ENVIRONMENTAL PROTECTION

ENVIRONMENTAL REGULATION

Toxic Catastrophe Prevention Act Program

Proposed Readoption with Amendments: N.J.A.C. 7:31

Proposed Repeal: N.J.A.C. 7:31-3

Authorized By: Lisa P. Jackson, Commissioner,

Department of Environmental Protection

Authority: N.J.S.A. 13:1B-1 et seq., 13:1D-1 et seq., 13:1K-19 et seq., 13:1D-

125 et seg., 26:2C-1 et seg.

Calendar Reference: See Summary below for explanation of exception to calendar

requirement.

DEP Docket Number: 14-08-08/660 Proposal Number: PRN 2008-308

A public hearing concerning this proposal will be held on:

Date: Tuesday, October 14, 2008

Time: 9:00 A.M. to noon or close of comments, whichever occurs first

Location: New Jersey Department of Environmental Protection

401 E. State Street, First Floor Public Hearing Room

Trenton, New Jersey 08625

Submit written comments by November 14, 2008 to:

Leslie W. Ledogar, Esquire

Attention: DEP Docket Number 14-08-08/660

Office of Legal Affairs

New Jersey Department of Environmental Protection

P.O. Box 402

Trenton, New Jersey 08625-0402

The Department of Environmental Protection (Department) requests that commenters submit comments on disk or CD as well as on paper. Submittal of a disk or CD is not a requirement. Submittals on disk or CD must not be access-restricted (locked or read-only) in order to facilitate use by the Department of the electronically submitted comments. The Department prefers Microsoft Word 6.0 or above. MacintoshTM formats should not be used. Each comment should be identified by the applicable N.J.A.C. citation with the commenter's name and affiliation following the comment.

This rule proposal document can be viewed or downloaded from the Department's web page at www.state.nj.us/dep.

The agency proposal follows:

Summary

As the Department has provided a 60-day comment period on this notice of proposal, this notice is exempt from the rulemaking calendar requirement pursuant to N.J.A.C. 1:30-3.3(a)5.

The Department of Environmental Protection (Department) is proposing to readopt, with amendments, its Toxic Catastrophe Prevention Act rules (TCPA rules), N.J.A.C. 7:31. These rules were scheduled to sunset on July 14, 2008, in accordance with N.J.S.A. 52:14B-5.1. The Governor granted a 30-day extension of the sunset date to August 13, 2008. The expiration date was extended by 180 days to February 9, 2009, pursuant to N.J.S.A. 52:14B-5.1c, as a result of the timely filing of this proposal to readopt the rules. The Department has reviewed these rules and determined that the readoption of the TCPA rules is necessary and appropriate for the continued implementation of the State mandated accidental release prevention program.

TCPA Background

The Toxic Catastrophe Prevention Act (the Act), N.J.S.A. 13:1K-19 et seq., was enacted in 1985 and became effective in January 1986. The goal of the Act is to protect the public from catastrophic accidental releases of extraordinarily hazardous substances (EHSs) into the environment. The Act requires owners or operators of facilities having EHSs at certain threshold quantities to anticipate the circumstances that could result in accidental EHS releases and to take precautionary or preemptive actions to prevent such releases. The impetus for the Act was the infamous December 1984 accidental release of methyl isocyanate at a plant in Bhopal, India that resulted in the deaths of 2,500 people. Methyl isocyanate was one of 11 compounds on the original EHS list identified in the Act. The Act mandated the Department to propose additional substances within 18 months. In 1988, when the Department adopted the original rules at N.J.A.C. 7:31, it added 93 toxic chemicals to the EHS list. The EHS list was further expanded in 1998 when the Department incorporated into its rules by reference most of the flammable substances regulated by the United States Environmental Protection Agency (USEPA) under the Federal Accidental Release Prevention (ARP) program mandated by Section 112(r) of the Clean Air Act Amendments of 1990.

In its 1998 readoption of the TCPA rules, the Department also incorporated by reference with some amendments the provisions of the Federal ARP rules at 40 CFR 68 (see 30 N.J.R. 2728(a)). Adopting the Federal ARP rules enabled the Department to seek and obtain Federal authorization to implement the TCPA program in New Jersey in lieu of the Federal ARP program. Public notice of USEPA's delegation of the Federal ARP program to the Department was published in the Federal Register on July 3, 2001 (see 66 Fed. Reg. 35083) and became effective on September 4, 2001.

The TCPA rules at N.J.A.C. 7:31-1.4(a) automatically incorporate future amendments to the Federal ARP rules into the State TCPA rules unless the Federal rules conflict with, and are less stringent than, the State rules. Since the 1998 readoption of the TCPA rules, the Federal rules were amended on May 26, 1999 to include revisions to the worst case scenario for flammable gases at 40 CFR 68.25 (see 64 Fed. Reg. 28700). The Federal rules at 40 CFR 68.3 were amended on March 13, 2000 to add a definition of retail facility and at 40 CFR 68.126 to exclude flammable gases used as a fuel or held for sale as a fuel at a retail facility (see 65 Fed. Reg. 13250). Additionally, 40 CFR 68.130, which contains the list of regulated substances, was amended to reflect the exclusions set forth at 40 CFR 68.126. Finally, on April 9, 2004, the

Federal rules at 40 CFR 68.42, 150, 155, 160, 190, and 195 were amended with changes to Risk Management Plan submittal schedules and data requirements (see 69 Fed. Reg. 18819).

The TCPA rules specify the key elements of a risk management program needed to minimize the threat of an accidental EHS release at a regulated facility. By requiring owners and operators to consider the conditions that may contribute to accidental EHS releases and to manage the potential risk to the environment and the public by taking precautionary actions, these rules have reduced the risk of accidental EHS releases that could cause a catastrophic accident.

The TCPA rules have also decreased the risk of accidental EHS releases by encouraging reduction in EHS inventories or implementation of process changes that utilize fewer extraordinarily hazardous substances at regulated quantities. Reductions in EHS use has been confirmed by the number of TCPA facilities that have been able to "deregister" from the TCPA program because they no longer have EHSs at or above established threshold quantities. Significant reductions in the use of common EHSs such as chlorine, ammonia, hydrogen chloride, and hydrochloric acid have resulted in a reduction in the number of TCPA registrants from over 600 in 1988 to approximately 93 in 2008. Water treatment plants account for the most dramatic decline in the number of regulated TCPA facilities due to the increased use of sodium hypochlorite as a substitute for chlorine for water treatment.

Review of the history of the TCPA program confirms the need to continue the current regulations. In addition, the USEPA recognized the success of New Jersey's TCPA program by using it as a model for the Federal ARP program, which is now in effect in every state.

Summary of TCPA rule subchapters

The TCPA rules consist of 11 subchapters that govern the TCPA program's risk management program requirements, confidentiality and trade secrets, and administrative penalties for non-compliance. Subchapters 1 through 8 incorporate by reference the corresponding subparts of the Federal regulations and any additional State regulations. Subchapters 9 through 11 contain State-only rules, for which there are no Federal counterparts. A brief summary of each subchapter follows.

