Protection Agency
EPCRA	Emergency Planning and Community Right-to-Know Act
ERNS	Emergency Response Notification System
HAZWOPER	Hazardous Waste Operations and Emergency Response
LEPC	Local Emergency Planning Committee
NCP	National Contingency Plan
NFPA	National Fire Protection Association
NRS	National Response System
OSHA	Occupational Safety and Health Administration
PHA	Process Hazard Analysis
PPE	Personal Protective Equipment
PSM	Process Safety Management
RMP	Risk Management Plan
SARA	Superfund Amendments and Reauthorization Act
SERC	State Emergency Response Commission

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INTRODUCTION

Purpose

This document provides guidance for implementing agencies that conduct inspections of facilities (i.e., stationary sources) subject to 40 CFR Part 68, also called the EPA Risk Management Program. It is designed as a tool for inspectors reviewing industry compliance with the Risk Management Program regulation. However, this guidance does not reflect all requirements that a facility must meet to be in compliance with the regulation.

Background

The Environmental Protection Agency (EPA) works closely with stakeholders to reduce the likelihood and severity of chemical accidents.

Several important planning and legislative initiatives have been introduced since 1968. These include the National Contingency Plan (NCP) (started in 1968), EPA's voluntary Chemical Emergency Preparedness Program started after the December 1984 accident in Bhopal (India), the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA), and the Accidental Release Prevention requirements under Section 112(r) of the Clean Air Act (CAA), as amended in 1990. These initiatives address the entire safety continuum dealing with chemical accident preparedness, response, and prevention.

In this document "RMP" denotes Risk Management Plan, which summarizes the source's risk management program and is submitted to EPA

Interrelated Opportunities for Chemical Accident Prevention

From a government point of view, chemical accident prevention involves: (1) working with facilities (both management personnel and employees) to improve their chemical safety management program, and (2) encouraging communities to coordinate risk reduction activities with facilities even as they enhance emergency preparedness for response to possible accidents. Improving the safe use and management of chemicals begins with an understanding of:

Accident prevention opportunities include:

- Chemical safety audits
- Accident investigations
- General Duty Clause inspections
- RMP inspections

- How and why accidents occur;
- How industry identifies chemical and process hazards;
- How industry designs, maintains, and operates a safe facility; and
- How the consequences of accidents are minimized.

Industry has the expertise and responsibility, with assistance from their employees, to make sure that the elements of safe operation (e.g., procedures, training, and maintenance) are brought together and managed day-to-day. Government agencies can help facilities by inspecting their safety management programs, comparing them to successful practices used by other facilities, and stimulating improvements.

The Risk Management Program regulations are among several tools implementing agencies have to help facilities prevent chemical accidents. Existing and new programmatic tools are briefly described below. Each of these programs is designed to help identify the causes of accidental chemical releases as well as the means to prevent them from occurring. Additionally, these activities can be used to promote coordination within the local community.

Chemical Safety Audits

Chemical Safety Audits are designed to:

- Share information about chemical safety practices and technologies when visiting facilities that handle hazardous substances;
- Heighten awareness of the need for and promote chemical safety at chemical facilities and in the communities where chemicals are located; and
- Build cooperation among facilities, government agencies, and others.

Chemical safety audits are usually voluntary and may include facilities not covered by the Risk Management Program provisions. One purpose of conducting a chemical safety audit at a facility is to identify and characterize the strengths and weaknesses of specific chemical accident prevention program areas, as a means to highlight the elements which form an effective program. Additionally, chemical safety audits facilitate the sharing of information about successful practices and generally result in (non-mandatory) recommendations for safety improvements. This can lead to process safety improvements, which may prevent or mitigate releases by the audited facility.

Accident Investigations

The fundamental objective of a chemical accident investigation is to determine the facts, conditions, circumstances, and causes or probable causes of chemical accidents. In determining the root causes or management system failures resulting in an accident, the ultimate goal of the accident investigation is to reduce the likelihood of recurrence, minimize the consequences associated with accidental releases, and make chemical production, processing, handling, and storage safer. The accident investigation also looks at contributing factors of the event that may have broad applicability to industry, and the potential to develop recommendations and lessons learned to prevent similar accidents in the future. In addition to determining causes, lessons learned, and recommendations, EPA accident investigations may be combined with inspections in order to identify specific violations of regulatory or statutory requirements, leading to enforcement actions.

The Chemical Safety Board began operating in 1998 after it was funded by Congress. EPA and the Chemical Safety Board have developed a Memorandum of Understanding which addresses their respective authorities and coordination on accident investigation. To view this MOU, see http://www.epa.gov/oem/docs/chem/csbepa.pdf.

For further information concerning the Chemical Safety Board, visit the web site at www.chemsafety.gov or www.csb.gov.

CAA Section 112(r)(6) established an independent safety board known as the Chemical Safety and Hazard Investigation Board ("the Chemical Safety Board"). One of the objectives of the Chemical Safety Board, as directed by the CAA, is to investigate, determine and report to the public, the facts, conditions, circumstances, and cause or probable cause of any accidental release resulting in fatality, serious injury or substantial property damage.

The Chemical Safety Board does not issue fines or citations, but does make recommendations to facilities, regulatory agencies such as OSHA and EPA, industry organizations, and labor groups. Congress designed the CSB to be non-regulatory and independent of other agencies so that its investigations might, where appropriate, review the effectiveness of regulations and regulatory enforcement. In the event of a large chemical accident, EPA inspectors will likely interact with CBS investigators. The two agencies have developed a Memorandum of Understanding to address their respective authorities and coordination on such investigations (see inset at right).

The General Duty Clause

CAA Section 112(r)(1), known as the "General Duty Clause," further expands the range of activities EPA can undertake to promote chemical safety.

Owners and operators of facilities producing, processing, handling, or storing extremely hazardous substances have a general duty to:

- Identify hazards associated with a potential accidental release, using appropriate hazard assessment techniques;
- Design and maintain a safe facility, taking steps to prevent releases; and
- Minimize the consequences of accidental releases that do occur.

The General Duty Clause is not limited to a finite list of chemicals or established thresholds.

To the extent state or local law establishes a similar general duty, implementing agencies other than EPA can take actions to promote safe operating practices and the prevention of chemical accidents.

RMP Inspections and Audits

RMP inspections and audits help ensure compliance with the Risk Management Program, but the two terms carry different meanings within the context of 40 CFR Part 68. Within Part 68, the term "audit" refers to the process that implementing agencies may use to verify the quality of the RMP submitted to EPA and require revisions when necessary to ensure compliance with the requirements of subpart G of the rule. Like inspections, RMP audits will generally involve on-site verification of a facility's underlying risk management program. However, section 68.220 of the rule requires implementing agencies to select facilities for audits based on specific criteria, and to follow a specific process for resolving audit findings (involving steps known as preliminary determinations and final determinations) prior to any enforcement action.

RMP inspections are different from audits in that facilities are not necessarily selected for inspection based on Part 68 regulatory criteria, and inspections can lead directly to implementing agency enforcement actions for regulatory violations. Also, RMP inspections always involve on-site verification activities. In general, the on-site activities performed by implementing agency inspectors and auditors are the same, and this guidance can be applied to either activity. However, most implementing agency oversight and enforcement of CAA Section 112(r) and 40 CFR Part 68 involves inspections, rather than audits. Annex A contains additional information related to the specific requirements for implementing agencies when conducting audits in accordance with the process described in section 68.220 of the rule.

The above-mentioned activities are not mutually exclusive. Many times, a combination of activities may be used to achieve results. For example, an agency might investigate a chemical accident at a facility. While the investigation may determine a root cause, a chemical safety audit may confirm that procedures are being used to reduce the risk of future accidents. Additionally, the agency may also perform an inspection to evaluate compliance with the General Duty Clause and/or RMP requirements.

Risk Management Program Requirements

CAA Section 112(r) requires EPA to publish rules and guidance for chemical accident prevention. The rules promulgating the list of regulated substances (published January 31, 1994) and the Risk Management Program provisions (published June 20, 1996) are found at 40 CFR Part 68. The Risk Management Program contains three elements: a hazard assessment, a prevention program, and an emergency response program. The entire program is to be described and documented in a Risk Management Plan (RMP) which is submitted to EPA (delegated state and local implementing agencies receive RMP data from EPA).

In general, the RMP submitted by most facilities includes the following:

- Executive summary;
- Registration information;
- Off-site consequence analysis;
- Five-year accident history;
- Prevention program; and
- Emergency response program.

Who is covered?

EPA estimates that approximately 13,000 facilities are covered by the provisions of 40 CFR Part 68, including:

- Chemical manufacturers (industrial organics and inorganics, paints, pharmaceuticals, adhesives, sealants, fibers),
- Petrochemical (refining and gas processing operations, plastics and resins, synthetic rubber),
- Other manufacturing (electronics, semiconductors, paper, fabricated metals, industrial machinery, furniture, textiles),
- Agriculture (fertilizers),
- Public facilities (drinking and waste water treatment works),
- Electric utilities,
- Food and cold storage,
- Chemical warehousing,
- Chemical wholesalers,
- Military and energy installations, and
- Other facilities.

Owners or operators of a facility with more than a threshold quantity of a regulated substance (one of the 140 listed toxic and flammable substances in 40 CFR Section 68.130) in a process, as determined under section 68.115, must submit an RMP no later than the latest of the following dates:

- Three years after the date on which a substance is first listed under 40 CFR 68.130; or
- The date on which a regulated substance is first present in a process above a threshold quantity.

The Risk Management Program regulations also define the activities that facilities must undertake to identify and minimize the risks posed by regulated substances in covered processes. Specifically, EPA defined three "program levels" to ensure that individual chemical processes are subject to appropriate requirements based on the size of the process and the associated risks (see table on next page).

Table 1: RMP Program Levels and Requirements			
PROGRAM LEVEL	Program 1	Program 2	Program 3
DESCRIPTION	Requirements apply to processes where (1) a Worst case release, as determined by the hazard assessment, is not expected to reach public receptors; (2) no accidental release has occurred in the last five years that caused specified offsite impacts; and (3) the facility has coordinated emergency response procedures with the local planning and response organizations. The most likely processes for this program level are those at remotely located facilities and/or those using listed flammable chemicals.	Requirements apply to processes that do not meet the eligibility requirements of Program 1 or 3.	Requirements apply to processes not eligible for Program 1, and which are in certain specified industrial categories or are already subject to the OSHA Process Safety Management (PSM) standard. These generally include higher-risk, complex chemical processing and petroleum refining operations.
REQUIREMENTS	• Conduct an offsite consequence analysis that evaluates worst-case accidental release scenario(s); • Document the five-year history of certain accidental releases of regulated substances from covered processes; • Coordinate response plans with local emergency planning and response agencies; and • Revise, update, and submit the RMP at least every five years.	• Conduct an offsite consequence analysis that evaluates worst-case accidental release scenario(s); • Document the five-year history of certain accidental releases of regulated substances from covered processes; • Coordinate response plans with local emergency planning and response agencies; and • Revise, update, and submit the RMP at least every five years. Evaluate alternative accident release scenarios and establish: • An integrated prevention program for managing risk; • Provisions for responding to emergencies; and • An overall management system supervising the implementation of these program elements.	• Conduct an offsite consequence analysis that evaluates worst-case accidental release scenario(s); • Document the five-year history of certain accidental releases of regulated substances from covered processes; • Coordinate response plans with local emergency planning and response agencies; and • Revise, update, and submit the RMP at least every five years. Evaluate alternative accident release scenarios and establish: • An integrated prevention program for managing risk; • Provisions for responding to emergencies; and • An overall management system supervising the implementation of these program elements.

Developing an RMP Inspection Program

Objective

RMP Inspections focus on verifying compliance with the Risk Management Program and Plan.

The RMP regulation states that implementing agencies shall conduct inspections for the purposes of regulatory development and enforcement of the CAA. RMP inspections focus on the underlying Risk Management Program, as well as the data contained in the Risk Management Plan. An RMP is a blueprint of how Risk Management Program provisions are incorporated into process safety at the facility, just as an emergency response plan is a blueprint of an emergency response program for a community or a facility. Risk Mangement Plans do not directly protect the public; Risk Managment Programs are the comprehensive approach to protecting the public.

Approaches to an RMP Inspection

Full compliance with the Risk Management Program regulations cannot be determined without on-site or independent verification of all or part of the information submitted in an RMP. However, each implementing agency should determine the scope of the inspection process to be used. This determination is based on available resources, priorities, expertise, and other factors. Inspecting to ensure compliance with the Risk Management Program regulation may consist of a range of off-site and on-site activities. Off-site activities might include determining that the rule applies to the facility, that the facility placed itself in the correct program level, and that the facility submitted a complete and correct RMP. On-site activities might include verification of documentation; interviews with facility managers, employees, and employee representatives; and observations of ongoing process operations or maintenance activities.

To ease the inspection burden, the implementing agency should also determine how the scope and conduct of on-site inspection activities can be coordinated with other regulatory inspections. For example, the implementing agency might coordinate with either the federal or state OSHA office within its jurisdiction. If chemical facilities are subject to the OSHA Process Safety Management (PSM) Standard, OSHA has its own authority over the facilities' prevention program. Also, other state agencies, such as state fire marshal offices, state departments of agriculture, or state environmental offices may regulate certain activities at RMP facilities. Coordinating inspection activities and sharing appropriate information with such agencies may save inspection resources and decrease the burden on the facility.

How to Use Reviews/Audits/Inspections

The Risk Management Program regulations mention the use of completeness checks, reviews, audits, and inspections. These terms are defined below.

RMP Completeness Checks. The implementing agency may conduct an in-office "completeness check" of the RMP. RMP*eSubmit (a submission system developed by EPA) will check each RMP before it is submitted to ensure that all the required data elements have been completed. The software program will indicate which fields are missing any required information. In addition, the EPA reporting center will use a similar technique to review every RMP submitted to see if all necessary fields have been completed.

RMP Reviews. Implementing agencies may want to review the data in an RMP to identify discrepancies. For example, the Executive Summary and registration data can be compared to chemical inventory data submitted to the state under EPCRA section 312 (always remembering that EPCRA section 312 and CAA section 112(r) may have differences in thresholds). Agencies may also want to review RMPs to identify internal data inconsistencies (e.g., dates listed for activities should be verified as internally consistent), facilities with potential problems based on their accident histories, and unusual data (e.g., failure to list appropriate hazards under the prevention program). For example, if an RMP reports that there has recently been a major change in a process that triggered a review or revision of certain requirements (see 68.170(k)), but the RMP indicates that these requirements have not been reviewed or revised since the date of the change, further inquiry is warranted.

RMP Audits. In an audit, the implementing agency evaluates the adequacy of the RMP submitted to EPA and requires revisions to RMPs when necessary to ensure compliance with the Risk Management Plan requirements of Part 68. As previously discussed, implementing agencies must select facilities for audits and resolve audit findings using criteria and procedures specified in 40 CFR 68.220. See Annex A for additional information on RMP Audits.

Inspections. Inspections complement other compliance monitoring activities and are valuable for evaluating compliance with the CAA Section 112(r) requirements. Many implementing agencies that have programs for the protection of public health and safety already have staff who are qualified to conduct on-site inspections (e.g., water permitting agencies visit water treatment plants; fire inspectors check on propane distributors). With proper training, it may be efficient for these regulators and inspectors to add 112(r) compliance elements to their inspection checklist.