Subchapter 1, General Provisions, incorporates by reference with amendments Subpart A (General) of 40 CFR 68. Subchapter 1 of the TCPA rules contains the purpose, construction, applicability, and severability provisions of the rules. This subchapter also contains definitions and the rules governing fees as well as other general information including how to obtain copies of the Federal ARP rules that are incorporated by reference into N.J.A.C. 7:31.

Subchapter 2, Hazard Assessment, incorporates by reference Subpart B (Hazard Assessment) of 40 CFR 68 and describes the requirements for conducting an analysis of the offsite consequences of an EHS release.

Subchapter 3, Minimum Requirements for a Program 2 TCPA Risk Management Program, incorporates by reference Subpart C (Program 2 Prevention Program) of 40 CFR 68 and contains

the risk management program elements required for owners and operators of Program 2 covered processes. For purposes of this chapter, a "process" is any activity at a facility involving a regulated substance, including any use, storage, manufacturing, handling, or on-site movement of such substances, or combination of these activities. See N.J.A.C. 7:31-1.1(c)2ii. A "covered process" is a process that has an EHS inventory that meets or exceeds the threshold quantity as determined elsewhere in the TCPA rules. A covered process is subject to Program 2 if the process is not subject to Program 3, discussed below. See N.J.A.C. 7:31-1.1(c)3iv, which incorporates 40 CFR 68.10, Applicability, by reference with amendments, and see 40 CFR 68.10. In addition to the Federal requirements, this subchapter also contains supplemental State emergency response, triennial reporting, new covered processes, and inherently safer technology review requirements for Program 2 processes.

Subchapter 4, Minimum Requirements for a Program 3 TCPA Risk Management Program, incorporates by reference Subpart D (Program 3 Prevention Program) of 40 CFR 68, which contains the risk management program elements required for owners and operators of Program 3 covered processes. A covered process is subject to Program 3 if the process is in NAICS code 32211 (pulp mills), 32411 (petroleum refineries), 32511 (petrochemical manufacturing), 325181 (alkalies and chlorine manufacturing), 325188 (all other basic inorganic chemical manufacturing), 325192 (cyclic crude and intermediate manufacturing), 325199 (all other basic organic chemical manufacturing), 325211 (plastics material and resin manufacturing), 325311 (nitrogenous fertilizer manufacturing), or 32532 (pesticide and other agricultural chemical manufacturing), or if the process is subject to the OSHA process safety management standard, 29 CFR 1910.119. See N.J.A.C. 7:31-1.1(c)3v, which incorporates 40 CFR 68.10, Applicability, by reference with amendments, and see 40 CFR 68.10. This subchapter contains all the Federal requirements for a Program 3 risk management program, many of which were incorporated by reference with changes, and several State only requirements. These additional State requirements include: process hazard analysis with risk assessment for specific pieces of EHS equipment or operating alternatives; standard operating procedures; EHS operator training; management of change; safety reviews, including design and pre-startup; emergency response; annual reporting; temporary discontinuance of EHS use, storage and handling; and new covered processes, including construction and new EHS service, and inherently safer technology review.

Subchapter 5, Emergency Response, incorporates by reference Subpart E (Emergency Response) of 40 CFR 68 and sets forth the elements that must be included in the regulated stationary source's emergency response program. This subchapter also includes additional State emergency response program requirements regarding emergency response refresher training, annual emergency response exercises, and requirements for notification of emergencies.

Subchapter 6, Extraordinarily Hazardous Substances, incorporates by reference, with changes, the lists of regulated substances and their threshold quantities found in Subpart F of 40 CFR 68 (Regulated Substances for Accidental Release Prevention). This subchapter also describes how to determine whether a process contains a threshold quantity of a regulated substance and is therefore regulated under TCPA.

Subchapter 7, Risk Management Plan and TCPA Program Submission, incorporates by reference Subpart G of 40 CFR 68 (Risk Management Plan) and contains the rules for submitting and updating a Risk Management Plan (RMP), including preparation of the registration, off-site consequence analysis, five-year accident history, and certification. This subchapter also contains additional State rules governing the submittal of supplemental TCPA program information, initial program evaluation, and risk management program transfers.

Subchapter 8, Other Federal Requirements, incorporates by reference with changes 40 CFR 68 Subpart H (Other Requirements). This subchapter discusses recordkeeping, audits to determine compliance with the rules and with the owner's or operator's risk management program, and the mechanisms to ensure that appropriate action is taken to correct any violations or risk management program deficiencies found during an audit.

Subchapter 9, Work Plan/EHSARA, outlines the requirements and process for developing a workplan to perform an Environmental Hazardous Substance Accident Risk Assessment (EHSARA) and establishing a risk management program. The work plan process is used for owners and operators who are newly regulated and do not have an established risk management program. The EHSARA is the first step in developing a risk reduction plan and an approved risk management program. There is no Federal counterpart in 40 CFR 68 to the rules in this subchapter.

Subchapter 10, Confidentiality and Trade Secrets, contains the steps to be taken when asserting, substantiating, reviewing or appealing claims of confidentiality to withhold privileged trade secret or security information. This subchapter also establishes the Department's procedures governing internal management of confidential information. There is no Federal counterpart in 40 CFR 68 to the rules in this subchapter.

Subchapter 11, Civil Administrative Penalties and Request for Adjudicatory Hearings, specifies the procedures for assessment of civil administrative penalties for any violation of the TCPA rules and the procedures to be followed by the regulated community when requesting an administrative hearing. This subchapter also lists each category of offense and the penalty amount to be assessed for the first, second, or third offense and each subsequent offense. There is no Federal counterpart in 40 CFR 68 to the rules in this subchapter.

Proposed Amendments

In preparation for this proposal, the Department held meetings with representatives of industry and an environmental and labor organization. The amendments proposed reflect the input of those representatives and the Department's experience in implementing and administering the program.

Deletion of the "industrial complex" definition and related amendments

The Department proposes to delete the definition of "industrial complex" from N.J.A.C. 7:31-1.5 as well as related provisions in Subchapters 4 and 5 concerning identifying release scenarios with offsite impacts as applied to industrial sources. These provisions provide alternate compliance requirements for owners or operators whose sources met the definition of industrial complex. For the reasons discussed below, these alternatives are no longer appropriate in today's security climate.

As currently defined, "industrial complex" is the overall property of at least two contiguous TCPA regulated stationary sources that meet the following criteria:

- 1. Owners and operators of each source provide access to the hazard review, process hazard analysis with risk assessment and accident or potential catastrophic event investigation reports to the qualified person or the assigned designee of each of the other stationary sources, and the qualified person or the assigned designee of each source signs a certification statement annually that the records have been reviewed;
- 2. Employees of each of the individual sources have access to these reports and all information required to be developed under this chapter;
- 3. The owners or operators of each source have implemented security measures to restrict uncontrolled public access to the entire property; and
- 4. There is a previous history of common ownership of the complex, now occupied by the individual regulated stationary sources, by one company.

N.J.A.C. 7:31-4.2(f) is proposed to be deleted because it allows the owner or operator of a stationary source that is part of an industrial complex to use either the property boundary of the industrial complex or the property boundary for the individual stationary source for the purpose of identifying release scenarios with offsite impacts. If the site boundary of the industrial complex is used, then the result may be that a release from the individual source will not be considered in offsite impact planning because the source is within the larger boundary of the industrial complex. Also, N.J.A.C. 7:31-5.2(b)4iii(1), which currently exempts from notification requirements to the Department's communication center an EHS accidental release that has no potential offsite impact or potential to have an impact beyond the industrial complex property boundary, is proposed to be amended to delete the latter alternative.

Under the current definition of industrial complex, if a TCPA facility were adjacent to a non-TCPA facility, the facility can avoid implementing risk reduction measures or inherently safer technology alternatives, even though a release might present risk to the adjacent facility. The deletion of the industrial complex-related provisions will increase protection for the employees at the facilities adjoining the TCPA facility. The deletion also makes the TCPA rules consistent with Federal requirements to evaluate offsite consequences. Currently, nine TCPA registrants in three industrial complexes will be affected by these proposed amendments.

Petroleum refining process unit definition

The TCPA rules incorporate the Federal definitions of "covered process" and "petroleum refining process unit" at 40 CFR 68.3 with changes specified at N.J.A.C. 7:31-1.1(c)2. The

Department proposes to amend the definitions of these two terms such that a "petroleum refining process unit" that has an EHS present would be a single covered process.

The TCPA rules apply to four registered petroleum refineries. Each refinery currently registers as one "covered process." A covered process is currently defined as "a process that has an EHS inventory that meets or exceeds the threshold quantity as determined under N.J.A.C. 7:3-6.3" (see 40 CFR 68.3, as amended by N.J.A.C. 7:31-1.1(c)2i). A process is defined as "any activity at a facility involving a regulated substance including any use, storage, manufacturing, handling, or on-site movement of such substances, or combination of these activities. For the purposes of this definition, any group of vessels that are interconnected, or separate vessels that are located such that a regulated substance could be involved in a potential release, shall be considered a single process" (see 40 CFR 68.3, as amended by N.J.A.C. 7:31-1.1(c)2ii). Thus, under the definition of "process" and "covered process," a refinery can be interpreted to consist of only one set of interconnected contiguous equipment. However, one refinery unit, such as a sulphur recovery unit, is analogous to a separate process unit at a non-petroleum refining facility. In practice, each refinery does a separate process hazard analysis (PHA) for each individual unit within the overall refinery. Moreover, the Department individually reviews the PHAs for each process. Additionally, the Department has learned that petroleum refineries located in other states have multiple registered covered processes, each of which is required to be analyzed in Risk Management Plans submitted to the USEPA. Accordingly, the Department proposes to amend the definitions of "covered process" and "petroleum refining process unit" such that each petroleum refining process unit is defined as an individual covered process, which consequently will have to be listed separately as individual covered processes in the Risk Management Plan submitted to the Department.

Deletion of the Program 2 prevention program requirements

The Federal accidental release prevention rule, 40 CFR Part 68, which was incorporated by reference in the TCPA rules in 1998, establishes three levels of release prevention programs: Program 1, which is intended for sites that do not have an offsite worst case scenario impact and which has minimal requirements; Program 3, which contains the most complex set of requirements that mimic the Occupational Safety and Health Administration's Process Safety Management (PSM) rule, 29 CFR 1910.119; and Program 2, which has similar requirements to Program 3 such as operator training, maintenance, operator procedures, and incident investigation, but with less detailed program elements. The Department has not incorporated the Program 1 eligibility requirements; therefore, all owners or operators currently subject to the New Jersey TCPA rules must implement either the Program 2 or Program 3 requirements.

As mentioned above, a process is covered under Program 3 if it has a specified North American Identification Classification System (NAICS) code or if it is covered under the PSM rule. Primarily captured on the list of NAICS codes are chemical manufacturing facilities and petroleum refineries. A process is subject to Program 2 if it does not meet the Program 3 eligibility requirements. There are 17 TCPA Program 2-only sites and three sites that have both Program 2 and Program 3 processes.

The Federal regulations establish three program levels in which processes are categorized according to the level of complication of equipment and procedures utilized in that process. The less complicated the process, the lower the level of analysis that is required. The Department, when it first incorporated the Federal rules by reference, declined to incorporate the Program 1 requirements. Now, after several years of experience with implementing the TCPA program, the Department has determined that the distinction between Program 2 covered processes and Program 3 covered processes does not necessarily relate to the potential risk present in that process. For example, some Program 2 processes can show much worse offsite impacts than Program 3 covered processes. Additionally, some critical Program 3 elements, such as hot work permit, employee participation, contractors, and management of change, should be required for Program 2 covered processes because these elements are important for an effective risk management program.

Accordingly, the Department is proposing to delete the Program 2 requirements incorporated by reference at N.JA.C. 7:31-3, since some current Program 2 processes show greater worst case offsite impacts than some Program 3 sites. The effect of this repeal would be that all processes would be considered Program 3 covered processes and would be subject to Program 3 requirements.

To give owners or operators of current Program 2 processes adequate time to revise their Program 2 risk management program requirements to the Program 3 requirements, the Department proposes that the repeal of N.J.A.C. 7:31-3, except for N.J.A.C. 7:31-3.4, will be operative on a date that is 365 days from the date of the amendments to the TCPA rules. However, any new processes coming into service on or after the publication of the notice of adoption will have to immediately comply with the Program 3 requirements for a new covered process; thus, the repeal of N.J.A.C. 7:31-3.4 will be effective on the effective date of the proposed amendments.

The Department also proposes to amend the following rule provisions to fully effectuate the repeal of Subchapter 3, all of which are to be operative 365 days from the effective date of the TCPA rules as amended:

- Add a new paragraph 1 to N.J.A.C. 7:31-1.1(b) to include 40 CFR 68.10(e), which addresses future changes in program level by the owner or operator, in the list of Federal provisions that are not incorporated by reference;
- Amend N.J.A.C. 7:31-1.1(c)3iii, which incorporates 40 CFR 68.10(a)(1) through (3) with specified changes, to remove reference to Program 2 and Program 3 covered processes;
- Amend N.J.A.C. 7:31-1.1(c)3v, which incorporates 40 CFR 68.10(d) to delete the phrase "and if either of the following conditions is met" and to delete 40 CFR 68.10(d)(1) and (2) so that all covered processes are categorized as Program 3;
- Delete the entirety of N.J.A.C. 7:31-1.1(c)4ii, which incorporates the general requirements for Program 2, and replace it with the following: "Delete the entirety of 40 CFR 68.12(c)1 through (5); and
- Add proposed new N.J.A.C. 7:31-7.1(c)9 through 12, to delete all references to Program 2 requirements from the Federal Risk Management Plan requirements of

40 CFR 68.165(a)(2), 68.190(b)5, 68.195(a), and the entire section of 40 CFR 68.170 which are incorporated into Subchapter 7 by reference.