Pursuant to an inspection, a facility may be required to revise its RMP and correct deficiencies in its underlying Risk Management Program. For example, if an inspection 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, re-train workers in the new procedures, and submit a revised RMP. Inspections may also result in a variety of enforcement actions and penalties. Implementing agencies should consult legal counsel and applicable agency policies to determine appropriate enforcement actions following an inspection.

THE RMP INSPECTION PROCESS

Step (1): Selecting Facilities for RMP Inspections

EPA policy requires EPA regional offices to prioritize inspections at "high-risk" facilities. High-risk facilities include facilities with a large residential population within the facility's worst-case scenario vulnerable zone, facilities with a history of significant accidental releases, and facilities with very large quantities of regulated substances held on site (or with multiple regulated substances held above a threshold quantity). While EPA expects that every RMP facility will periodically be inspected, implementing agencies should inspect high-risk RMP facilities more frequently than other RMP facilities.

There are several basic steps to conducting an RMP inspection:

1. The first is selecting facilities to be inspected.
2. Next, there is a range of potential off-site, on-site, and concluding activities.
3. Finally, there is a series of post-inspection actions.

EPA policy also requires regional offices to periodically search for regulated facilities that have failed to submit RMPs (i.e., "RMP non-filers"), identify known RMP facilities that have failed to update their RMP as required by the rule, and take appropriate enforcement or compliance assistance actions in order to resolve the status of such facilities.

Beyond these considerations, implementing agencies have significant flexibility to select facilities for inspection. In making their selections, implementing agencies may choose to consider additional factors such as geographic location or clustering, proximity to minority or low-income residential areas, industry sector trends, and specific facility hazards or characteristics.

Step (2): Off-Site Activities

If more than one inspector is participating in the inspection, the entire inspection team should participate in a planning meeting prior to the inspection. This meeting should include any personnel from outside the implementing agency who will participate in the inspection, such as personnel from other agencies (e.g., fire marshal, emergency management staff, or environmental management staff), or outside contractors or experts who will provide technical support to the inspection team. Additionally, if possible, the implementing agency should include LEPC members and/or local response agency members. To the extent that Offsite Consequence Analysis information is shared during planning, the members of the team should be aware of restrictions on dissemination of this information to the public.

The lead inspector should determine at this point whether the facility will be notified in advance of the site visit. Prior notification may be dictated by implementing agency policy or practices. If the facility is to be notified in advance of the visit, the lead inspector should schedule the date, time, and point of arrival at the facility.

- CAA Section 112(r)(6)(L) provides facility employees and employee representatives with the same rights to participate in the physical inspection of any workplace conducted pursuant to CAA Section 112(r) as provided in the Occupational Safety and Health (OSH) Act (29 CFR 1903.8). Therefore, if there is advance notification of the site visit, the notification should be provided to both the owner/operator and facility employees/employee representative(s).
- If advanced written notification to the owner/operator is provided (e.g., Notice of Inspection (NOI) Letter) it should reference the statutory right for employees and employee representatives to participate in Section 112(r) inspections. The notification also should instruct the owner/operator to notify, upon receipt of the notification, the employee representative(s), if any, of the date and time of the on-site inspection and make arrangement for their participation. The owner/operator should be instructed to provide a copy of the notification to the employee representative(s).
  - » The owner/operator also should be instructed to post the notification, upon receipt, in the area subject to the inspection.
- If the name and contact information of the employee representative(s) is readily available to the lead inspector, a copy of the notification should be sent to the employee representative(s) concurrently with the notification being sent to the owner/operator.

The lead inspector should:

- Brief all inspectors on the rationale for the inspection;
- Assign each inspector specific section(s) of the inspection report, including collecting facility background information related to his/her report section;
- Identify related regulatory requirements (e.g., hot work permit, HAZWOPER); and
- Establish a schedule for completing collection of the necessary background information, conducting the pre-visit meeting, conducting the inspection, and completing the inspection report.

Collecting Background Information

Preliminary preparation is crucial to a well organized inspection. It is useful to collect as much of the facility background information as possible in advance of the inspection. The lead inspector may elect to notify the facility (both owner/operator and employee representative(s)), state, and local officials of the pending inspection and request appropriate background information. The inspector(s) then can review this information prior to the visit, prepare a detailed list of topics and questions to help organize their on-site activities, and minimize the amount of time spent at the facility. The table on the following page lists some examples of background information that may be useful to inspectors.

Table 2: Background Information

TYPES OF INFORMATION	SOURCES OF INFORMATION
Submitted RMP	RMP*Info and/or RMP*Review (database available to the implementing agency from EPA).
History of releases at the facility and/or similar facilities	On-scene coordinator reports, Accidental Release Investigation Program (ARIP) questionnaires, RMPs, Emergency Response Notification System (ERNS) data, EPCRA 304 release notifications, Toxic Release Inventory data, state release files.
Chemical processes	Industry standards and processing techniques from trade and professional groups (e.g., American Institute of Chemical Engineers (AIChE), ASME, and the Chlorine Institute), process flow diagrams, and piping and instrumentation diagrams.
EPCRA Chemical Inventory Data	SERC, LEPC, local fire department.
Other information	OSHA facility inspection information, EPA databases, state databases.

Inspectors should also determine the applicability of existing checklists specific to the facility being inspected such as checklists developed by EPA in sector-specific RMP guidance may be used (e.g., ammonia refrigeration, publicly owned treatment works, chemical warehouses, propane users). Inspectors should also familiarize themselves with industry and government standards specific to the facility (e.g., standards developed by OSHA, NFPA, and ANSI).

Planning the Inspection

An on-site inspection might include review of programs and records, verification of data, interviews with employees, and analysis of prevention measures. See the following table of potential inspection components for suggestions.

Table 3: Potential Inspection Components

Review	• accident history • incident investigation reports, and documentation of corrective measures taken • preventive maintenance program • process hazard analysis or hazard review, including review of safety information and risk scenarios • soundness of air modeling results • operation and maintenance records, inspection procedures, and repairs records • training records and review of emergency plan exercise program • emergency response program capabilities, including exercises, equipment, training, off-site programs, public notification, procedures, and communication with local emergency responders • management of change program, pre-start review program, employee participation program, hot work permit program, and contractor employee training
Verify	• facility classification and program designation • air modeling methods and results • model input parameters • mitigation measures and systems • process enhancements, including facility-conducted compliance inspection results and recommendations
Evaluate	• additional (unreported) covered processes
Engineering review	• processes
Engineering analyses	• release prevention measures
Engineering verification	• mitigation measures, design parameters

Prepare Inspection Staff and Plan Logistics

The lead inspector should hold a pre-visit meeting with all inspectors as close to the date of the inspection as possible. By this time, all inspectors should be familiar with this guidance and any information they have collected about the facility to be inspected and its processes. Additional information to be obtained at the facility should be identified and inspectors should develop individual plans for conducting their portion of the inspection. For extensive inspections, the pre-visit meeting should:

- Establish the entry authority of each inspector;
- Review each inspector's area of responsibility;
- Review the inspection objectives and highlight areas of special interest;
- Review any site-specific personal health and safety issues, and complete, if necessary, a site safety plan for on-site activities;
- Review information about key personnel and operations at the site;

- Establish an agenda for each day of the site visit;
- Review logistical matters (e.g., nightly team meetings to discuss results and plan the next day's activity);
- Review the RMP submitted by the facility and preliminarily evaluate compliance with regulatory requirements;
- Arrange for proper management of confidential business information (CBI); and
- Cover any additional topics.

The lead inspector should also:

- Develop site-specific guidance, if needed;
- Reserve work space and equipment at the facility;
- Develop employee interview questionnaires, if an interview is planned; and
- Schedule opening meetings, closing meetings, and daily debriefings.

Step (3): At the Site

Entering the Facility

Upon entering the facility, the inspector(s) should present official credentials. The inspector(s) should not relinquish credentials or allow photocopying of them. The inspector(s) should arrive at the facility during normal working hours. The inspector(s) may sign a "sign-in" sheet, log, or visitor register. However, the inspector(s) must not sign any type of "waiver" or "visitor release" which would relieve the facility of responsibility for injury or limit the rights of the inspecting agencies to collect or use data obtained from the facility. If a waiver or release is presented, the lead inspector should explain that such a document will not be signed and request a blank "sign-in" sheet. If the inspector(s) is refused entry as a result of not signing the release, the lead inspector should report all pertinent facts to the implementing agency's legal counsel. If the matter cannot be resolved, the inspector(s) should leave the facility. All events surrounding the refused entry must be fully documented, including the name(s) and title(s) of the person(s) refusing entry, and the stated reason for denying access to the facility. The inspector(s) should also document any observations made at the facility prior to the denial of entry.

In addition to presenting official credentials, the lead inspector may also present a Notice of Inspection to provide further clarification to the facility that the purpose of the inspection is to determine compliance with CAA Section 112(r) as well as with CERCLA Section 103(e) and EPCRA Sections 302 -312.

Once credentials have been presented and entry gained, the lead inspector should advise the owner/operator that CAA Section 112(r) requires employee representatives be given an opportunity to participate in the physical inspection of the facility (as referenced in the NOI if advance notification had been provided). As soon as practicable after entering the facility, the lead inspector should determine whether the facility employees are represented and, if so, offer the employee representative(s) an opportunity to participate in the on-site inspection.

If employees are not represented by an authorized representative or employees have not chosen a representative for the Section 112(r) inspection (e.g., chosen by employees at large or through an established employee safety committee), the lead inspector should determine, if able, the employee(s) who may serve as employee representative(s) for purposes of the inspection. If the lead inspector is unable to make such a determination, the inspector(s) should interview during the course of the inspection a reasonable number of employees the inspector(s) deems necessary to conduct the inspection.

Pursuant to CAA Section 112(r)(6)(L) and the OSH Act, the employee representative is to be an employee of the employer. Having an employee who works at the facility and has knowledge of the Risk Management Program participate in the inspection may assist the inspector(s) in evaluating compliance with CAA Section 112(r) requirements. However, if the inspector(s) determines that good cause has been shown why accompaniment by a third party who is not an employee of the employer is reasonably necessary to the conduct of an effective and thorough physical inspection of the workplace, such third party may accompany the inspector(s) during the inspection. The determination to include a third party is at the discretion of the inspector(s).

The lead inspector should document in the inspection report the offer to employees and employee representatives the opportunity to participate in the Section 112(r) inspection.

- The inspection should not be postponed or unreasonably delayed if an employee representative is unavailable when the inspector(s) arrives to begin the on-site visit. The reason for an employee representative not being available to participate in the inspection should be noted in the inspection report

(e.g., representative is not present at facility; representative does not accept offer to join inspection due to participation in an ongoing strike or labor dispute.)

If management personnel attempt to interfere with participation by employees and employee representatives in the inspection, the lead inspector should advise management that such participation, as indicated in the NOI letter, is a statutory right pursuant to CAA Section 112(r)(6)(L). Any attempt by management to interfere in such participation should be documented in the inspection report. Depending upon the nature and scope of the management interference, the lead inspector may determine the interference to be a refusal to permit the inspection.

Opening Meeting

The inspector(s) should conduct a joint opening meeting with management personnel (e.g., plant manager, superintendents of safety and operations, legal counsel, corporate representative) and the employee representative(s). The lead inspector should clearly explain the purpose and objectives of the inspection.

- If either management personnel or the employee representatives object to a joint opening meeting, the inspector(s) should conduct separate opening meetings.

The lead inspector may give management personnel and employee representative(s) each a copy of this guidance to help them understand the scope, purpose, and objective of the inspection. In addition, this guidance may help management personnel and employee representatives in assembling information to be reviewed by the inspector(s). At a minimum, the following items should be addressed during the opening meeting:

- Discussion of entry and information gathering authorities;
- Inspection purpose and objectives;
- On-site agenda;
- Identification and management of CBI;
- Information necessary to conduct the inspection;
- Safety issues (e.g., facility-specific safety orientation training, emergency response procedures and alarms that may sound in an emergency); and
- Schedule for closing conference.

The inspector(s) should also request a detailed overview of the chemical processes and/or manufacturing operations at the facility, including block flow and/or process flow diagrams indicating chemicals and processes involved.

Prior to walking around the facility, the inspector(s) should request an explanation of the facility's Risk Management Program, including, at a minimum:

- How the elements of the program are implemented;
- Personnel who are responsible for the implementation of the various elements of the program; and
- A description of the facility's records documenting compliance.

At the conclusion of the opening meeting, the lead inspector should request access to the following information, where applicable:

- Documentation for the hazard assessment, including selection of model and procedures followed;
- Documentation supporting reports under the five-year accident history (e.g., follow-up release reports, initial notifications);
- Documentation for the process hazards analysis or hazard review;
- Standard operating procedures;
- Training records (e.g., hazard communication, emergency response) for all employees;
- Pre-startup safety review;
- Integrity or preventive maintenance records;
- Hot work permit program;
- Written procedures to manage change to processes;
- Plan of action for implementation of employee participation;
- Written process safety information;
- Incident investigation reports;
- The emergency response plan developed by the facility;
- The two most recent compliance audit reports; and
- Documentation on coordination with local officials on emergency response activities.

Collecting and Analyzing Information

After the opening meeting, the inspector(s) may accomplish their tasks individually or in small groups, performing their work as quickly and efficiently as possible. Special attention should be paid to:

- Verifying the reported program level; and
- Comparing the facility's RMP to policies and procedures actually implemented, especially for production or equipment changes.

Annex D, Inspection Checklist (on page D-1) may be used as guidance to ensure regulatory requirements are met and a basic level of data quality is achieved. However, this checklist is not intended to be comprehensive of all applicable requirements. Accordingly, the checklist is not a substitute for knowledge and understanding of the regulations.

Confidential Business Information

- During the course of the inspection, inspector(s) may have access or obtain information that may be entitled to confidential treatment.
- It is the source's responsibility to identify this information as Confidential Business Information (CBI) to the inspector(s), in accordance with the Risk Management Program regulations.
- This information will be handled in accordance with the implementing agency's procedures (e.g., 40 CFR Part 2 for EPA personnel).
- Before visiting the site, inspector(s) should check to see if their agency has training or programs on handling CBI.

During the inspection, a variety of materials will be gathered relating to operations at the facility. These materials should be referenced in the inspection report and maintained in a central file. Examples of the types of material that might be included are:

- Sample facility memoranda, guidelines, safe operating procedures, policy statements (e.g., safety practices, Responsible Care);
- Correspondence between the facility and the implementing agency; or
- Graphic materials such as photographs, maps, charts, plot plans, organizational charts.

All materials should be labeled with:

- Name of facility;
- Names of inspection team members;
- Date of inspection; and
- Other identifying information.

While collecting information, and in order to aid the inspection without causing interference to the conduct of the inspection, the inspector(s), as provided by Section 112(r)(6)(L), may determine the following is appropriate:

- To permit additional employer and employee representatives to participate in the inspection.
- To permit different employer and employee representatives to participate in the inspection as the inspector(s) visits different areas of the workplace. For example,
  - » Provide for participation of employees who have familiarity with specific work areas or have expertise with certain process units.
  - » Address issues concerning workplace areas containing confidential business information or trade secrets by including employees in the inspection who are authorized to have access to those areas.