The Department is also proposing that the following amendments be operative immediately on the effective date of the TCPA rules as amended:

- Replace the Federal provision at N.J.A.C. 7:31-1.1(c)3iv with a provision stating that a covered process is subject to Program 2 requirements if it does not meet Program 3, but on or after 365 days from the effective date of the amendments to these rules, all processes shall be subject to Program 3. This is necessary because, any covered process that is subject to Program 2 requirements shall, on or after the effective date of readoption plus 365 days, be subject to Program 3 requirements;
- Add a new N.J.A.C. 7:31-1.1(c)5iv to remove reference to "Program 2 and Program 3" at 40 CFR 68.15(a);
- Amend N.J.A.C. 7:31-1.9(b) and (d) to add a new paragraph to each subsection that would require, as of 365 days from the effective date of these amendments, all new processes to comply only with Program 3 requirements by cross referencing the appropriate provisions in Subchapter 4;
- Amend N.J.A.C. 7:31-5.2(b)2i to remove the reference to Program 2;
- Amend N.J.A.C. 7:31-7.3(c) to remove reference to "or at least one hazard assessment and one hazard review (for Program 2 covered processes),";
- Amend N.J.A.C. 7:31-7.4(a) and (b) to remove reference to "Program 2 or Program 3";
- Delete references to Program 2 in provisions at N.J.A.C. 7:31-7.5(c) and (d) and 9.5(e) since these provisions regard new covered processes or facilities coming into the program; and
- Delete all of N.J.A.C. 7:31-9.2(b) and 9.5(d) because they pertain to plans and reports that are only associated with new Program 2 processes.

The Department is also proposing to delete the penalties associated with Program 2 process requirements from N.J.A.C. 7:31-11.4(c) Table III. Penalties 5 through 8 are proposed to be deleted upon the effective date of the TCPA rules as amended, penalties 10 through 14, 108 through 208, and 522 through 540 are proposed for deletion 365 days from the effective date of the TCPA rules as amended, and penalties 20, 580, and 584 are proposed to be amended to delete references to Program 2 upon the effective date of the TCPA rules as amended.

The Department does not anticipate that the elimination of Program 2 will affect the number of registered sites in the TCPA program, but owners or operators of the current Program 2 processes will have to perform additional work to upgrade their risk management program to the Program 3 requirements. This will include providing more detail in their prevention program element procedures. Also, additional modeling will be required for the risk assessment requirements of N.J.A.C. 7:31-4.2.

Deletion of the definition of "state-of-the-art"

The Department proposes to delete the State definition of "state-of-the-art" at N.J.A.C. 7:31-1.5 and the requirement to conduct state-of-the-art analyses in accordance with the risk assessment requirements of N.J.A.C. 7:31-4.2(c)1 and 2i. "State-of-the-art" is defined as "current technology that, when applied to an owner or operator's EHS equipment and procedures will result in a significant reduction of risk. The technology represents an advancement in reduction of risk and shall have been demonstrated at a similar referenced facility to be reliable in commercial operation or in a pilot operation on a scale large enough to be translated into commercial operation. The technology shall be in the public domain or otherwise available at reasonable cost commensurate with the reduction of risk achieved." Currently, owners or operators identifying release scenarios meeting specified consequence and likelihood criteria are required to evaluate state-of-the-art risk reduction measures. See N.J.A.C. 7:31-4.2(c)1 and 2. The state-of-the-art standard was codified to ensure that the risk reduction plans developed by owners and operators reflect the most updated, practicable technologies available for minimizing the risk of catastrophic accidental releases, and that the cost of these technologies be reasonable and commensurate with the reduction of risk achieved. The owner or operator is required to evaluate state-of-the-art, but is not required to implement it.

With the recent promulgation of requirements for owners or operators to evaluate inherently safer technology (IST) at N.J.A.C. 7:31-3.6 and 4.2 (see 39 N.J.R. 1351(a) (April 16, 2007 for proposal and 40 N.J.R. 2254(a) (May 5, 2008) for adoption), the requirement for owners or operators to evaluate "state-of-the-art" as currently defined is redundant and is no longer necessary.

IST is defined as "the principles or techniques that can be incorporated in a covered process to minimize or eliminate the potential for an EHS release." For each inherently safer technology review, the owner or operator must identify available inherently safer technology alternatives or combinations of alternatives that minimize or eliminate the potential for an EHS release. The IST review must include an analysis of the following principles and techniques:

- 1. Reducing the amount of EHS material that potentially may be released;
- 2. Substituting less hazardous materials;
- 3. Using EHSs in the least hazardous process conditions or form; and
- 4. Designing equipment and processes to minimize the potential for equipment failure and human error.

The owner or operator must evaluate the feasibility of IST alternatives identified, document and justify the feasibility/infeasibility determination, and prepare and submit a report on the findings of the IST review.

Revised concentration and likelihood criteria to determine risk reduction in risk assessment

Pursuant to the risk assessment requirements of N.J.A.C. 7:31-4.2(b), owners or operators must model release scenarios identified in their process hazard analysis to determine whether they have an offsite impact. Endpoint criteria are established depending on the type of substance and scenario, overpressure for flammable and reactive substances, radiant heat and lower flammable limit for flammable substances, and toxicity for toxic substances. In the current rule, there are two levels of these criteria. N.J.A.C. 7:31-4.2(c)1 requires the facility to immediately evaluate state-

of-the-art risk reduction measures for each release scenario that has an offsite impact of the endpoint criteria specified at N.J.A.C. 7:31-4.2(b)3iii, the higher level of criteria. N.J.A.C. 7:31-4.2(c)2 gives the facility the option to evaluate the state-of-the-art or to determine the likelihood of the release occurrence for each release scenario that has an offsite impact of the endpoint criteria specified at N.J.A.C. 7:31-4.2(b)3iv, the lower level of criteria. If the likelihood is greater than or equal to 10^{-4} per year, the facility must evaluate state of the art. The Department proposes to delete the higher level of analysis codified at N.J.A.C. 7:31-4.2(b)3iii to simplify the risk assessment analysis, which requires corresponding amendments at N.J.A.C. 7:31-4.2(c), explained below. The Department proposes to recodify the current endpoint criteria contained in N.J.A.C. 7:31-4.2(b)3iv as N.J.A.C. 7:31-4.2(b)3iii.

The Department proposes to modify the radiant heat criterion at N.J.A.C. 7:31-4.2(b)3iv (proposed to be recodified as N.J.A.C. 7:31-4.2(b)3iii) to make it consistent with the criterion utilized by the EPA for the worst case scenario analysis. In the current rule, this radiant heat criterion is specified as 1,200 thermal dose units (equivalent to 15 kW/m² for 40 seconds). Thermal dose is an amount of heat energy per area for the exposure time length. The Department is proposing to utilize the radiant heat/exposure time criterion of five kW/m² for 40 seconds, which is estimated to result in second degree burns to exposed persons. This amendment will make the TCPA rule consistent with the radiant heat parameter specified by EPA to be used in the hazard assessment, and will enable owners and operators to utilize guidance documents and software provided by EPA for the modeling of radiant heat scenarios.

The Department proposes to include the lower flammability limit (LFL) as one of the endpoint criteria to be evaluated in the consequence analysis at proposed N.J.A.C. 7:31-4.2(b)3iii. The LFL is one of the endpoint criteria in the current rule's N.J.A.C. 7:31-4.2(b)3iii, proposed to be deleted. The LFL is the endpoint criteria needed to evaluate flash fire scenarios.