To provide for an effective inspection and to assist in the collection and analysis of information, the inspector(s) may interview employees. As statutorily provided, such employee interviews may be conducted privately. Consent by management personnel to conduct private employee interviews is not necessary. Any interference by management personnel with the ability of the inspector(s) to conduct private interviews should be documented in the inspection report. Such interference includes attempts by management to be present during private interviews.

- Employee interviews should occur during normal working hours and at other reasonable times during or after the on-site visit at the facility or at an alternate location agreed upon between the inspector and employee.
- The inspector interviewing an employee should provide the employee with contact information (e.g., a business card). While the NOI letter should include contact information, the lead inspector also should provide such contact information to the employee representative(s).

- The inspector(s) should inform employees and employee representatives participating in the inspection that only matters related to the inspection (e.g., workplace hazards; processes; emissions units) are to be discussed.

During the course of the inspection, the inspector(s) has the statutory right to deny participation in the inspection to any person whose conduct interferes with a fair and orderly inspection. Such denial should be documented and explained in the inspection report.

Personal Protective Equipment (PPE)

In addition to normal protective equipment (e.g., safety shoes, hard hats, goggles), inspector(s) may need special equipment:

- Flame-retardant coveralls in all areas of the facility where there is potential for flash fires and as may be required by facility policy;
- Emergency escape respirators during the walk-around portion of the inspection (personnel conducting these inspections should have received proper training in the use of emergency escape respirators);
- Alert monitors approved for the environment where they will be used (e.g., HCN, Cl2); and
- Electronic equipment (e.g., still cameras, video cameras, cellular phones) that are safe for use in the process areas being inspected.

Inspectors should follow facility guidance relative to the appropriate use of PPE and request notice of any unusual conditions which may dictate specific precautions.

Closing Conference

Prior to the closing conference, the inspector(s) should meet privately to review preliminary inspection observations and establish topics for the conference. Significant observations should be presented to management personnel and employee representatives. Any issues requiring clarification should be listed for discussion with the management personnel and employee representatives. The lead inspector will determine what should be communicated during the closing conference.

The inspector(s) should conduct the closing conference with management personnel (e.g., plant manager, superintendents of safety and operations, legal counsel, corporate representative) and the employee representative(s). Other employees who participated in the inspection should also be invited to the closing conference.

- If either management personnel or the employees/ employee representatives object to a joint closing conference, the inspector(s) should conduct separate closing conferences.

Closing Conference

- Maintain a professional courteous demeanor.
- Make management and employee representative(s) aware of helpful standards, guidelines, or resources.
- Alert management and employee representative(s) to situations requiring immediate remediation.
- Avoid implying a “consulting” relationship.
- Do not state that violations have been observed.
- Avoid statements that affect subsequent enforcement actions.

The inspector(s) should use the closing conference to gather additional information, answer questions and verbally communicate preliminary inspection observations. The closing conference provides an opportunity for management personnel and employee representatives to enhance their ability to take timely action to correct deficiencies as a result of receiving preliminary inspection observations and appropriate compliance assistance.

The inspector(s) should maintain a professional, courteous demeanor throughout the inspection, including the closing conference. The inspector(s) should ensure management personnel and employee representatives are aware of any standards, guidelines, or resources that would be helpful in improving the facility Risk Management Program. However, the inspector(s) should be careful to avoid making suggestions which imply a "consultant" type of relationship, such as endorsing one product or firm exclusively.

The inspector(s) should never state that the facility is "in compliance" or that "violations" have been observed. Determining that a violation has occurred is done after the inspection by the appropriate enforcement program in consultation with legal counsel. The inspector(s) should not make any representations that could affect subsequent enforcement actions against the facility (e.g., guaranteeing no enforcement will be taken if a facility performs certain actions to correct a deficiency).

- In addition to verbally communicating preliminary inspection observations, the inspector(s), consistent with regional practice, may provide written information concerning such observations during the closing conference or after conclusion of the inspection. However, this information should not identify or characterize such observations as "violations."
- An "in-compliance" letter should not be sent to a facility.

The lead inspector should alert management personnel and employee representatives to situations that are in need of immediate remediation (e.g., improper storage of incompatible chemicals).

The lead inspector should document in the inspection report whether a closing conference was conducted and, if so, with whom. If a closing conference was not conducted, the report should include the reasons why the conference was not conducted and confirm that contact information was left.

Step (4): Concluding Activities

Follow-up Meeting

The inspector(s) should meet as soon as possible after completion of the site visit to ensure details of the inspection are accurately recorded. At a minimum, inspector(s) should:

- Immediately review and edit personal notes taken during the site visit for clarity and completeness;
- Review report format, and identify any additional information needed to complete the report;
- Review all important preliminary observations and facts obtained;
- Agree on a date for the final report;
- Differentiate recommendations from any observed potential noncompliance; and
- Resolve recommendations that are not supported by team consensus.

Inspection Report

Sufficient documentation of the inspection is to be provided to allow for a compliance determination to be made. To ensure sufficient documentation with complete information, the inspection report documenting a Section 112(r) inspection should include the following basic elements. Annex D, Inspection Checklist (on page D-1) may be helpful and also may be used as a component of the inspection report.

- A basic profile of the facility and general information about the inspection:
  - » Facility name, location, mailing address;
  - » Facility contact, phone number, e-mail address;
  - » Employee representative(s), phone number(s), e-mail address(es);
    - Nature, extent, and substance of the employee(s) and employee representative(s) involvement;
  - » Date of inspection and name of inspector(s);
  - » Inspection activities – e.g., processes and emission units evaluated; on-site observations; employee interviews; whether compliance assistance was provided and if so, nature of assistance; any action taken by facility to come back into compliance during on-site visit;
- Date and program levels of submitted RMP;
- A description of the criteria, rationale, and factual information used to select the facility for an inspection (including information on enforcement actions resulting from previous Section 112(r) inspections); and
- Observations and recommendations.

Each observation should be supported and documented with information collected through such activities as document reviews, sampling, interviews and/or facility walkthroughs. The inspector(s) should only provide factual observations without any legal conclusions about whether there were violations or deficiencies. Preliminary inspection observations should be accompanied by recommendations based upon a comparative

analysis of the observation with applicable rules, regulations, standards, and accepted guidance. Each recommendation should cite the specific rules, regulations, standards, accepted guidance, or technical basis used to formulate the recommendation. If more than one inspector participated in the inspection, the lead inspector should consult with appropriate personnel in the implementing agency to determine if recommendations that are not supported by team consensus should be included. Each inspector should sign the report. The original report should be maintained by the implementing agency. When finalized, a copy of the report may be provided, consistent with Regional practice, to facility owners/operators; employee representatives; the State Emergency Response Commission; the Local Emergency Planning Committee in whose area the facility is located; and/or other federal, state, and local agencies as appropriate. However, when considering whether to provide an inspection report, the regional office must take into account the necessity to ensure trade secrets and confidential business information are protected pursuant to statutory requirements and implementing agency regulations and policies. Also, any potential enforcement action is not to be compromised when providing an inspection report.

Step (5): Post-Inspection Actions

Post-inspection actions will largely depend on the observations of the inspector and the information obtained during the inspection. If observations and other information support the determination of violations, there are several types of enforcement actions among which the implementing agency may choose to pursue. Such actions include, for example, notices of violations, administrative orders, monetary fines and penalties, injunctive relief, and supplemental environmental projects. Implementing agencies should consult applicable enforcement response policies in order to determine appropriate enforcement actions.

Inspections do not necessarily result in enforcement actions. If the implementing agency concludes that enforcement action is not warranted (e.g., only minor deficiencies are discovered during the inspection), the implementing agency may choose to take no post-inspection actions or to provide compliance assistance. Such assistance could include providing training, regulatory guidance, reference materials, or other information to the facility owner/operator. Since implementing agencies have discretion in regulatory enforcement matters, inspectors, case development officers and legal counsel should work in a coordinated manner when determining the appropriate enforcement response.

ANNEXES

Annex A:
RMP Audits Conducted Pursuant to 40 CFR Part 68.220

◇

Annex B:
Site Safety Plan for On-Site Activities

◇

Annex C:
Inspection Report

◇

Annex D:
Inspection Checklist

◇

Annex E:
Risk Management Program and OSHA PSM:
List of Regulated Substances

Annex A: RMP Audits Conducted Pursuant to 40 CFR Part 68.220

This Annex describes the process for conducting audits in accordance with 40 CFR Part 68.220. In general, the guidelines contained in the main document may be applied to both inspections and audits. However, Part 68.220 contains specific guidance to implementing agencies on selecting facilities for RMP audits, as well as on resolving audit findings.

Selecting Facilities for RMP Audits

Under 68.220(b), the implementing agency may select facilities for audits based on any of the following criteria:

1. Accident history;
2. Accident history of other facilities in the same industry;
3. Quantity of regulated substances;
4. Location and proximity to the public and environmental receptors;
5. Presence of specific regulated substances;
6. Hazards identified in the RMP; or
7. A plan providing for neutral, random oversight.

Related criteria could include the number of accidental releases, whether there have been any catastrophic accidental releases, and the known toxicity of chemicals used in the processes.

Facilities with a "Star" or "Merit" ranking under OSHA's voluntary protection program are exempt from audits based solely on criteria (2) and (7). However, these facilities may be audited based on any of the other five criteria [68.220(c)]. Each implementing agency should develop a targeting system, based on their resources and priorities.

Under 40 CFR 68.220(d), the implementing agency shall have access to the facility, supporting documentation, and any area where an accidental release could occur.

After-Audit Actions

Preliminary Determination

Based on the results of the audit, the implementing agency may issue the owner or operator a written preliminary determination of necessary revisions to the facility's RMP to ensure that the RMP meets the criteria of 40 CFR Part 68, Subpart G. The preliminary determination should include an explanation of the basis for the revisions, reflecting applicable industry standards and guidelines (such as American Institute of Chemical Engineers (AIChE)/Center for Chemical Process Safety (CCPS) guidelines and American Society of Mechanical Engineers (ASME) and American Petroleum Institute (API) standards). The preliminary determination should also include a timetable for the implementation of the revisions [68.220(e)].

The owner or operator should respond in writing to the preliminary determination. The response should state that the owner or operator will implement the revisions contained in the preliminary determination in accordance with the timetable included in the preliminary determination, or should state that the owner or operator rejects the revisions in whole or in part. For each rejected revision, the owner or operator should explain the basis for rejecting that revision. Such explanation may include substitute revisions [68.220(f)(1)].

The owner or operator should submit the written response to the implementing agency within 90 days of issuance of the preliminary determination. The implementing agency may specify a shorter period of time in the preliminary determination to protect public health and the environment. Prior to the written response being due and upon written request from the owner or operator, the implementing agency may provide additional time for the response to be received [68.220(f)(2)].

Final Determination

After providing the owner or operator an opportunity to respond to the preliminary determination, the implementing agency may issue the owner or operator a written final determination of necessary revisions to the facility's RMP. The final determination may adopt or modify the revisions contained in the preliminary determination, or may adopt or modify the substitute revisions provided in response to the preliminary determination. A final determination that adopts a revision rejected by the owner or operator should include an explanation of the basis for the revision. A final determination that fails to adopt a substitute revision provided under 68.220(f) should include an explanation of the basis for finding such substitute revision unreasonable [68.220(g)].

Thirty days after completion of the actions detailed in the implementation schedule set in the final determination, the owner or operator will be in violation of subpart G of part 68 unless the owner or operator revises the RMP, as required by the final determination, and submits the revised RMP [68.220(h)].

Once a final determination has been made and the facility is deemed to be in violation of 40 CFR Part 68, the audit report along with the final determination should be referred to the appropriate program within the implementing agency for enforcement actions. If warranted, the implementing agency may initiate an enforcement action, rather than use the preliminary and final determination process.

The public should have access to the preliminary determination, response, and final determination pursuant to 42 U.S.C. 7414(c) [68.210(a), 68.220(i)]. The disclosure of classified information by the Department of Defense or other federal agencies or contractors of such agencies will be controlled by applicable laws, regulations, or executive orders concerning the release of classified information [68.210(b)].

None of the actions described above will preclude, limit, or interfere in any way with the authority of the implementing agency to exercise its enforcement, investigatory, and information gathering authorities under the CAA concerning accidental releases [68.220(j)].

Annex B: Site Safety Plan for On-Site Activities

The EPA Safety Manual and other EPA policies articulate certain safety planning efforts prior to field activities. The following format is consistent with these requirements. Extensive training and certifications, and further planning in the form of a more extensive Site Safety Plan, may be necessary in addition to the following plan.

FACILITY:

LEAD INSPECTOR:

DATE:

DESCRIPTION OF ACTIVITIES

Location and approximate size of facility:

Description of activities to be performed by each of the inspectors:

Proposed date of on-site activities beginning:

Duration of the planned activities:

Site topography:

Site accessibility by roads and air:

HAZARDOUS SUBSTANCES AND HEALTH HAZARDS INVOLVED OR SUSPECTED AT THE SITE

(Fill in any information that is known or suspected)

AREAS OF CONCERN	CHEMICAL AND PHYSICAL PROPERTIES	IDENTITY OF SUBSTANCE AND PRECAUTIONS
Explosivity		
Radioactivity		
Oxygen deficiency (e.g., confined spaces)		
Toxic gases		
Skin/eye contact hazards		
Heat stress		

Pathways from site for hazardous substance dispersion:

WORK PLAN INSTRUCTIONS

Recommended level of protection:

☐ A

☐ B

☐ C

Cartridge type if level C:

Monitoring equipment to be used:

Accompanying/helping persons (facility/contractors):

Safety clothing/equipment required for those persons:

OSHA required training and certification (29 CFR 1910.120) received by those persons:

FIELD INVESTIGATION AND DECONTAMINATION PROCEDURES

Decontamination procedures (e.g., contaminated protective clothing, instruments, equipment):

Disposal procedures (e.g., contaminated equipment, supplies, disposable items, washwater):

EMERGENCY CONTACTS

Hospital Name/Location: _____

Hospital Phone No.:_____

Fax: _____

Emergency Medial Treatment Phone No.: _____

Fax: _____

Ambulance Phone No.: _____

Fax: _____

Police Phone No.: _____

Fire Assistance Phone No.: _____

Regional Health and Safety Officer
(or position with similar duties): _____

Phone No.: _____

Annex C: Inspection Report

Note: A report similar to this will be generated by RMP*Review, the software available to RMP implementing agencies.

EPA facility ID #:

City: _____ State: _____ County: _____

Date: _____

INSPECTION TEAM:

Lead Inspector: _____

Inspectors: _____

Date(s) of facility visit: _____

I. FACILITY IDENTIFICATION

Name: _____

Street Address: _____

City: _____ State: _____ County: _____

Zip: _____

Latitude: _____ Longitude: _____

Dun & Bradstreet (D&B) No.: _____

Name, address, and D&B of corporate parent company (if applicable): _____

_____

Owner/operator: _____ Phone No.: _____

E-mail Address: _____

Mailing Address: _____

City: _____ State: _____ Zip: _____

Contact information of person responsible for 40 CFR Part 68 implementation:

Name: _____ Title: _____ Phone No.: _____

E-mail Address: _____

Name and title of emergency contact: _____

Name: _____ Title: _____

Day Phone: _____ 24-hour Phone: _____ Cell:_____

E-mail Address: _____

Names, titles, phone numbers and e-mail addresses of facility personnel/employee representatives involved in inspection. Include information on nature, extent, and substance of such involvement (e.g., accompanied site tours; provided documents and explanatory information; participated in interviews):

II. DATE AND PROGRAM LEVELS OF SUBMITTED RMP

Date of Initial Submission: ___ ___ / ___ ___ / ___ ___

Date of Latest Update: ___ ___ / ___ ___ / ___ ___

Process (Program 1, 2, 3) as reported in RMP:

Process ID#: Program Level: NAICS Code:

CRITERIA, RATIONALE, and FACTUAL INFORMATION used to select the facility for an inspection (including information on enforcement actions resulting from previous Section 112(r) inspections:

III. INSPECTION ACTIVITIES

(e.g., processes and emission units evaluated; on-site observations; employee interviews; whether compliance assistance was provided and if so, nature of assistance; any action taken by facility to come back into compliance during on-site visit):

IV. OBSERVATIONS AND RECOMMENDATIONS

Signatures:

Lead Inspector: _____

Inspectors: _____

Approved by:

Signature: _____ Date: _____

Title: _____

* Observations and recommendations may be presented in one or more attachments and referred to in the report.

Annex D: Inspection Checklist

Process inspected: _____

Inspector: _____

Instructions: This checklist may be used for verification of RMP and Program compliance
(Check boxes coding: Y=Yes, N=No, P=Partial, A=Not Applicable)

Note: Compliance Objectives are listed in the order they appear in the RMP rule

1. RISK MANAGEMENT PROGRAM AND PLAN (SUBPART A) [68.1 – 68.15]

Applicability [68.1]

___ 1.1 Does the owner or operator of the stationary source have more than a threshold quantity of a regulated substance in a process? [68.10(a)]

___ 1.2 Has the process had, in the five years prior to submission of the RMP, an accidental release of a regulated substance where exposure to the substance, its reaction products, overpressure generated by an explosion involving the substance, or radiant heat generated by a fire involving the substance led to any of the following off-site:

(i) Death; (ii) Injury; or (iii) Response or restoration activities for an exposure of an environmental receptor? [68.10(b)(1)]

___ 1.3 Is the distance to a toxic or flammable endpoint for a worst-case release assessment less than the distance to any public receptor? [68.10(b)(2)]

___ 1.4 Has the owner or operator coordinated emergency response procedures between the stationary source and local emergency planning and response organizations? [68.10(b)(3)]

___ 1.5 Is the covered process subject to OSHA PSM standard, 29 CFR 1910.119? [68.10(d)(2)]

___ 1.6 Is the covered process in one of the NAICS codes listed in 40 CFR §68.10(d) (1)? [68.10(d)(1)]

Inspector may need to re-answer 1.5 and 1.6 for multiple processes in comments section.

___ 1.7 Has the owner or operator submitted a single RMP, which included a registration that reflects all covered processes, as provided in 68.150 to 68.185? [68.12(a)]

1.8 For Program 1 processes inspected, has the owner or operator: [68.12(b)]

___ 1.8.1 Analyzed the worst-case release scenario for the process(es), as provided in 68.25; [68.12(b)(1)]

___ 1.8.2 Documented that the nearest public receptors is beyond the distance to an endpoint defined in 68.22(a); and [68.12(b)(1)]

___ 1.8.3 Included the scenario(s) in the RMP as provided in 68.165? [68.12(b)(1)]

___ 1.8.4 Completed the five-year accident history for the process as provided in 68.42 [68.12(b)(2)]; and

___ 1.8.5 Included the history in the RMP as provided in 68.168? [68.12(b)(2)]

___ 1.8.6 Ensured that response actions have been coordinated with local emergency planning and response agencies? [68.12(b)(3)]

___ 1.8.7 Included the appropriate certification statement for Program 1 processes? [68.12(b)(4)]

1.9 For Program 2 processes, has the owner or operator: [68.12(c)]

___ 1.9.1 Developed and implemented a management system as provided in 68.15? [68.12(c)(1)]

___ 1.9.2 Conducted a hazard assessment as provided in 68.20 through 68.42? [68.12(c)(2)]

___ 1.9.3 Implemented the Program 2 prevention steps provided in 68.48 through 68.60 or implemented the Program 3 prevention steps provided in 68.65 through 68.87? [68.12(c)(3)]

___ 1.9.4 Developed and implemented an emergency response program as provided in 68.90 to 68.95? [68.12(c)(4)]

___ 1.9.5 Submitted, as part of the RMP, the data on prevention program elements for Program 2 processes as provided in 68.170? [68.12(c)(5)]

1.10 For Program 3 processes, has the owner or operator: [68.12(d)]

___ 1.10.1 Developed and implemented a management system as provided in 68.15? [68.12(d)(1)]

___ 1.10.2 Conducted a hazard assessment as provided in 68.20 through 68.42? [68.12(d)(2)]

___ 1.10.3 Implemented the prevention requirements provided in 68.65 through 68.87? [68.12(d)(3)]

___ 1.10.4 Developed and implemented an emergency response program as provided in 68.90 to 68.95? [68.12(d)(4)]

___ 1.10.5 Submitted, as part of the RMP, the data on prevention program elements for Program 3 processes as provided in 68.175? [68.12(d)(5)]

Management [68.15]

Has the owner or operator:

___ 1.11 Developed a management system to oversee the implementation of the Risk Management Program elements? [68.15(a)]

___ 1.12 Assigned a qualified person or position that has the overall responsibility for the development, implementation, and integration of the Risk Management Program elements? [68.15(b)]

___ 1.13 Documented other persons responsible for implementing individual requirements of the Risk Management Program and defined the lines of authority through an organization chart or similar document? [68.15(c)]

Findings:

_____

_____

_____

Documentation obtained to support Findings:

_____

_____

_____

2. RMP SUBMISSION (SUBPART G) [68.150 – 68.190]

___ 2.1 Did the owner or operator submit an RMP on or before June 21, 1999? Postmark date of initial submission: [68.10, 68.10(a)(1), 68.150(a) & (b)]

If submission was after June 21, 1999, was submittal required because: [68.10 & 68.150(b)]

___ 2.1.1 Initial listing of a regulated substance under 68.130 after June 21, 1999 [68.10(a)(2) & 68.150(b)(2)]

___ 2.1.2 A regulated substance was first present at the stationary source above the threshold quantity in a process [68.10(a)(3) & 68.150(b)(2)]

___ 2.2 Has the owner or operator revised and updated the RMP within 5 years of initial submission? Date of the last revision and update [68.190(a)]:

_____

2.3 If required, has the owner or operator submitted a revised RMP for any of the following: [68.190(b)]

___ 2.3.1 Within 3 years after EPA first listed a newly regulated substance? [68.190(b)(2)]

___ 2.3.2 No later than the date on which a new regulated substance is first present in an already covered process above a threshold quantity? [68.190(b)(3)]

___ 2.3.3 No later than the date on which a regulated substance is first present above a threshold quantity in a new process? [68.190(b)(4)]

___ 2.3.4 Within six months of a change that requires a revised PHA or hazard review? [68.190(b)(5)]

___ 2.3.5 Within six months of a change that requires a revised off-site consequence analysis as provided in 68.36? [68.190(b)(6)]

___ 2.3.6 Within six months of a change that alters the Program level that applied to any covered process? [68.190(b)(7)]

___ 2.4 Has the owner or operator included information submitted as CBI in the RMP? [68.150(d)]

___ 2.4.1 If so, were the provisions of 68.151 and 68.152 followed?

RMP: Executive Summary [68.155]

2.5 Has the owner or operator included a brief description of the following elements in the executive summary of the RMP: [68.155]

___ 2.5.1 The accidental release prevention and emergency response policies at the stationary source? [68.155(a)]

___ 2.5.2 The stationary source and regulated substances handled? [68.155(b)]

___ 2.5.3 The general accidental release prevention program and chemical-specific prevention steps? [68.155(c)]

___ 2.5.4 The five-year accident history? [68.155(d)]

___ 2.5.5 The emergency response program? [68.155(e)]

___ 2.5.6 Planned changes to improve safety? [68.155(f)]

RMP: Registration [68.160]

___ 2.6 Has the owner or operator included a single registration form in the RMP which covers all regulated substances handled in covered processes? [68.160(a)]

2.7 Does the registration include the following data: [68.160(b)]

___ 2.7.1 Stationary source name, full address, Dun and Bradstreet number; longitude and latitude with method and description? [68.160(b)(1) & (2)]

___ 2.7.2 Corporate parent company name and Dun and Bradstreet number? [68.160(b)(3)]

___ 2.7.3 The name, telephone number, and mailing address of the owner or operator? [68.160(b)(4)]

___ 2.7.4 The name and title of the person or position with overall responsibility for RMP elements and implementation? [68.160(b)(5)]

___ 2.7.5 The name, title, telephone number, and 24-hour number of the emergency contact? [68.160(b)(6)]

___ 2.7.6 For each covered process, the name and CAS number of each regulated substance held above the threshold quantity in the process, the maximum quantity of each regulated substance or mixture in the process, the NAICS code, and the Program level of the process? [68.160(b)(7)]

___ 2.7.7 The stationary source EPA identifier? [68.160(b)(8)]

___ 2.7.8 The number of full-time employees at the stationary source? [68.160(b)(9)]

___ 2.7.9 Whether the stationary source is subject of 29 CFR §1910.119, OSHA's Process Safety Management Standard? [68.160(b)(10)]

___ 2.7.10 Whether the stationary source is subject to 40 CFR Part 355, the Emergency Planning Requirements of the Emergency Planning and Community Right-to-Know Act? [68.160(b)(11)]

___ 2.7.11 If the stationary source has a CAA Title V operating permit, its permit number? [68.160(b)(12)]

___ 2.7.12 The date of the last safety inspection of the stationary source by a Federal, state, or local government agency and the identity of the inspecting entity? [68.160(b)(13)]

RMP: Off-site Consequence Analysis [68.165]

2.8 Does the RMP include the following: [68.165(a)]

___ 2.8.1 One worst-case release scenario for each Program 1 process? [68.165(a)(1)]

___ 2.8.2 For Program 2 and 3 processes, one worst-case release scenario to represent all regulated toxic substances held above the threshold quantity and one worst-case release scenario to represent all regulated flammable substances held above the threshold quantity? [68.165(a)(2)]

___ 2.8.3 For Program 2 and 3 processes, were additional worst-case scenarios also submitted, if required by 68.25(a)(2)(iii)? [68.165(a)(2)]

___ 2.8.4 For Program 2 and 3 processes, was information submitted on one alternative scenario for each regulated toxic substance held above the threshold quantity and one alternative scenario to represent all regulated flammable substances held above the threshold? [68.165(a)(2)]

2.9 Does the RMP include the following information for each submitted release scenario: [68.165(b)]

___ 2.9.1 Scenario type (explosion, fire, toxic gas release, or liquid spill and vaporization)? [68.165(b)(5)]

___ 2.9.2 Chemical name of released substance? [68.165(b)(1)]

___ 2.9.3 Percentage weight of the chemical in a liquid mixture (toxics only)? [68.165(b)(2)]

___ 2.9.4 Physical state of substance (toxics only)? [68.165(b)(3)]

___ 2.9.5 Basis of results (model name if used)? [68.165(b)(4)]

___ 2.9.6 Quantity released in pounds? [68.165(b)(6)]

___ 2.9.7 Release rate? [68.165(b)(7)]

___ 2.9.8 Release duration? [68.165(b)(8)]

___ 2.9.9 Wind speed and atmospheric stability class (toxics only)? [68.165(b)(9)]

___ 2.9.10 Topography (toxics only)? [68.165(b)(10)]

___ 2.9.11 Distance to endpoint? [68.165(b)(11)]

___ 2.9.12 Public and environmental receptors within the distance? [68.165(b)(12)]

___ 2.9.13 Passive mitigation considered? [68.165(b)(13)]

___ 2.9.14 Active mitigation considered (alternative releases scenarios only)? [68.165(b)(14)]

RMP: Five-Year Accident History [68.168]

___ 2.10 Has the owner or operator provided the five-year accident history information in 68.42 on each accident covered by 68.42? [68.168]

___ 2.11 Does the RMP include the following information for each reported accidental release: [68.42(b)]

___ 2.11.1 Date, time, and approximate duration of the release? [68.42(b)(1)]

___ 2.11.2 Chemical(s) released? [68.42(b)(2)]

___ 2.11.3 Estimated quantity released in pounds and percentage weight in a mixture (toxics)? [68.42(b)(3)]

___ 2.11.4 NAICS code for the process? [68.42(b)(4)]

___ 2.11.5 The type of release event and its source? [68.42(b)(5)]

___ 2.11.6 Weather conditions (if known)? [68.42(b)(6)]

___ 2.11.7 On-site impacts? [68.42(b)(7)]

___ 2.11.8 Known offsite impacts? [68.42(b)(8)]

___ 2.11.9 Initiating event and contributing factors (if known)? [68.42(b)(9)]

___ 2.11.10 Whether offsite responders were notified (if known)? [68.42(b)(10)]

___ 2.11.11 Operational or process changes that resulted from investigation of the release? [68.42(b)(11)]

RMP: Prevention Program/Program 2 [68.170]

2.12 Has the owner or operator included the following information for each covered process in Program 2: [68.170(a)]

___ 2.12.1 The NAICS code for the process? [68.170(b)]

___ 2.12.2 The name(s) of the chemical(s) covered? [68.170(c)]

___ 2.12.3 The date of the most recent review or revision of the safety information and a list of Federal or state regulations or industry-specific design codes and standards used to demonstrate compliance with the safety information requirement. [68.170(d)]

___ 2.12.4 The date of completion of the most recent hazard review or update? [68.170(e)]

___ 2.12.4.1 The expected date of completion of any changes resulting from the hazard review or update? [68.170(e)(1)]

___ 2.12.4.2 Major hazards identified? [68.170(e)(2)]

___ 2.12.4.3 Process controls in use? [68.170(e)(3)]

___ 2.12.4.4 Mitigation systems in use? [68.170(e)(4)]

___ 2.12.4.5 Monitoring and detection systems in use? [68.170(e)(5)]

___ 2.12.4.6 Changes since the last hazard review? [68.170(e)(6)]

___ 2.12.5 The date of the most recent review or revision of operating procedures? [68.170(f)]

___ 2.12.6 The date of the most recent review or revision of training programs? [68.170(g)]

___ 2.12.6.1 The type of training provided--classroom, classroom plus on the job, on the job? [68.170(g)(1)]

___ 2.12.6.2 The type of competency testing used? [68.170(g)(2)]

___ 2.12.7 The date of the most recent review or revision of maintenance procedures and the date of the most recent equipment inspection or test and the equipment inspected or tested? [68.170(h)]

___ 2.12.8 The date of the most recent compliance audit and the expected date of completion of any changes resulting from the compliance audit? [68.170(i)]

___ 2.12.9 The date of the most recent incident investigation and the expected date of completion of any changes resulting from the investigation? [68.170(j)]

___ 2.12.10 The date of the most recent change that triggered a review or revision of safety information, hazard review, operating or maintenance procedures, or training? [68.170(k)]