Also, the Department is proposing to delete N.J.A.C. 7:31-4.2(c)1 and amend N.J.A.C. 7:31-4.2(d)2iv. In the current rule at N.J.A.C. 7:31-4.2(c)1, for scenarios that have an offsite impact of the higher endpoint criteria of the current N.J.A.C 7:31-4.2(b)3iii, the owner or operator must evaluate state of the art. As specified at the current N.J.A.C. 7:31-(c)2i and ii, if the EHS release scenario has an offsite impact of the lower endpoint criteria of the current N.J.A.C. 7:31-4.2(b)3iv, the owner or operator has the option of either immediately evaluating state-of-the-art or determining the likelihood of the release; if the likelihood of release occurrence is greater than or equal to 10⁻⁴ per year, the state-of-the-art evaluation is then required. The Department proposes to delete the current N.J.A.C. 7:31-4.2(c)1 requirement so that owners or operators will not have to automatically evaluate state-of-the-art for the higher endpoint criteria, which is also proposed to be deleted. However, at the proposed N.J.A.C. 7:31-4.2(c)1, the Department is proposing to require that owners or operators determine the likelihood of release, and that owners or operators must evaluate alternative processes, procedures or equipment which would reduce the likelihood or consequence of an EHS release if the likelihood of release occurrence is greater than or equal to 10⁻⁶ per year. The Department chose 10⁻⁶ based on its evaluation of other programs that incorporate risk management and assessment. For example, the Air Quality Permitting Program, Bureau of Air Quality Evaluation's Technical Manual 1003, "Guidance on Preparing a Risk Assessment for Air Contaminant Emissions" details the policy for cancer risk that indicates that 1

times 10⁻⁶ is a negligible risk, and 1 times 10⁻⁴, risk is an unacceptable risk, while if the risk is between 1 times 10⁻⁴ and 1 times 10⁻⁶, it is evaluated on case by case basis. Both the Air program and the TCPA program evaluate the likelihood of the undesired consequence; for air the risk is getting cancer, and for TCPA it is the likelihood of a catastrophic release that would present an imminent and substantial endangerment to public health and the environment. That said, a catastrophic release is actually a worse consequence and thus would warrant mandating a stricter likelihood value to determine when risk reduction is required. If an owner or operator determines that a release scenario has an offsite impact and the likelihood criterion is exceeded, they must evaluate risk reduction measures to reduce the likelihood or consequences of the EHS release and determine whether they are feasible.

For those release scenarios that meet the specified offsite impact and likelihood criteria, the Department is proposing at N.J.A.C. 7:31-4.2(c)2 (recodified from N.J.A.C. 7:31-4.2(c)3) that the owner or operator then must develop and implement a risk reduction plan for the feasible risk reduction measures. The Department is also proposing to define "feasible" at N.J.A.C. 7:31-1.5 to mean capable of being successfully accomplished, taking into account environmental, public health and safety, legal, technological and economic factors. Feasible risk reduction measures are those that are existing and have been demonstrated to be reliable in service. These amendments will make the requirement for risk reduction more consistent with the TCPA Inherently Safer Technology (IST) provisions of N.J.A.C. 7:31-4.12 and with interpretations of process hazard analysis requirements under the Occupational Safety and Health Administration's Process Safety Management rule, 29 CFR 1910.119, and the United States Environmental Protection Agency's Chemical Accident Prevention rule, 40 CFR Part 68, in terms of what is considered to be feasible. However, these rules differ from the IST rules in that, under IST, risk reduction is not mandatory.

The Department is proposing to amend N.J.A.C. 7:31-4.2(d)4, which requires the owner or operator to provide an explanation as to why potential risk reduction measures are not included in the risk reduction plan, to require the owner or operator to provide documentation to justify why the owner or operator determined that the risk reduction measures are not feasible.

Finally, the Department is proposing to clarify N.J.A.C. 7:31-4.2(d)3, which requires modeling documentation from the process hazard analysis with risk assessment to be maintained, by replacing "dispersion" model information with "consequence analysis" model information. This change reflects the risk assessment requirements for performing other types of consequence analysis modeling such as overpressure and radiant heat modeling in addition to dispersion modeling.

Liquefied petroleum gas (LPG)

N.J.A.C. 7:31-6.1(c)5ii incorporates by reference all the regulated flammable substances listed in the Federal rules at 40 CFR 68.130 Tables 3 and 4, with the exception of the components of LPG (propanes, propenes, butanes, and butenes), which amount to 10 distinct flammable substances. These substances are also excepted from the current TCPA list of Extraordinarily Hazardous Substances (EHSs) at N.J.A.C. 7:31-6.3(a), Table 1, Part C, even though they are Federally listed. The Department is proposing to remove the language that excepts these

components from the incorporation by reference of the Federal regulated flammable substances list at N.J.A.C. 7:31-6.1(c)5ii and from the TCPA list of EHSs at N.J.A.C. 7:31-6.3(a) Part C of Table I. Deleting the exception language results in the addition of liquefied petroleum gas (LPG) and its constituents (listed above) to the list of flammable EHSs at N.J.A.C. 7:31-6.3(a), Table I, Part C.

The Federal Chemical Safety Information, Site Security and Fuels Regulatory Relief Act (CSISSFRRA), 42 U.S.C §§7401, et seq., enacted in August 1999, and the Federal regulations at 40 CFR 68.126 adopted March 13, 2000, which are incorporated by reference at N.J.A.C. 7:31-6.1(a), exclude from coverage under the Federal Chemical Accident Prevention (CAP) program flammable fuels held for retail sale or used as fuel. With the proposed amendments to N.J.A.C. 7:31-6.1(c)5ii, which deletes the exclusion of LPG components, and the amendments to N.J.A.C. 7:31-6.3(a) Table I Part C, the Department will regulate LPG components and all flammable fuels in the same manner as they are regulated under the CAP program by excluding their coverage under the TCPA rules when used as a fuel or held for sale as a fuel at a retail facility.

In the readoption of the TCPA rules, published in the New Jersey Register on July 20, 1998 (30 N.J.R. 2728(a), 2737), the Department explained its decision to withdraw its proposed listing of LPG and its constituents as flammable EHSs. This decision was based on the fact that LPG was already regulated by the New Jersey Department of Community Affairs' Office of Safety Compliance under the New Jersey Liquefied Petroleum Gas Act of 1950, N.J.S.A. 21:1B-1 et seq. and the rules promulgated by the Department of Community Affairs (DCA) pursuant to that Act at N.J.A.C. 5:18. In response to several comments concerning the impact on small businesses of regulating LPG fuels under the TCPA program, the Department agreed to rely on the LPG Act to supplement the Federal CAP rules and provide adequate protection to the public. At that time, the Federal CAP program did not exclude LPG gases when used as fuels. The Department stated that it may, at a later time, reevaluate the need for additional coverage under TCPA.

In 2003, DCA included requirements in its rules for facilities with 10,000 gallon water capacity or more, which is about 45,000 pounds or more, to maintain a "quality control manual" which includes several of the elements of a risk management program. Facilities handling LPGs in amounts less than the 10,000 gallon water capacity are not regulated, and the threshold quantity specified at 40 CFR 68.130 is 10,000 pounds for a flammable substance mixture. The DCA rules also cross-reference the TCPA rules, stating that the quality control manual must include documentation of compliance with the Department's Risk Management Program. See N.J.A.C. 5:18-9.2(a)6.

Since the CAP program rule at 40 CFR 68.126 now excludes from regulation flammable substances used as fuel or held for retail sale for use as fuel, the Department is proposing to regulate LPG and its constituents in the same manner as the USEPA, when processed or used as feedstocks. To bring the LPG facilities that store between 10,000 and 45,000 pounds of LPG back under State regulation and to ensure consistent regulation across all large LPG facilities, the Department proposes to relist LPGs and their components as EHSs. This will make the State and Federal programs consistent in the regulation of LPG. If the LPG substances are added to the

TCPA EHS list, Risk Management Plans submitted to the EPA show that eight facilities that currently are not regulated under the TCPA program would become subject to the TCPA rules. The Department also estimates that eight current TCPA registrants will register LPG components as additional EHSs in their New Jersey Risk Management Plans.

Deletion of the exemption for Group I Reactive Hazard Substances that have an inhibitor

The Department added reactive hazard substances (RHSs) to the list of Extraordinarily Hazardous Substances at N.J.A.C. 7:31-6.3(a), Table I Part D, Group I (List of Individual Reactive Hazard Sbstances) in 2003, thus making them subject to the TCPA rules at the codified threshold quantities. An RHS is defined at N.J.A.C. 7:31-1.5 as an EHS that is a substance, or combination of substances, which is capable of producing toxic or flammable EHSs or undergoing unintentional chemical transformations producing energy and causing an extraordinarily hazardous accident risk. RHSs are those substances that can cause a dangerous release of heat, energy, toxic vapors or gases when exposed to conditions that may occur in either normal or abnormal situations. Examples of reactive substances are spontaneously combustible materials, water reactive substances, and flammable solids.

When the Department first listed RHSs, it determined that there are two likely scenarios under which a RHS could cause a catastrophic accident such that it would be considered an EHS. The first scenario involves reactions caused by the inherent properties of the chemical itself, such as the chemical's instability or the chemical's propensity to react if unintentionally exposed to air or water. These RHSs are listed at N.J.A.C. 7:31-6.3, Table I, Part D, Group I. In the second scenario, the potential hazard occurs because of abnormal conditions in the intentional mixing of two or more chemicals in a process. The Department reviewed several technical sources to determine which substances with functional groups, as defined at N.J.A.C. 7:31-1.5, when included in a reactive hazard substance mixture, have the potential to cause an uncontrolled reaction with the potential to impact the public beyond the property boundary of the stationary source. The RHS mixture functional groups are listed at N.J.A.C. 7:31-6.3, Table I, Part D, Group II.

N.J.A.C. 7:31-6.3(b)1 provides that an individual RHS listed in Table I, Part D, Group I that is received, stored, and handled in combination with one or more other chemical substances specifically formulated to inhibit the reactive hazard (such as water reactivity, pyrophoric, or self-reacting) of the RHS is exempt from being included in risk management program implementation as long as the appropriate inhibitor concentration is maintained. The owner or operator is required to document that the inhibitor concentration is maintained.

The Department has determined that this exemption should be deleted. Although inhibitors are designed to act as a safeguard, most inhibitors decompose at a rate which is dependent on time and temperature. Measures are required to ensure that the temperature of the material containing the inhibitor is maintained below a specified upper limit, and for a time not exceeding its decomposition rate at that temperature. In addition, periodic analyses are required to determine the concentration of the inhibitor in the material, to verify that the inhibitor is active and to add additional inhibitor when necessary. Pressure and temperature monitoring need to be

provided to warn of a runaway reaction, and to activate control measures, for those instances where the material does react unexpectedly. Therefore, the Department has determined that the only way to ensure that the proper concentration of inhibitor is present is to have all of the equipment, procedures, and training in place, and that this is best achieved through the implementation of a risk management program. The Department is therefore proposing to amend N.J.A.C. 7:31-6.3(b)1 to state that Group I RHSs with inhibitors are not exempt from this chapter. It is estimated that this would make five to ten additional facilities subject to the TCPA rule, consisting of chemical manufacturing and warehouse facilities.

Exemption for Reactive Hazard Substance Mixtures for which there is no possibility of a catastrophic accident

Proposed new N.J.A.C. 7:31-6.2(i) provides that an owner or operator may apply for an exemption from the rule for specific equipment containing reactive hazard substance (RHS) mixtures. This exemption is directed to individual pieces of equipment containing an RHS mixture because threshold quantity applicability is based on the maximum capacity of an RHS mixture in an individual piece of equipment such as a vessel. Facilities have approached the Department with documentation for a reactor vessel containing a regulated RHS mixture showing that there was no possibility of an uncontrolled reaction which would cause an overpressurization, explosion, or release from the vessel. This documentation was specific to the reaction chemistry of the RHS mixture being handled in that facility's reactor. However, the rules do not currently contain a mechanism by which the Department could exempt this specific reactor vessel from the requirements of the rules, even though that vessel may be a part of a covered process.

Under the proposed new subsection, the owner or operator must demonstrate to the satisfaction of the Department that, based on an evaluation of the reaction chemistry of the RHS mixture, there is no possibility of a runaway reaction, overpressurization, or release during either normal or abnormal conditions. Proposed new N.J.A.C. 7:31-6.2(i)1 provides that the request for exemption must include the results of calorimetry testing that must be independently verified and certified by a New Jersey licensed professional engineer.

Proposed new N.A.C. 7:31-6.3(i)2 requires the owner or operator to also certify the application pursuant to N.J.A.C. 7:31-8.2(c).

Proposed new N.A.C. 7:31-6.3(i)3 provides that the Department shall review the request for exemption and provide the owner or operator written notification of approval or denial of the exemption request.

If the owner or operator demonstrates that the RHS mixture in the specified equipment is exempt, that RHS mixture contained in that EHS equipment will not be considered in determining if the threshold quantity is present at the facility. The Department expects that some current TCPA registrants may utilize this exemption for particular pieces of equipment covered by the rules but not for the entire facility.

Addition of organometallics to the list of RHS mixture functional groups at N.J.A.C. 7:31-6.3 <u>Table I, Part D, Group II</u>

The Department is proposing to add organometallics as a new functional group to the list of RHS mixture functional groups at N.J.A.C. 7:31-6.3(a) Table I, Part D, Group II. Organometallics were involved in a fatal explosion and fire that occurred on December 19, 2007 at T2 Labs, a chemical plant in Jacksonville, Florida.

This incident is being investigated by the United States Chemical Safety Board (CSB), an independent Federal agency that investigates major chemical accidents at industrial sites (see the CSB website at www.csb.gov link to documents regarding the ongoing investigation of the T2 laboratories explosion).

After preliminary investigations, the CSB reported that the blast at T2 was among the most powerful ever examined by the CSB. In addition to the tragic loss of life of four T2 workers, investigators say that a total of 33 people were injured in the massive explosion and fire, and many of the injuries resulted from flying and falling debris and a powerful blast wave that caused structural damage to offsite buildings. Injuries off-site requiring medical attention occurred as far away as 750 feet from the reactor site. CSB investigators observed building blast damage at 1000 feet from the reactor site.