RMP: Prevention Program/Program 3 [68.175]

___ 2.13 Has the owner or operator included in the RMP information addressing 68.175(b) to 68.175(p)? [68.175(a)]

___ 2.13.1 The NAICS code for the process? [68.175(b)]

___ 2.13.2 The name(s) of the substance(s) covered? [68.175(c)]

___ 2.13.3 The date on which the safety information was last reviewed or revised? [68.175(d)]

___ 2.13.4 The date of completion of the most recent process hazard analysis (PHA) or update and the technique used? [68.175(e)]

___ 2.13.4.1 The expected date of completion of any changes resulting from the PHA? [68.175(e)(1)]

___ 2.13.4.2 Major hazards identified? [68.175(e)(2)]

___ 2.13.4.3 Process controls in use? [68.175(e)(3)]

___ 2.13.4.4 Mitigation systems in use? [68.175(e)(4)]

___ 2.13.4.5 Monitoring and detection systems in use? [68.175(e)(5)]

___ 2.13.4.6 Changes since the last PHA? [68.175(e)(6)]

___ 2.13.5 The date of the most recent review or revision of operating procedures? [68.175(f)]

___ 2.13.6 The date of the most recent review or revision of training programs? [68.175(g)]

___ 2.13.6.1 The type of training provided – classroom, classroom plus on the job, on the job? [68.175(g)(1)]

___ 2.13.6.2 The type of competency testing used? [68.175(g)(2)]

___ 2.13.6.1 The type of training provided – classroom, classroom plus on the job, on the job? [68.175(g)(1)]

___ 2.13.6.2 The type of competency testing used? [68.175(g)(2)]

___ 2.13.7 The date of the most recent review of revision of maintenance procedures and the date of the most recent equipment inspection or test and the equipment inspected of tested? [68.175(h)]

___ 2.13.8 The date of the most recent change that triggered management of change procedures and the date of the most recent review or revision of management of change procedures? [68.175(i)]

___ 2.13.9 The date of the most recent pre-startup review? [68.175(j)]

___ 2.13.10 The date of the most recent compliance audit and the expected date of completion of any changes resulting from the compliance audit? [68.175(k)]

___ 2.13.11 The date of the most recent incident investigation and the expected date of completion of any changes resulting from the investigation? [68.175(l)]

___ 2.13.12 The date of the most recent review or revision of employee participation plans? [68.175(m)]

___ 2.13.13 The date of the most recent review or revision of hot work permit procedures? [68.175(n)]

___ 2.13.14 The date of the most recent review or revision of contractor safety procedures? [68.175(o)]

___ 2.13.15 The date of the most recent evaluation of contractor safety performance? [68.175(p)]

RMP: Emergency Response Program [68.180]

2.14 Has the owner or operator included the following information in the RMP on the emergency response program: [68.18]

___ 2.14.1 Does a written emergency response plan exist? [68.180(a)(1)]

___ 2.14.2 Does the plan include specific actions to be taken in response to an accidental release of a regulated substance? [68.180(a)(2)]

___ 2.14.3 Does the plan include procedures for informing the public and local agencies responsible for responding to accidental releases? [68.180(a)(3)]

___ 2.14.4 Does the plan include information on emergency health care? [68.180(a)(4)]

___ 2.14.5 Date of the most recent review of update of emergency response plan? [68.180(a)(5)]

___ 2.14.6 Date of the most recent emergency response training for employees? [68.180(a)(6)]

___ 2.15 Has the owner or operator provided the name and telephone number of the local agency with which emergency response activities and the emergency response plan is coordinated? [68.180(b)]

___ 2.16 Has the owner or operator listed other Federal or state emergency plan requirements to which the stationary source is subject? [68.180(c)]

RMP: Certification [68.185]

2.17 Has the owner or operator: [68.185]

___ 2.18 For Program 1 processes, submitted the certification statement in 68.12(b)(4)? [68.185(a)]

___ 2.19 For Program 2 or 3 processes, submitted the appropriate certification statement that to the best of the signer's knowledge, information, and belief formed after reasonable inquiry, the information submitted is true, accurate, and complete? [68.185(b)]

Findings:

Documentation obtained to support Findings:

3. HAZARD ASSESSMENT (SUBPART B) [68.20 – 68.42]

Hazard Assessment: Applicability [68.20]

___ 3.1 Has the owner or operator prepared a worst-case release scenario analysis as provided in 68.25 and completed the five-year accident history as provided in 68.42? [68.20]

Hazard Assessment: Offsite Consequence Analysis Parameters [68.22]

3.2 Has the owner or operator used the following endpoints for offsite consequence analysis for a worst-case scenario: [68.22(a)]

___ 3.2.1 For toxics: the endpoints provided in Appendix A of 40 CFR Part 68? [68.22(a)(1)]

___ 3.2.2 For flammables: an explosion resulting in an overpressure of 1 psi? [68.22(a)(2)(i)]

___ 3.3 Has the owner or operator used the following endpoints for offsite consequence analysis for an alternative release scenario: [68.22(a)]

___ 3.3.1 For toxics: the endpoints provided in Appendix A of 40 CFR Part 68? [68.22(a)(1)]

___ 3.3.2 For flammables: an explosion resulting in an overpressure of 1 psi? [68.22(a)(2)(i)]

___ 3.3.3 For flammables: a fire resulting in a radiant heat/exposure of 5 kw/m2 for 40 seconds? [68.22(a)(2)(ii)]

___ 3.3.4 For flammables: a concentration resulting in a lower flammability limit, as provided in NFPA documents or other generally recognized sources? [68.22(a)(2)(iii)]

3.4 In the release analysis, has the owner or operator used appropriate values for the following parameters:

___ 3.4.1 Wind speed and atmospheric stability class?

___ 3.4.2 Ambient temperature and humidity?

___ 3.4.3 Height of the release?

___ 3.4.4 Surface roughness?

___ 3.4.5 Dense or neutrally buoyant gases?

___ 3.4.6 Temperature of the released substance?

Hazard Assessment: Worst-case Release Scenario Analysis [68.25]

3.5 Has the owner or operator of Program 1 processes:

___ 3.5.1 Analyzed and reported in the RMP one worst-case scenario for each Program 1 process? [68.25(a)(1)]

3.6 Has the owner or operator of Program 2 or 3 processes:

___ 3.6.1 Analyzed and reported in the RMP one worst-case release scenario estimated to create the greatest distance to an endpoint resulting from an accidental release of a regulated toxic substance from covered processes under worst-case conditions? [68.25(a)(2)(i)]

___ 3.6.2 Analyzed and reported in the RMP one worst-case release scenario estimated to create the greatest distance to an endpoint resulting from an accidental release of a regulated flammable substance from covered processes under worst-case conditions? [68.25(a)(2)(ii)]

___ 3.6.3 Analyzed and reported in the RMP additional worst-case release scenarios for a hazard class if the a worst-case release from another covered process at the stationary source potentially affects public receptors different from those potentially affected by the worst-case release scenario developed under 68.25(a)(2)(i) or 68.25(a) (2) (ii)? [68.25(a)(2)(iii)]

3.7 Has the owner or operator determined the worst-case release quantity to be the greater of the following: [68.25(b)]

___ 3.7.1 If released from a vessel, the greatest amount held in a single vessel, taking into account administrative controls that limit the maximum quantity? [68.25(b)(1)]

___ 3.7.2 If released from a pipe, the greatest amount held in the pipe, taking into account administrative controls that limit the maximum quantity? [68.25(b)(2)]

3.8 For toxic substances that are normally gases at ambient temperature and handled as a gas or liquid under pressure, has the owner or operator: [68.25(c)(1)]

___ 3.8.1 Assumed the whole quantity in the vessel or pipe would be released as a gas over 10 minutes? [68.25(c)(1)]

___ 3.8.2 Assumed the release rate to be the total quantity divided by 10, if there are no passive mitigation systems in place? [68.25(c)(1)]

3.9 For toxic gases handled as refrigerated liquids at ambient pressure, has the owner or operator: [68.25(c)(2)]

___ 3.9.1 Assumed the substance would be released as a gas in 10 minutes, if not contained by passive mitigation systems or if the contained pool would have a depth of 1 cm or less? [68.25(c)(2)(i)]

___ 3.9.2 Assumed the quantity in the vessel or pipe would be spilled instantaneously to form a liquid pool, if the released substance would be contained by passive mitigation systems in a pool with a depth greater than 1 cm? [68.25(c)(2)(ii)]

___ 3.9.3 Calculated the volatilization rate at the boiling point of the substance and at the conditions specified in 68.25(d)? [68.25(c)(2)(ii)]

3.10 For toxic substances that are normally liquids at ambient temperature, has the owner or operator: [68.25(d)]

___ 3.10.1 Assumed the quantity in the vessel or pipe would be spilled instantaneously to form a liquid pool? [68.25(d)(1)]

___ 3.10.2 Determined the surface area of the pool by assuming that the liquid spreads to 1 cm deep, if there is no passive mitigation system in place that would serve to contain the spill and limit the surface area, or if passive mitigation is in place, the surface area of the contained liquid shall be used to calculate the volatilization rate? [68.25(d)(1)(i)]

___ 3.10.3 Taken into account the actual surface characteristics, if the release would occur onto a surface that is not paved or smooth? [68.25(d)(1)(ii)]

___ 3.10.4 Determined the volatilization rate by accounting for the highest daily maximum temperature in the past three years, the temperature of the substance in the vessel, and the concentration of the substance if the liquid spilled is a mixture or solution? [68.25(d)(2)]

___ 3.10.5 Determined the rate of release to air from the volatilization rate of the liquid pool? [68.25(d)(3)]

___ 3.10.6 Determined the rate of release to air by using the methodology in the RMP Offsite Consequence Analysis Guidance, any other publicly available techniques hat account for the modeling conditions and are recognized by industry as applicable as part of current practices, or proprietary models that account for the modeling conditions may be used provided the owner or operator allows the implementing agency access to the model and describes model features and differences from publicly available models to local emergency planners upon request. [68.25(d)(3)]

3.11 For flammables, has the owner or operator:

___ 3.11.1 Assumed the quantity in a vessel(s) of flammable gas held as a gas or liquid under pressure or refrigerated gas released to an undiked area vaporizes resulting in a vapor cloud explosion? [68.25(e)]

___ 3.11.2 For refrigerated gas released to a contained area or liquids released below their atmospheric boiling point, assumed the quantity volatilized in 10 minutes results in a vapor cloud. [68.25(f)]

___ 3.11.3 Assumed a yield factor of 10% of the available energy is released in the explosion for determining the distance to the explosion endpoint, if the model used is based on TNT-equivalent methods? [68.25(e)]

___ 3.12 Has the owner or operator used the parameters defined in 68.22 to determine distance to the endpoints? [68.25(g)]

___ 3.13 Has the owner or operator determined the rate of release to air by using the methodology in the RMP Offsite Consequence Analysis Guidance, any other publicly available techniques that account for the modeling conditions and are recognized by industry as applicable as part of current practices, or proprietary models that account for the modeling conditions? [68.25(g)]

___ 3.13.1 Modeling technique used: _____

___ 3.14 Has the owner or operator ensured that any passive mitigation system considered for the worst case analysis is capable of withstanding the release event triggering the scenario and will still function as intended? [68.25(h)]

___ 3.15 Has the owner or operator considered selecting a scenario involving a smaller quantity handled at higher process temperature or pressure, or located closer to the boundary of the stationary source, if such a scenario would result in a greater distance to an endpoint beyond the stationary source boundary? [68.25(i)]

Hazard Assessment: Alternative Release Scenario Analysis [68.28]

___ 3.16 Has the owner or operator identified and analyzed at least one alternative release scenario for each regulated toxic substance held in covered processes and at least one alternative release scenario to represent all flammable substances held in covered processes? [68.28(a)]

	3.17	Has the owner or operator selected a scenario: [68.28(b)]
___	3.17.1	That is more likely to occur than the worst-case release scenario under 68.25? [68.28(b)(1)(i)]
___	3.17.2	That will reach an endpoint off-site, unless no such scenario exists? [68.28(b)(1)(ii)]
	3.18	Has the owner or operator considered release scenarios which included, but are not limited to, the following: [68.28(b)(2)]
___	3.18.1	Transfer hose releases due to splits or sudden hose uncoupling? [68.28(b)(2)(i)]
___	3.18.2	Process piping releases from failures at flanges, joints, welds, valves and valve seals, and drains or bleeds? [68.28(b)(2)(ii)]
___	3.18.3	Process vessel or pump releases due to cracks, seal failure, or drain, bleed, or plug failure? [68.28(b)(2)(iii)]
___	3.18.4	Vessel overfilling and spill, or overpressurization and venting through relief valves or rupture disks? [68.28(b)(2)(iv)]
___	3.18.5	Shipping container mishandling and breakage or puncturing leading to a spill? [68.28(b)(2)(v)]
___	3.19	Used the parameters defined in 68.22 to determine distance to the endpoints? [68.28(c)]
___	3.20	Has the owner or operator determined the rate of release to air by using the methodology in the RMP Offsite Consequence Analysis Guidance, any other publicly available techniques that account for the modeling conditions and are recognized by industry as applicable as part of current practices, or proprietary models that account for the modeling conditions? [68.28(c)]
___	3.21	Has the owner or operator ensured that the passive and active mitigation systems, if considered, are capable of withstanding the release event triggering the scenario and will be functional? [68.28(d)]
	3.22	Has the owner or operator considered the following factors in selecting the alternative release scenarios: [68.25(e)]
___	3.22.1	The five-year accident history provided in 68.42? [68.25(e)(1)]
___	3.22.2	Failure scenarios identified under 68.50 or 68.67? [68.25(e)(2)]

Hazard Assessment: Defining Off-site Impacts – Population [68.30]

Has the owner or operator:

___ 3.23 Estimated population that would be included in the distance to the endpoint in the RMP based on a circle with the point of release at the center? [68.30(a)]

___ 3.24 Identified the presence of institutions, parks and recreational areas, major commercial, office, and industrial buildings in the RMP? [68.30(b)]

___ 3.25 Used most recent Census data, or other updated information to estimate the population? [68.30(c)]

___ 3.26 Estimated the population to two significant digits? [68.30(d)]

Hazard Assessment: Defining Off-site Impacts – Environment [68.33]

Has the owner or operator:

___ 3.27 Identified environmental receptors that would be included in the distance to the endpoint based on a circle with the point of release at the center? [68.33(a)]

___ 3.28 Relied on information provided on local U.S.G.S. maps, or on any data source containing U.S.G.S. data to identify environmental receptors? [Source may have used LandView to obtain information] [68.33(b)]

Hazard Assessment: Review and Update [68.36]

Has the owner or operator:

___ 3.29 Reviewed and updated the off-site consequence analyses at least once every five years? [68.36(a)]

___ 3.30 Completed a revised analysis and submit a revised RMP within six months of a change in processes, quantities stored or handled, or any other aspect that might reasonably be expected on increase or decrease the distance to the endpoint by a factor of two or more? [68.36(b)]

Hazard Assessment: Documentation [68.39]

Has the owner or operator:

___ 3.31 For worst-case scenarios: a description of the vessel or pipeline and substance selected, assumptions and parameters used, the rationale for selection, and anticipated effect of the administrative controls and passive mitigation on the release quantity and rate? [68.39(a)]