The explosion occurred during the production of a gasoline additive called methylcyclopentadienyl manganese tricarbonyl, which is an additive widely used to boost the octane rating of gasoline. The company produced the chemical in a several step process using a batch reactor. The loss of control of the reaction occurred in the first step of the process, which involved heating and reacting organic materials with metallic sodium. It was during this step that the reactor ruptured. Prior to the rupture, eyewitnesses reported hearing loud hissing and seeing vapor venting, which indicates the development of excess temperature and pressure inside the reactor.

The reactor eventually became overpressured and ruptured at a pressure of several thousand pounds per square inch. The contents of the reactor immediately ignited, creating a fireball and mushroom cloud rising approximately 2000 feet high. The reactor was designed for high pressure and had steel walls three inches thick. Under normal temperatures and conditions, it would require a pressure of several thousand pounds per square inch to rupture this reactor. Large portions of the vessel's top head weighing hundreds of pounds were recovered approximately one quarter-mile away, which gives an idea of the tremendous power of the explosion. The CSB and others involved in the investigation found debris from the explosion as far as one mile from the explosion site.

Increased penalties for facilities that fail to submit a Risk Management Plan

At N.J.A.C. 7:31-11.4(c), Table III, violation number 480, is proposed to be revised as failure to submit the first RMP on or before the date on which a regulated substance is first present at or above (rather than only above, as is currently stated) a threshold quantity at the facility (rather than in a process, as is currently stated). These penalties do not provide an adequate deterrent. TCPA inspectors have identified facilities that apparently were operating above the threshold for several years but had never submitted a Risk Management Plan to register in the program. By their noncompliance, these facilities avoided not only paying the annual fees but also the ongoing implementation of the risk management program requirements. The TCPA statute and rules specify maximum penalties of \$10,000 for a first offense, \$20,000 for a second offense, and \$50,000 for third and subsequent offenses. However, there also is a provision that a civil penalty is not to exceed \$10,000 per day of the violation, and each day's continuation of the violation constitutes a separate and distinct violation.

The Department is proposing to increase the penalty for failure to submit the RMP to \$10,000 per year out of compliance plus the amount of past fees due calculated per N.J.A.C 7:31-1.11A for a first offense if the violation is found by the Department. The second and third offenses would be treated similarly, with a \$25,000 per year base penalty for a second offense and \$50,000 per year base penalty for a third offense, plus the past due fees. If the violation is self-reported by the owner or operator, the Department proposes that the first offense penalty be only \$10,000, second offense only \$25,000, and third and subsequent offense only \$50,000.

Confidentiality

In conjunction with the promulgation of the inherently safer technology rules at N.J.A.C. 7:31-3.6 and 4.12 and other related amendments to the TCPA rules (see 39 N.J.R. 1351(a) for the proposal and 40 N.J.R. 2254(a) for the adoption), the Department received several comments regarding the confidentiality of inherently safer technology (IST) review reports. N.J.A.C. 7:31-3.6(a) and 4.12(a) require that owners or operators submit their IST review reports to the Department. Some commenters stated that the IST review reports should be made available for public inspection since the public has a right to know this information, making these reports available to the public would promote sharing of information among facilities, and there is a need for emergency responders and the public to know the potential risks of an EHS release at TCPA facilities.

On the other hand, some commenters stated that the IST review reports should be kept confidential because they contain security information and that other Federal and state agencies require that security-related information be kept confidential. In its response to comments (see 40 N.J.R. 2254(a)), the Department stated that it would review the confidentiality provisions of the rule to determine whether other amendments are necessary in connection with the readoption of the TCPA rules in 2008.

Other State rules and orders affect the handling of confidential information under the TCPA Program. For example, Executive Order No. 21, July 8, 2002, as modified by Executive

Order No. 26, August 13, 2002, issued by former Governor McGreevy, specifies that off-site consequence analyses developed pursuant to the Toxic Catastrophe Prevention Act are confidential and are not subject to public inspection or copying under the Open Public Records Act, P.L. 2001, c. 404, N.J.S.A. 47:1A-1 et seq.

The Best Practices Standards at TCPA/DPCC Chemical Sector Facilities (Best Practices Standards), issued November 21, 2005 by the New Jersey Domestic Security Preparedness Task Force require that Chemical Sector facilities subject to TCPA, currently 43 facilities, prepare inherently safer technology review reports, (see Best Practices Standards ¶ 5) and that these reports shall be held in a confidential and secure fashion (see Best Practices Standards ¶ 12). The Domestic Security Preparedness Task Force adopted the Best Practices Standards under the authority of the Domestic Security Preparedness Act, N.J.S.A. A:9-64 et seq. The Best Practices Standards define Chemical Sector Facilities as all facilities that are subject to the TCPA or the Discharge Prevention, Containment and Countermeasure (DPCC) programs and that are identified by any of the following Standard Industrial Classification (SIC) major groups: 28 (chemical and allied products), 30 (rubber and miscellaneous plastic products), 5169 (chemicals and allied products, not elsewhere classified), or the corresponding North American Industry Classification System (NAICS) codes (325, 326, and 424690). See Best Practices Standards, ¶ 1.

The Best Practices Standards define IST in much the same way as it is defined in the TCPA rules at N.J.A.C. 7:31-1.5. The IST rules at N.J.A.C. 7:31-3.6(a) and 4.12(a) provide owners or operators with the option of submitting an IST report conducted under the Best Practices Standards for their initial submittal to avoid unnecessary duplication of effort on the part of owners and operators and Departmental personnel.

The Department has concluded from its review of Executive Order Nos. 21 and 26, the Best Practices Standards, and in consideration of comments received on the IST rules that revisions are necessary to address concerns regarding the confidentiality of security information, as defined in the TCPA rules at N.J.A.C. 7:31-1.5. Accordingly, it is proposing amendments to several provisions of N.J.A.C. 7:31-10.

The Department is proposing to amend N.J.A.C. 7:31-10.2(b) to allow the Department, in addition to being able to protect confidential information, to also be able to protect from disclosure to the public any security information submitted to the Department. The Department is proposing this amendment to enable it to protect information the release of which may adversely affect the security of the facility. The Department intends to consult with the State Office of Homeland Security and Preparedness (OHSP) so that it will remain apprised of Federal and State laws and regulations in addition to security alerts issued by OHSP that become effective requiring confidential handling of risk management program documents containing security information that are submitted to the Department.

In conjunction with this proposed amendment, the Department is proposing to amend the definition of security information at N.J.A.C. 7:31-1.5 to add examples of the types of information that would be considered security information. The examples proposed to be added to the

definition include offsite consequence analysis data and quantities and locations of EHSs at facilities.

At proposed new N.J.A.C. 7:31-10.3(b)11, the Department is proposing that inherently safer technology (IST) review reports shall not be considered privileged trade secret or security information regardless of any petition either pending or approved. "Privileged trade secret or security information" is defined at N.J.A.C. 7:31-1.5 as trade secret or security information which the Department has determined the owner or operator of a covered process is entitled to withhold from and not disclose to the Department; consisting of trade secret or security information which is not otherwise required to be disclosed to either the public or to any governmental agency or entity by any Federal or state law or regulation, and which has never been released to any person other than the owner's or operator's employees involved in its use. The Department's ability to verify that an owner or operator completed the IST review would be undermined if the IST review report was considered to be privileged trade secret. However, the owner or operator may claim the IST review report to be confidential in accordance with the provisions for confidential information.