___ 3.32 For alternative release scenarios: a description of the scenarios identified, assumptions and parameters used, the rationale for the selection of specific scenarios, and anticipated effect of the administrative controls and mitigation on the release quantity and rate?[68.39(b)]

___ 3.33 Documentation of estimated quantity released, release rate, and duration of release? [68.39(c)]

___ 3.34 Methodology used to determine distance to endpoints? [68.39(d)]

___ 3.35 Data used to estimate population and environmental receptors potentially affected? [68.39(e)]

Hazard Assessment: Five-Year Accident History [68.42]

___ 3.36 Has the owner or operator included all accidental releases from covered processes that resulted in deaths, injuries, or significant property damage on site, or known offsite deaths, injuries, evacuations, sheltering in place, property damage, or environmental damage? [68.42(a)]

3.37 Has the owner or operator reported the following information for each accidental release: [68.42(b)]

___ 3.37.1 Date, time, and approximate duration of the release? [68.42(b)(1)]

___ 3.37.2 Chemical(s) released? [68.42(b)(2)]

___ 3.37.3 Estimated quantity released in pounds and percentage weight in a mixture (toxics)? [68.42(b)(3)]

___ 3.37.4 NAICS code for the process? [68.42(b)(4)

___ 3.37.5 The type of release event and its source? [68.42(b)(5)]

___ 3.37.6 Weather conditions (if known)? [68.42(b)(6)]

___ 3.37.7 On-site impacts? [68.42(b)(7)]

___ 3.37.8 Known offsite impacts? [68.42(b)(8)]

___ 3.37.9 Initiating event and contributing factors (if known)? [68.42(b)(9)]

___ 3.37.10 Whether offsite responders were notified (if known)? [68.42(b)(10)]

___ 3.37.11 Operational or process changes that resulted from investigation of the release? [68.42(b)(11)]

Findings:

Documentation obtained to support Findings:

4. PROGRAM 2 PREVENTION PROGRAM (SUBPART C) [68.48 – 68.60]

Program 2 Prevention: Safety Information [68.48]

Has the owner or operator:

4.1 Compiled and maintained the following up-to-date safety information, related to the regulated substances, processes, and equipment: [68.48(a)]

___ 4.1.1 Material Safety Data Sheets (MSDS) that meet the requirements of the OSHA Hazard Communication Standard [29 CFR 1910.1200(g)]? [68.48(a)(1)]

___ 4.1.2 Maximum intended inventory of equipment in which the regulated substances are stored or processed? [68.48(a)(2)]

___ 4.1.3 Safe upper and lower temperatures, pressures, flows, and compositions? [68.48(a)(3)]

___ 4.1.4 Equipment specifications? [68.48(a)(4)]

___ 4.1.5 Codes and standards used to design, build, and operate the process? [68.48(a)(5)]

___ 4.2 Ensured the process is designed in compliance with recognized and generally accepted good engineering practices? [68.48(b)]

___ 4.3 Updated information if a major change has occurred that made the information inaccurate? [68.48(c)]

Program 2 Prevention: Hazard Review [68.50]

___ 4.4 Has the owner or operator conducted a review of the hazards associated with the regulated substances, processes, and procedures? [68.50(a)]

4.5 Did the review identify:

___ 4.5.1 The hazards associated with the process and regulated substances? [68.50(a)(1)]

___ 4.5.2 Opportunities for equipment malfunctions or human errors that could cause an accidental release? [68.50(a)(2)]

___ 4.5.3 The safeguards used or needed to control the hazards or prevent equipment malfunctions or human error? [68.50(a)(3)]

___ 4.5.4 Any steps used or needed to detect or monitor releases? [68.50(a)(4)]

Has the owner or operator:

___ 4.6 Determined by inspecting all equipment that the processes are designed, fabricated, and operated in accordance with applicable standards or rules, if designed to meet industry standards or Federal or state design rules? [68.50(b)]

___ 4.7 Documented the results of the review? [68.50(c)]

___ 4.8 Ensured that problems identified were resolved in a timely manner? [68.50(c)]

___ 4.9 Updated the review at least once every five years or whenever a major change in the processes occurred? [68.50(d)]

___ 4.10 Resolved all issues identified in the review before startup of the changed process? [68.50(d)]

Program 2 Prevention: Operating Procedures [68.52]

___ 4.11 Has the owner or operator prepared written operating procedures that provide clear instructions or steps for safely conducting activities associated with each covered process consistent with the safety information for that process? [68.52(a)]

4.12 Do the procedures address the following: [68.52(b)]

___ 4.12.1 Initial startup? [68.52(b)(1)]

___ 4.12.2 Normal operations? [68.52(b)(2)]

___ 4.12.3 Temporary operations? [68.52(b)(3)]

___ 4.12.4 Emergency shutdown and operations? [68.52(b)(4)]

___ 4.12.5 Normal shutdown? [68.52(b)(5)]

___ 4.12.6 Startup following a normal or emergency shutdown or a major change that requires a hazard review? [68.52(b)(6)]

___ 4.12.7 Consequences of deviations and steps required to correct or avoid deviations? [68.52(b)(7)]

___ 4.12.8 Equipment inspections? [68.52(b)(8)]

___ 4.13 Has the owner or operator ensured that the operating procedures have been updated, if necessary, whenever a major change occurred and prior to startup of the changed process? [68.52(c)]

Program 2 Prevention: Training [68.54]

Has the owner or operator:

___ 4.14 Certified that each employee presently operating a process, and each employee newly assigned to a covered process have been trained or tested competent in the operating procedures provided in § 68.52 that pertain to their duties? [68.54(a)]

___ 4.15 Provided refresher training at least every three years, or more often if necessary, to each employee operating a process, to ensure that the employee understands and adheres to the current operating procedures of the process? [68.54(b)]

___ 4.16 Determined, in consultation with the employees operating the process, the appropriate frequency of refresher training? [68.54(b)]

___ 4.17 Certified that each employee was trained in any updated or new procedures prior to startup of a process after a major change? [68.54(d)]

Program 2 Prevention: Maintenance [68.56]

Has the owner or operator:

___ 4.18 Prepared and implemented procedures to maintain the on-going mechanical integrity of the process equipment? [68.56(a)]

___ 4.19 Trained or caused to be trained each employee, involved in maintaining the on-going mechanical integrity of the process, in the hazards of the process, in how to avoid or correct unsafe conditions, and in the procedures applicable to the employee's job tasks? [68.56(b)]

___ 4.20 Has every maintenance contractor ensured that each contract maintenance employee is trained to perform the maintenance procedures developed? [68.56(c)]

___ 4.21 Has the owner or operator performed or caused to be performed inspections and tests on process equipment that follow recognized and generally accepted engineering practices? [68.56(d)]

Program 2 Prevention: Compliance Audits [68.58]

Has the owner or operator:

___ 4.22 Has the owner or operator certified that compliance audits are conducted at least every three years to verify that the procedures and practices are adequate and are being followed? [68.58(a)]

___ 4.23 Has compliance audit been conducted by at least one person knowledgeable in the process? [68.58(b)]

___ 4.24 Has the owner operator developed a report of the audits findings? [68.58(c)]

___ 4.25 Has the owner or operator promptly determined and documented an appropriate response to each of the findings of the audit and documented that deficiencies had been corrected? [68.58(d)]

___ 4.26 Has the owner or operator retained the two most recent compliance audit reports, unless more than five years old? [68.58(e)]

Program 2 Prevention: Incident Investigation [68.60]

Has the owner or operator:

___ 4.27 Has the owner or operator investigated each incident which resulted in, or could reasonably have resulted in a catastrophic release? [68.60(a)]

___ 4.28 Were all incident investigations initiated not later than 48 hours following the incident? [68.60(b)]

___ 4.29 Was a summary prepared at the conclusion of every investigation, which included: [68.60(c)]

___ 4.29.1 Date of incident? [68.60(c)(1)]

___ 4.29.2 Date investigation began? [68.60(c)(2)]

___ 4.29.3 A description of incident? [68.60(c)(3)]

___ 4.29.4 The factors that contributed to the incident? [68.60(c)(4)]

___ 4.29.5 Any recommendations resulting from the investigation? [68.60(c)(5)]

___ 4.30 Has the owner or operator promptly addressed and resolved the investigation findings and recommendations, and are the resolutions and corrective actions documented? [68.60(d)]

___ 4.31 Has the owner or operator reviewed the finding with all affected personnel whose job tasks are affected by the findings? [68.60(e)]

___ 4.32 Has the owner or operator retained investigation summaries for five years? [68.60(f)]

Findings:

Documentation obtained to support Findings:

5. PROGRAM 3 PREVENTION PROGRAM (SUBPART D) [68.65 – 68.87]

Program 3 Prevention: Process Safety Information [68.65]

___ 5.1 Has the owner or operator compiled written process safety information, which includes information pertaining to the hazards of the regulated substances used or produced by the process, information pertaining to the technology of the process, and information pertaining to the equipment in the process, before conducting any process hazard analysis required by the rule? [68.65(a)]

5.2 Does the process safety information contain the following for hazards of the substances: [68.65(b)]

___ 5.2.1 Toxicity information? [68.65(b)(1)]

___ 5.2.2 Permissible exposure limits? [68.65(b)(2)]

___ 5.2.3 Physical data? [68.65(b)(3)]

___ 5.2.4 Reactivity data? [68.65(b)(4)]

___ 5.2.5 Corrosivity data? [68.65(b)(5)]

___ 5.2.6 Thermal and chemical stability data? [68.65(b)(6)]

___ 5.2.7 Hazardous effects of inadvertent mixing of materials that could foreseeably occur? [68.65(b)(7)]

5.3 Does the process safety information contain the following for technology of the process: [68.65(c)(1)]

___ 5.3.1 A block flow diagram or simplified process flow diagram? [68.65(c)(1)(i)]

___ 5.3.2 Process chemistry? [68.65(c)(1)(ii)]

___ 5.3.3 Maximum intended inventory? [68.65(c)(1)(iii)]

___ 5.3.4 Safe upper and lower limits for such items as temperatures, pressures, flows or compositions? [68.65(c)(1)(iv)]

___ 5.3.5 An evaluation of the consequences of deviations? [68.65(c)(1)(v)]

5.4 Does the process safety information contain the following for the equipment in the process: [68.65(d)(1)]

___ 5.4.1 Materials of construction? [68.65(d)(1)(i)]

___ 5.4.2 Piping and instrument diagrams? [68.65(d)(1)(ii)]

___ 5.4.3 Electrical classification? [68.65(d)(1)(iii)]

___ 5.4.4 Relief system design and design basis? [68.65(d)(1)(iv)]

___ 5.4.5 Ventilation system design? [68.65(d)(1)(v)]

___ 5.4.6 Design codes and standards employed? [68.65(d)(1)(vi)]

___ 5.4.7 Material and energy balances for processes built after June 21, 1999? [68.65(d)(1)(vii)]

___ 5.4.8 Safety systems? [68.65(d)(1)(viii)]

___ 5.5 Has the owner or operator documented that equipment complies with recognized and generally accepted good engineering practices? [68.65(d)(2)]

___ 5.6 Has the owner or operator determined and documented that existing equipment, designed and constructed in accordance with codes, standards, or practices that are no longer in general use, is designed, maintained, inspected, tested, and operating in a safe manner? [68.65(d)(3)]

___ 5.7 Has the owner or operator performed an initial process hazard analysis (PHA), and has this analysis identified, evaluated, and controlled the hazards involved in the process? [68.67(a)]

___ 5.8 Has the owner or operator determined and documented the priority order for conducting PHAs, and was it based on an appropriate rationale? [68.67(a)]

5.9 Has the owner or operator used one or more of the following technologies: [68.67(b)]

___ 5.9.1 What-If? [68.67(b)(1)]

___ 5.9.2 Checklist? [68.67(b)(2)]

___ 5.9.3 What-If/Checklist? [68.67(b)(3)]

___ 5.9.4 Hazard and Operability Study (HAZOP)? [68.67(b)(4)]

___ 5.9.5 Failure Mode and Effects Analysis (FMEA)? [68.67(b)(5)]

___ 5.9.6 Fault Tree Analysis? [68.67(b)(6)]

___ 5.9.7 An appropriate equivalent methodology? [68.67(b)(7)]

5.10 Did the PHA address: [68.67(c)]

___ 5.10.1 The hazards of the process? [68.67(c)(1)]

___ 5.10.2 Identification of any incident which had a likely potential for catastrophic consequences? [68.67(c)(2)]

___ 5.10.3 Engineering and administrative controls applicable to hazards and interrelationships? [68.67(c)(3)]

___ 5.10.4 Consequences of failure of engineering and administrative controls? [68.67(c)(4)]

___ 5.10.5 Stationary source siting? [68.67(c)(5)]

___ 5.10.6 Human factors? [68.67(c)(6)]

___ 5.10.7 An evaluation of a range of the possible safety and health effects of failure of controls? [68.67(c)(7)]

___ 5.11 Was the PHA performed by a team with expertise in engineering and process operations and did the team include appropriate personnel? [68.67(d)]

___ 5.12 Has the owner or operator established a system to promptly address the team's findings and recommendations; assured that the recommendations are resolved in a timely manner and documented; documented what actions are to be taken; completed actions as soon as possible; developed a written schedule of when these actions are to be completed; and communicated the actions to operating, maintenance and other employees whose work assignments are in the process and who may be affected by the recommendations? [68.67(e)]

___ 5.13 Has the PHA been updated and revalidated by a team every five years after the completion of the initial PHA to assure that the PHA is consistent with the current process? [68.67(f)]

___ 5.14 Has the owner or operator retained PHAs and updates or revalidations for each process covered, as well as the resolution of recommendationsfor the life of the process? [68.67(g)]

Program 3 Prevention: Operating procedures [68.69]

___ 5.15 Has the owner or operator developed and implemented written operating procedures that provide instructions or steps for conducting activities associated with each covered process consistent with the safety information? [68.69(a)]

5.16 Do the procedures address the following: [68.69(a)]

___ 5.16.1 Steps for each operating phase? [68.69(a)(1)]

___ 5.16.1.1 Initial startup? [68.69(a)(1)(i)]

___ 5.16.1.2 Normal operations? [68.69(a)(1)(ii)]

___ 5.16.1.3 Temporary operations? [68.69(a)(1)(iii)]

___ 5.16.1.4 Emergency shutdown including the conditions under which emergency shutdown is required, and the assignment of shutdown responsibility to qualified operators to ensure that emergency shutdown is executed in a safe and timely manner? [68.69(a)(1)(iv)]

___ 5.16.1.5 Emergency operations? [68.69(a)(1)(v)]

___ 5.16.1.6 Normal shutdown? [68.69(a)(1)(vi)]

___ 5.16.1.7 Startup following a turnaround, or after emergency shutdown? [68.69(a)(1)(vii)]

5.16.2 Operating limits: [68.69(a)(2)]

___ 5.16.2.1 Consequences of deviations? [68.69(a)(2)(i)]

___ 5.16.2.2 Steps required to correct or avoid deviations? [68.69(a)(2)(ii)]

5.16.3 Safety and health considerations: [68.69(a)(3)]

___ 5.16.3.1 Properties of, and hazards presented by, the chemicals used in the process? [68.69(a)(3)(i)]

___ 5.16.3.2 Precautions necessary to prevent exposure, including engineering controls, administrative controls, and personal protective equipment? [68.69(a)(3)(ii)]

___ 5.16.3.3 Control measures to be taken if physical contact or airborne exposure occurs? [68.69(a)(3)(iii)]

___ 5.16.3.4 Quality control for raw materials and control of hazardous chemical inventory levels? [68.69(a)(3)(iv)]

___ 5.16.3.5 Any special or unique hazards? [68.69(a)(3)(v)]

___ 5.16.4 Safety systems and their functions? [68.69(a)(4)]

___ 5.17 Are operating procedures readily accessible to employees who are involved in a process? [68.69(b)]

___ 5.18 Has the owner or operator certified annually that the operating procedures are current and accurate and that procedures have been reviewed as often as necessary? [68.69(c)]

___ 5.19 Has the owner or operator developed and implemented safe work practices to provide for the control of hazards during specific operations, such as logout/tagout? [68.69(d)]

Program 3 Prevention: Training [68.71]

___ 5.20 Has each employee presently involved in operating a process, and each employee before being involved in operating a newly assigned process, been initially trained in an overview of the process and in the operating procedures? [68.71(a)(1)]

___ 5.21 Did initial training include emphasis on safety and health hazards, emergency operations including shutdown, and safe work practices applicable to the employee's job tasks?

[68.71(a)(2) allows in lieu of initial training for those employees already involved in operating a process on June 21, 1999 an owner or operator may certify in writing that the employee has the required knowledge, skills, and abilities to safely carry out the duties and responsibilities as specified in the operating procedures] [68.71(a)(1)]

___ 5.22 Has refresher training been provided at least every three years, or more often if necessary, to each employee involved in operating a process to assure that the employee understands and adheres to the current operating procedures of the process? [68.71(b)]

___ 5.23 Has owner or operator ascertained and documented in a record that each employee involved in operating a process has received and understood the training required? [68.71(c)]

___ 5.24 Does the prepared record contain the identity of the employee, the date of training, and the means used to verify that the employee understood the training? [68.71(c)]

Program 3 Prevention: Mechanical integrity [68.73]

___ 5.25 Has the owner or operator established and implemented written procedures to maintain the on-going integrity of the process equipment listed in 68.73(a)? [68.73(b)]

___ 5.26 Has the owner or operator trained each employee involved in maintaining the on-going integrity of process equipment? [68.73(c)]

Has the owner or operator:

___ 5.27 Performed inspections and tests on process equipment? [68.73(d)(1)]

___ 5.28 Followed recognized and generally accepted good engineering practices for inspection and testing procedures? [68.73(d)(2)]

___ 5.29 Ensured the frequency of inspections and tests of process equipment is consistent with applicable manufacturers' recommendations, good engineering practices, and prior operating experience? [68.73(d)(3)]

___ 5.30 Documented each inspection and test that had been performed on process equipment, which identifies the date of the inspection or test, the name of the person who performed the inspection or test, the serial number or other identifier of the equipment on which the inspection or test was performed, a description of the inspection or test performed, and the results of the inspection or test? [68.73(d)(4)]

___ 5.31 Corrected deficiencies in equipment that were outside acceptable limits defined by the process safety information before further use or in a safe and timely manner when necessary means were taken to assure safe operation? [68.73(e)]

___ 5.32 Assured that equipment as it was fabricated is suitable for the process application for which it will be used in the construction of new plants and equipment? [68.73(f)(1)]

___ 5.33 Performed appropriate checks and inspections to assure that equipment was installed properly and consistent with design specifications and the manufacturer's instructions? [68.73(f)(2)]

___ 5.34 Assured that maintenance materials, spare parts and equipment were suitable for the process application for which they would be used? [68.73(f)(3)]

Program 3 Prevention: Management of change [68.75]

___ 5.35 Has the owner or operator established and implemented writtenprocedures to manage changes to process chemicals, technology, equipment, and procedures, and changes to stationary sources that affect a covered process? [68.75(a)]

5.36 Do procedures assure that the following consideration are addressed prior to any change: [68.75(b)]

___ 5.36.1 The technical basis for the proposed change? [68.75(b)(1)]

___ 5.36.2 Impact of change on safety and health? [68.75(b)(2)]

___ 5.36.3 Modifications to operating procedures? [68.75(b)(3)]

___ 5.36.4 Necessary time period for the change? [68.75(b)(4)]

___ 5.36.5 Authorization requirements for the proposed change? [68.75(b)(5)]

___ 5.37 Were employees, involved in operating a process and maintenance, and contract employees, whose job tasks would be affected by a change in the process, informed of, and trained in, the change prior to start-up of the process or affected part of the process? [68.75(c)]

___ 5.38 If a change resulted in a change in the process safety information, was such information updated accordingly? [68.75(d)]

___ 5.39 If a change resulted in a change in the operating procedures or practices, had such procedures or practices been updated accordingly? [68.75(e)]

Program 3 Prevention: Pre-startup review [68.77]

___ 5.40 Has the owner or operator performed a pre-startup safety review for new stationary sources and for modified stationary sources when the modification was significant enough to require a change in the process safety information? [68.77(a)]

5.41 Did the pre-startup safety review confirm that prior to the introduction of regulated substances to a process: [68.77(b)]

___ 5.41.1 Construction and equipment was in accordance with design specifications? [68.77(b)(1)]

___ 5.41.2 Safety, operating, maintenance, and emergency procedures were in place and were adequate? [68.77(b)(2)]

___ 5.41.3 For new stationary sources, a process hazard analysis had been performed and recommendations had been resolved or implemented before startup? [68.77(b)(3)]

___ 5.41.4 Modified stationary sources meet the requirements contained in management of change? [68.77(b)(3)]

___ 5.41.5 Training of each employee involved in operating a process had been completed? [68.77(b)(4)]

Program 3 Prevention: Compliance audits [68.79]

___ 5.42 Has the owner or operator certified that the stationary source has evaluated compliance with the provisions of the prevention program at least every three years to verify that the developed procedures and practices are adequate and are being followed? [68.79(a)]

___ 5.43 Has the audit been conducted by at least one person knowledgeable in the process? [68.79(b)]

___ 5.44 Are the audits findings documented in report? [68.79(c)]

___ 5.45 Has the owner or operator promptly determined and documented an appropriate response to each of the findings of the audit and documented that deficiencies had been corrected? [68.79(d)]

___ 5.46 Has the owner or operator retained the two most recent compliance audit reports? [68.79(e)]

Program 3 Prevention: Incident investigation [68.81]

___ 5.47 Has the owner or operator investigated each incident which resulted in, or could reasonably have resulted in a catastrophic release of a regulated substance? [68.81(a)]

___ 5.48 Were all incident investigations initiated not later than 48 hours following the incident? [68.81(b)]

___ 5.49 Was an incident investigation team established and did it consist of at least one person knowledgeable in the process involved, including a contract employee if the incident involved work of the contractor, and other persons with appropriate knowledge and experience to thoroughly investigate and analyze the incident? [68.81(c)]

___ 5.50 Was a report prepared at the conclusion of every investigation? [68.81(d)]

5.51 Does every report include: [68.81(d)]

___ 5.51.1 Date of incident? [68.81(d)(1)]

___ 5.51.2 Date investigation began? [68.81(d)(2)]

___ 5.51.3 A description of the incident? [68.81(d)(3)]

___ 5.51.4 The factors that contributed to the incident? [68.81(d)(4)]

___ 5.51.5 Any recommendations resulting from the investigation? [68.81(d)(5)]

___ 5.52 Has the owner or operator established a system to address and resolve the report findings and recommendations, and are the resolutions and corrective actions documented? [68.81(e)]

___ 5.53 Was the report reviewed with all affected personnel whose job tasks are relevant to the incident findings including contract employees where applicable? [68.81(f)]

Program 3 Prevention: Employee participation [68.83]

Has the owner or operator:

___ 5.54 Developed a written plan of action regarding the implementation of the employee participation required by this section? [68.83(a)]

___ 5.55 Consulted with employees and their representatives on the conduct and development of process hazards analyses and on the development of the other elements of process safety management in chemical accident prevention provisions? [68.83(b)]

___ 5.56 Provided to employees and their representatives access to process hazard analyses and to all other information required to be developed under chemical accident prevention rule? [68.83(c)]

Program 3 Prevention: Hot work permit [68.85]

___ 5.57 Has the owner or operator issued a hot work permit for each hot work operation conducted on or near a covered process? [68.85(a)]

___ 5.58 Does the permit document that the fire prevention and protection requirements in 29 CFR 1910.252(a) have been implemented prior to beginning the hot work operations? [68.85(b)]

___ 5.59 Does the permit indicate the date(s) authorized for hot work and the object on which hot works to be performed? [68.85(b)]

___ 5.60 Are the permits being kept on file until completion of the hot work operations? [68.85(b)]

Program 3 Prevention: Contractors [68.87]

Has the owner or operator:

___ 5.61 Obtained and evaluated information regarding the contract owner or operator's safety performance and programs when selecting a contractor? [68.87(b)(1)]

___ 5.62 Informed contract owner or operator of the known potential fire, explosion, or toxic release hazards related to the contractor's work and the process? [68.87(b)(2)]

___ 5.63 Explained to the contract owner or operator the applicable provisions of emergency response program? [68.87(b)(3)]

___ 5.64 Developed and implemented safe work practices consistent with §68.69(d), to control the entrance, presence, and exit of the contract owner or operator and contract employees in covered process areas? [68.87(b)(4)]

Findings:

Documentation obtained to support Findings:

6. EMERGENCY RESPONSE (SUBPART E) [68.90 – 68.95]

Emergency Response: Applicability [68.90]

___ 6.1 Has the owner or operator of a stationary source developed an emergency response program, unless the source need not comply? [68.90(a)]

If the employees of the stationary source will not respond to accidental releases of regulated substances:

___ 6.2 For stationary sources with any regulated toxic substance held in a process above the threshold quantity, is the stationary source included in the community emergency response plan developed under EPCRA? [68.90(b)(1)]

___ 6.3 For stationary sources with only regulated flammable substances held in a process above the threshold quantity, has the owner or operator coordinated response actions with the local fire department? [68.90(b)(2)]

___ 6.4 Are appropriate mechanisms in place to notify emergency responders when there is a need for a response? [68.90(b)(3)]

Emergency Response Program [68.95]

___ 6.5 Has the owner or operator developed and implemented an emergency response program for the purpose of protecting public health and the environment? [68.95(a)]

6.6 Does the program include the following elements: [68.95(a)]

___ 6.6.1 An emergency response plan which is maintained at the stationary source? [68.95(a)(1)]

___ 6.6.2 Procedures for the use of emergency response equipment and for its inspection, testing, and maintenance? [68.95(a)(2)]

___ 6.6.3 Training for all employees in relevant procedures? [68.95(a)(3)]

___ 6.6.4 Procedures to review and update, as appropriate, the emergency response plan to reflect changes at the stationary source and ensure that employees are informed of changes? [68.95(a)(4)]

6.7 Does the emergency response plan contain the following elements: [68.95(a)(1)]

___ 6.7.1 Procedures for informing the public and local emergency response agencies about accidental releases? [68.95(a)(1)(i)]

___ 6.7.2 Documentation of proper first-aid and emergency medical treatment necessary to treat accidental human exposures? [68.95(a)(1)(ii)]

___ 6.7.3 Procedures and measures for emergency response after an accidental release of a regulated substance? [68.95(a)(1)(iii)]

___ 6.8 Did the owner or operator use a written plan that complies with other Federal contingency plan regulations or is consistent with the approach in the National Response Team's Integrated Contingency Plan Guidance (''One Plan'')? If so, does the plan include the elements provided in paragraph (a) of 68.95, and also complies with paragraph (c) of 68.95? [68.95(b)]

___ 6.9 Has the emergency response plan been coordinated with the community emergency response plan developed under EPCRA? [68.95(c)]

___ 6.10 Has the owner or operator provided to the local emergency response officials information necessary for developing and implementing the community emergency response plan requested by the LEPC or emergency response officials? [68.95(c)]

Findings:

Documentation obtained to support Findings:

Annex E: Risk Management Program and OSHA Process Safety Management: List of Regulated Substances (by chemical name)

CAS	Chemical Name	RMP Threshold Quantity (TQ) lbs	RMP Threshold Corrected to Gals	PSM Threshold Quantity (TQ) lbs	Toxic Endpoint
106-98-9	1-butene	10,000	**		
97-00-7	1-chloro-2,4-dinitrobenzene			5,000	
590-21-6	1-chloropropylene {1-propene, 1-chloro-}	10,000	**		
109-67-1	1-pentene	10,000	1,869		
57-14-7	1,1-dimethylhydrazine {Dimethylhydrazine} {Hydrazine, 1,1-dimethyl-}	15,000	2,271	1,000	0.012
106-99-0	1,3-butadiene	10,000	1,930		
504-60-9	1,3-pentadiene	10,000	1,753		
107-01-7	2-butene	10,000	**		
590-18-1	2-butene-cis	10,000	1,929		
624-64-6	2-butene-trans {2-butene, (E)}	10,000	1,983		
557-98-2	2-chloropropylene {1-propene, 2-chloro-}	10,000	**		
563-46-2	2-methyl-1-butene	10,000	1,844		
115-11-7	2-methylpropene {1-propene, 2-methyl-}	10,000	2,031		
646-04-8	2-pentene (E)-	10,000	1,827		
627-20-3	2-pentene (Z)-	10,000	1,849		
463-82-1	2,2-dimethylpropane {Propane, 2,2-dimethyl-}	10,000	2,028		
97-02-9	2,4-dinitroaniline			5,000	
563-45-1	3-methyl-1-butene	10,000	1,911		
75-07-0	Acetaldehyde	10,000	1,536	2,500	
74-86-2	Acetylene {Ethyne}	10,000	1,955		
107-02-8	Acrolein {2-propenal}	5,000	714	150	0.0011
107-13-1	Acrylonitrile {2-propenenitrile}	20,000	2,994		0.076
814-68-6	Acrylyl Chloride {2-propenoyl Chloride}	5,000	527	250	0.0009
Varies	Alkylaluminums			5,000	
107-18-6	Allyl Alcohol {2-propen-1-ol}	15,000	2,105		0.036
107-05-1	Allyl Chloride	1,000			
107-11-9	Allylamine {2-propen-1-amine}	10,000	1,577	1,000	0.0032
7664-41-7	Ammonia (Anhydrous)	10,000	1,758	10,000	0.14
7664-41-7	Ammonia (>=20% for RMP) (>44% for PSM)	20,000	2,723	15,000	0.14
7790-98-9	Ammonium Perchlorate			7,500	
7787-36-2	Ammonium Permanganate			7,500	

CAS	Chemical Name	RMP Threshold Quantity (TQ) lbs	RMP Threshold Corrected to Gals	PSM Threshold Quantity (TQ) lbs	Toxic Endpoint
7784-34-1	Arsenous Trichloride	15,000	836		0.01
7784-42-1	Arsine {Arsenic Hydride}	1,000	45	100	0.0019
10294-34-5	Boron Trichloride {Borane, Trichloro-}	5,000	444	2,500	0.01
7637-07-2	Boron Triflouride {Borane, Trifluoro-}	5,000	374	250	0.028
353-42-4	Boron Triflouride Compound with Methyl Ether (1:1) {Boron, Trifluoro[oxybis[methane]-,T-4}	15,000	1,451		0.023
7726-95-6	Bromine	10,000	386	1,500	0.0065
13863-41-7	Bromine Chloride			1,500	
7787-71-5	Bromine Trifluoride			15,000	
7789-30-2	Bromine Pentafluoride			2,500	
598-73-2	Bromotrifluorethylene {Ethene, Bromotrifluoro-}	10,000	**		
106-97-8	Butane	10,000	1,997		
25167-67-3	Butene	10,000	2,014		
75-91-2	Butyl Hydroperoxide (Tertiary)			5,000	
614-45-9	Butyl Perbenzoate			7,500	
75-15-0	Carbon Disulfide	20,000	1,897		0.16
463-58-1	Carbon Oxysulfide {Carbon Oxide Sulfide (Cos)} {Carbonyl Sulfide}	10,000	571		
353-44-5	Carbonyl Fluoride			2,500	
9004-70-0	Cellulose Nitrate (>12.6% Nitrogen for PSM)			2,500	
7782-50-5	Chlorine	2,500	210	1,500	0.0087
10049-04-4	Chlorine Dioxide {Chlorine Oxide (ClO2)}	1,000	75	1,000	0.0028
7791-21-1	Chlorine Monoxide {Chlorine Oxide}	10,000			
13637-63-3	Chlorine Pentrafluoride			1,000	
7790-91-2	Chlorine Trifluoride			1,000	
96-06-2	Chlorodiethylaluminum {Diethylaluminum Chloride}			5,000	
67-66-3	Chloroform {Methane, Trichloro-}	20,000	1,616		0.49
542-88-1	Chloromethyl Ether {Bis(chloromethyl) Ether} {Methane, Oxybis[chloro-} {Dichloromethyl Ether}	1,000	91	100	0.00025
107-30-2	Chloromethyl Methyl Ether {Methane, Chloromethoxy-}	5,000	565	500	0.0018
76-06-2	Chloropicrin			500	
None	Chloropicrin and Methyl Bromide Mixture			1,500	
None	Chloropicrin and Methyl Chloride Mixture			1,500	
4170-30-3	Crotonaldehyde {2-butenal}	20,000	2,833		0.029
123-73-9	Crotonaldehyde, (E)- {2-butenal, (E)-}	20,000	2,810		0.029
80-15-9	Cumene Hydroperoxide			5,000	
460-19-5	Cyanogen {Ethanedinitrile}	10,000	1,256	2,500	
506-77-4	Cyanogen Chloride	10,000	980	500	0.03
675-14-9	Cyanuric Fluoride			100	
108-91-8	Cyclohexylamine {Cyclohexanamine}	15,000	2,079		0.16

CAS	Chemical Name	RMP Threshold Quantity (TQ) lbs	RMP Threshold Corrected to Gals	PSM Threshold Quantity (TQ) lbs	Toxic Endpoint
75-19-4	Cyclopropane	10,000	1,773		
110-22-5	Diacetyl Peroxide (>70% for PSM)			5,000	
334-88-3	Diazomethane			500	
94-36-0	Dibenzoyl Peroxide			7,500	
19287-45-7	Diborane {Diborane (6)}	2,500	**	100	0.0011
110-05-4	Dibutyl Peroxide (Tertiary)		5,000		
4109-96-0	Dichlorosilane {Silane, Dichloro-}	10,000	999	2,500	
557-20-0	Diethylzinc			10,000	
75-37-6	Difluoroethane {Ethane, 1,1-difluoro-}	10,000	1,261		
105-64-6	Diisopropyl Peroxydicarbonate			7,500	
105-74-8	Dilauroyl Peroxide			7,500	
124-40-3	Dimethylamine {Methanamine, N-methyl-}	10,000	1,786	2,500	
75-78-5	Dimethyldichlorosilane {Silane, Dichlorodimethyl-}	5,000	545	1,000	0.026
106-89-8	Epichlorohydrin {Oxirane, (Chloromethyl)-}	20,000	1,331		0.076
74-84-0	Ethane	10,000	2,195		
107-00-6	Ethyl Acetylene {1-butyne}	10,000	1,767		
75-00-3	Ethyl Chloride {Chloroethane} {Ethane, Chloro-}	10,000	1,323		
60-29-7	Ethyl Ether {Ethane, 1,1'-oxybis-}	10,000	1,678		
75-08-1	Ethyl Mercaptan {Ethanethiol}	10,000	1,451		
1338-23-4	Ethyl Methyl Ketone Peroxide			5,000	
109-95-5	Ethyl Nitrite {Nitrous Acid, Ethyl Ester}	10,000	1,331	5,000	
75-04-7	Ethylamine {Monoethylamine} (Ethanamine}	10,000	1,762	7,500	
74-85-1	Ethylene {Ethene}	10,000	2,106		
371-62-0	Ethylene Fluorohydrin			100	
75-21-8	Ethylene Oxide {Oxirane}	10,000	1,379	5,000	0.09
107-15-3	Ethylenediamine {1,2-ethanediamine}	20,000	2,669		0.49
151-56-4	Ethyleneimine {Aziridine}	10,000	1,440	1,000	0.018
7782-41-4	Fluorine	1,000	79	1,000	0.0039
50-00-0	Formaldehyde (Solution)	15,000	1,591	1,000	0.012
110-00-9	Furan	5,000	639	500	0.0012
684-16-2	Hexafluoroacetone			5,000	
302-01-2	Hydrazine	15,000	1,918		0.011
7647-01-0	Hydrochloric Acid (>=37% for RMP)	15,000	1,510		0.03
74-90-8	Hydrocyanic Acid {Hydrogen Cyanide}	2,500	434	1,000	0.011
1333-74-0	Hydrogen	10,000	**		
10035-10-6	Hydrogen Bromide			5,000	
7647-01-0	Hydrogen Chloride (Anhydrous for CAA 112(r) RMP and PSM) {Hydrochloric Acid}	5,000	503	5,000	0.03
7664-39-3	Hydrogen Fluoride/hydrofluoric Acid (>=50% for RMP) {Hydrofluoric Acid}	1,000	121	1,000	0.016

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7722-84-1	Hydrogen Peroxide (>= 52% for PSM)			7,500	
7783-07-5	Hydrogen Selenide	500	28	150	0.00066
7783-06-4	Hydrogen Sulfide	10,000	1,308	1,500	0.042
7803-49-8	Hyroxylamine		2,500		
13463-40-6	Iron, Pentacarbonyl- {Iron Carbonyl (Fe(co)5), (Tb-5-11)-}	2,500	206	250	0.00044
75-28-5	Isobutane {Propane, 2-methyl}	10,000	2,151		
78-82-0	Isobutyronitrile {Propanenitrile, 2-methyl-}	20,000	3,149		0.14
78-78-4	Isopentane {Butane, 2-methyl-}	10,000	1,933		
78-79-5	Isoprene {1,3-butadiene, 2-methyl-}	10,000	1,760		
75-31-0	Isopropylamine {2-propanamine}	10,000	1,734	5,000	
75-29-6	Isopropyl Chloride {Propane, 2-chloro-}	10,000	1,390		
108-23-6	Isopropyl Chloroformate {Carbonochloridic Acid, 1-methylethyl Ester}	15,000	1,664		0.1
463-51-4	Ketene			100	
78-85-3	Methacrylaldehyde			1,000	
126-98-7	Methacrylonitrile {2-propenenitrile, 2-methyl-} {Methylacrylonitrile}	10,000	1,497	250	0.0027
920-46-7	Methacryloyl Chloride			150	
74-82-8	Methane	10,000	2,853		
74-83-9	Methyl Bromide			2,500	
74-87-3	Methyl Chloride {Chloromethane} {Methane, Chloro-}	10,000	1,202	15,000	0.82
79-22-1	Methyl Chloroformate {Carbonochloridic Acid, Methylester} {Methyl Chlorocarbonate}	5,000	489	500	0.0019
115-10-6	Methyl Ether {Methane, Oxybis-}	10,000	1,655		
1338-23-4	Methyl Ethyl Ketone Peroxide (>60% for PSM)			5,000	
453-18-9	Methyl Fluoroacetate			100	
421-20-5	Methyl Florosulfate			100	
107-31-3	Methyl Formate {Formic Acid, Methyl Ester}	10,000	1,235		
60-34-4	Methyl Hydrazine	15,000	2,066	100	0.0094
74-88-4	Methyl Iodide			7,500	
624-83-9	Methyl Isocyanate {Methane, Isocyanato-}	10,000	1,248	250	0.0012
74-93-1	Methyl Mercaptan {Methanethiol} {Thiomethanol}	10,000	1,343	5,000	0.049
556-64-9	Methyl Thiocyanate {Thiocyanic Acid, Methyl Ester}	20,000	2,244		0.085
79-84-4	Methyl Vinyl Ketone			100	
74-89-5	Methylamine {Methanamine} {Monomethylamine}	10,000	1,729	1,000	
75-79-6	Methyltrichlorosilane {Silane, Trichloromethyl-}	5,000	472		0.018
13463-39-3	Nickel Carbonyl {Nickel Tetracarbonyl}	1,000	91	150	0.00067
7697-37-2	Nitric Acid (>=80% for RMP) (>=94.5% for PSM)	15,000	1,196	500	0.026
10102-43-9	Nitric Oxide {Nitrogen Oxide (No)}	10,000	943	250	0.031
100-01-6	Nitroaniline {Para Nitroaniline}			5,000	

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7783-54-2	Nitrogen Trifluoride			5,000	
10102-44-0	Nitrogen Oxides (NO, NO2, N2O4, N2O3)			250	
10544-72-6	Nitrogen Tetroxide {Nitrogen Peroxide}			250	
10544-73-7	Nitrogen Trioxide			250	
10102-44-0	Nitrogen Dioxide			250	
75-52-5	Nitromethane			2,500	
8014-95-7	Oleum (Fuming Sulfuric Acid) (65-80% for PSM) {Sulfuric Acid, with Sulfur Trioxide}	10,000	608	1,000	0.01
20816-12-0	Osmium Tetroxide			100	
7783-41-7	Oxygen Difluoride {Fluorine Monoxide}			100	
10028-15-6	Ozone			100	
19624-22-7	Pentaborane			100	
109-66-0	Pentane	10,000	1,914		
79-21-0	Peracetic Acid (>60% Acetic Acid for PSM) {Ethaneperoxoic Acid} {Peroxyacetic Acid}	10,000	977		0.0045
7601-90-3	Perchloric Acid (>60% for PSM)			5,000	
594-42-3	Perchloromethylmercaptan {Methanesulfenyl Chloride, Trichloro-}	10,000	707	150	0.0076
7616-94-6	Perchloryl Fluoride			5,000	
75-44-5	Phosgene {Carbonic Dichloride} {Carbonyl Chloride}	500	42	100	0.00081
7803-51-2	Phosphine {Hydrogen Phosphide}	5,000	803	100	0.0035
10025-87-3	Phosphorus Oxychloride {Phosphoryl Chloride}	5,000	364	1,000	0.003
7719-12-2	Phosphorus Trichloride {Phosphorous Trichloride}	15,000	1,142	1,000	0.028
110-89-4	Piperidine	15,000	2,085		0.022
463-49-0	Propadiene {1,2-propadiene}	10,000	**		
74-98-6	Propane	10,000	2,381		
106-96-7	Propargyl Bromide {3-bromopropyne}			100	
107-12-0	Propionitrile {Ethyl Cyanide} {Propanenitrile)	10,000	1,494		0.0037
627-13-4	Propyl Nitrate			2,500	
109-61-5	Propyl Chloroformate {Carbonochloridic Acid, Propylester}	15,000	1,649		0.01
115-07-1	Propylene {1-propene}	10,000	1,968		
75-56-9	Propylene oxide {oxirane, methyl-}	10,000	1,395		0.59
75-55-8	Propyleneimine {Aziridine, 2-methyl}	10,000	1,485		0.12
74-99-7	Propyne {1-propyne}	10,000	1,697		
107-44-8	Sarin			100	
7783-79-1	Selenium Hexafluoride			1,000	
7803-62-5	Silane	10,000	1,762		
7803-52-3	Stibine {Antimony Hydride}			500	
7446-09-5	Sulfur Dioxide (Anhydrous for RMP)	5,000	418		0.0078
5714-22-7	Sulfur Pentafluoride			250	

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7783-60-0	Sulfur Tetraflouride {Sulfur Fluoride, (Sf4) (T-4)-}	2,500	154	250	0.0092
7446-11-9	Sulfur Trioxide {Sulfuric Anhydride}	10,000	624	1,000	0.01
7783-80-4	Tellurium Hexafluoride			250	
116-14-3	Tetrafluoroethylene {Ethene, Tetrafluoro-}	10,000	**	5,000	
10036-47-2	Tetrafluorohydrazine			5,000	
75-74-1	Tetramethyllead {Plumbane, Tetramethyl-}	10,000	601	1,000	0.004
75-76-3	Tetramethylsilane {Silane, Tetramethyl-}	10,000	1,849		
509-14-8	Tetranitromethane {Methane, Tetranitro-}	10,000	732		0.004
7719-09-7	Thionyl Chloride			250	
7550-45-0	Titanium Tetrachloride {Titanium Chloride (Ticl4)(T-4)}	2,500	174		0.02
584-84-9	Toluene 2,4-diisocyanate {Benzene, 2,4-diisocyanato-1-methyl-}	10,000	979		0.007
91-08-7	Toluene 2,6-diisocyanate {Benzene, 1,3-diisocyanato-2-methyl-}	10,000	978		0.007
26471-62-5	Toluene Diisocyanate (Unspecified Isomer) {Benzene, 1,3-diisocyanatomethyl-}	10,000	1,007		0.007
1558-25-4	Trichloro(chloromethyl)silane			100	
27137-85-5	Trichloro(dichlorophenyl)silane			2,500	
10025-78-2	Trichlorosilane {Silane, Trichloro-}	10,000	892	5,000	
79-38-9	Trifluorochloroethylene {Ethene, Chlorotrifluoro-}	10,000	917	10,000	
75-50-3	Trimethylamine {Methanamine, N,n-dimethyl-}	10,000	1,893		
75-77-4	Trimethylchlorosilane {Silane, Chlorotrimethyl-}	10,000	1,403		0.05
2487-90-3	Trimethyoxysilane			1,500	
108-05-4	Vinyl Acetate Monomer {Acetic Acid Ethenyl Ester}	15,000	1,929		0.26
689-97-4	Vinyl Acetylene {1-buten-3-yne}	10,000	1,689		
75-01-4	Vinyl Chloride {Ethene, Chloro-}	10,000	1,237		
109-92-2	Vinyl Ethyl Ether {Ethene, Ethoxy-}	10,000	1,579		
75-02-5	Vinyl Fluoride {Ethene, Fluoro-}	10,000	1,695		
107-25-5	Vinyl Methyl Ether {Ethene, Methoxy-}	10,000	1,542		
75-35-4	Vinylidene Chloride {Ethene, 1,1-dichloro-} {1,1-dichlorethylene}	10,000	990		
75-38-7	Vinylidene Fluoride {Ethene, 1,1-difluoro-}	10,000	**		

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