At N.J.A.C. 7:31-10.6(d) and (g), the Department is proposing amending provisions for the certifications on privileged trade secret or security information petition and substantiation forms to cross reference the certification specified at N.J.A.C. 7:31-8.2(c). This will necessitate that the reference to two part certifications and the cross reference to 40 CFR 68.185(b) be deleted.

At N.J.A.C. 7:31-10.7(d), the Department is proposing to correct the erroneous cross reference to N.J.A.C. 7:31-5.6. A substantiation submitted under N.J.A.C. 7:31-10.6 rather than 5.6 will be determined to be sufficient to support a petition to withhold privileged trade secret or security information if the substantiation asserts specific facts to support the following conclusions.

At N.J.A.C. 7:31-10.7(d)1 and (g)1i, the Department is proposing to correct the cross reference by replacing N.J.A.C. 7:31-10.5(j)1 through 10 with N.J.A.C. 7:31-10.6(c)1 through 10.

Also at N.J.A.C. 7:31-10.7(d)1, the Department proposes to delete the phrase "entitled to protection as confidential information" because whether information is entitled to protection as confidential information is irrelevant to substantiation of a trade secret claim.

Threshold quantity applicability

Compliance with the TCPA rules is triggered when a threshold quantity of an EHS is first present at a covered process. See 40 CFR 68.10(a), incorporated by reference with changes at N.J.A.C. 7:31-1.1(a)3, which requires an owner or operator of a stationary source that has at least a threshold quantity of a regulated substance in a process to comply with the rules. The practical result of this requirement is that a facility can have several covered processes, but because each of those processes involves an EHS at a quantity that falls below the threshold, the facility is not subject to the TCPA rules for that EHS. To rectify this anomaly, the Department proposes several amendments that collectively will require that the quantity of the EHS must be evaluated facility-wide, rather than within individual covered processes.

From a historical perspective, these amendments would return the applicability trigger to its pre-1998 form, and generally would make the rules comport more closely with the TCPA. The current method of determining applicability on a covered process basis was adopted in 1998 with the incorporation of the EPA's Chemical Accident Prevention regulations by reference.

Amendments to the applicability provision at 40 CFR 68.10(a), incorporated with changes at N.J.A.C. 7:31-1.1(c)3i and, as described below, to the definitions of covered process, process, threshold quantity, facility, and inventory at N.J.A.C. 7:31-1.5, are proposed to reflect the intent of basing threshold quantity applicability for the entire facility. The proposed amendments to N.J.A.C. 7:31-1.1(c)3i delete the current modifications to 40 CFR 68.10(a) in favor of specifying that determination of whether a threshold quantity is present at the facility shall be made using the sum of the EHS inventory of all covered processes at the facility. Furthermore, the EHS inventory of a covered process shall be determined from the greatest value of the following: the instantaneous static inventory of the EHS contained or stored, the hourly generation rate of the EHS, or the amount of the EHS that can be released in one hour from EHS equipment within the covered process.

The Department proposes to further revise N.J.A.C. 7:31-1.1(c)3i, by replacing the phrase "above a threshold quantity in a process" with "at or above a threshold quantity at the facility" so that the requirement reads, "The date on which a regulated substance is first present at or above a threshold quantity at the facility."

The Department is proposing to amend the definition of "covered process" at 40 CFR 68.3 with changes specified at N.J.A.C. 7:31-1.1(c)2i by deleting the phrase "inventory that meets or exceeds the threshold quantity" and replacing it with "present" to be "a process that has an EHS present as determined under N.J.A.C. 7:31-6.3."

The Department is proposing to amend the State definition of "facility" at N.J.A.C. 7:31-1.5 by deleting the phrase "a building, equipment, and contiguous area which embodies a process" and to add the phrase "the combination of all structures, buildings, and processes that are located on a single property site or on contiguous or adjacent property sites and that are under common control of the same owner or operator." The Department also proposes to cross reference 40 CFR 68.115(b)(5)(ii) with changes specified at N.J.A.C. 7:31-6.1(c)4 to clarify pilot plant scale operations requirements. In terms of threshold quantity applicability, this definition of facility is analogous to that of "stationary source" at 40 CFR 68.3, with one difference. "Stationary source" is defined as any buildings, structures, equipment, installations, or substance emitting stationary activities which belong to the same industrial group, which are located on one or more contiguous properties, which are under the control of the same person (or persons under common control), and from which an accidental release may occur. Under the definition of facility, different industrial groups would be included in a single facility as long as the other criteria in the definition are met.

The Department is proposing to amend the State definition of "inventory" at N.J.A.C. 7:31-1.5 to be consistent with the threshold quantity applicability specified at proposed N.J.A.C.

7:31-1.1(c)3i, namely, "the instantaneous static quantity of the EHS contained and stored in a process, the hourly generation rate of the EHS in a process, or the amount of the EHS that can be released in one hour from the process, whichever is greatest."

At proposed new N.J.A.C. 7:31-1.1(c)2v, the Department is proposing to change the Federal definition of "owner or operator" at 40 CFR 68.3 by replacing the Federal definition with "Owner or operator means any person who owns, leases, operates, controls, or supervises a facility (stationary source)." The definition of "facility" for applicability determination will apply in this rule as described previously.

At N.J.A.C. 7:31-1.1(c)2ii, the Department is proposing to delete the current changes to the definition of "process" at 40 CFR 68.3 so that the definition will revert back to the original EPA definition incorporated by reference.

The Department is proposing to delete the existing changes to the Federal definition of "threshold quantity" at 40 CFR 68.3, incorporated by reference at N.J.A.C. 7:31-1.1(c)2iii. In its place, the Department proposes to replace the Federal definition of threshold quantity with "the quantity specified for EHSs pursuant N.J.A.C. 7:31-6."

The Department is proposing to replace the phrase "handled, used, manufactured or stored, or is capable of being generated within one hour, at" in the State definition of "Registered EHS" at N.J.A.C. 7:31-1.5 with the phrase "listed in the Risk Management Plan for."

The Department is proposing to replace "stationary source" with "facility" at N.J.A.C. 7:31-1.9(b), (c), and (d); 1.11A(c)5i, (o) and (p); 4.3(b)5; 4.11(a), (b), (c), and (d); 5.1(c)1 and 2; 5.2(b)2i, and 4iii; 6.1(c)3; 7.3(c) and (e); 8.1(c)6; 8.2(a); and 9.1(b). At new N.J.A.C. 7:31-1.1(c)5iii, the Department is proposing to remove a reference to stationary source from 40 CFR 68.15(a). The Department is proposing to replace "process" or "covered process" with "facility" at the definition of "qualified person or position" at N.J.A.C. 7:31-1.5, and in the rule text at N.J.A.C. 7:31-6.2(c), (d)1 and 2, and (f), and at 40 CFR 68.150(b)(3) which is modified by new N.J.A.C. 7:31-7.1(c)7.

The Department is proposing to amend 40 CFR 68.165(b)(7) at proposed new N.J.A.C. 7:31-7.1(c)8 to require that the owner or operator include information in the registration section of the Risk Management Plan for each covered process, the name and CAS number of each regulated substance held at or above the threshold quantity at the facility rather than in the process.

The Department is proposing to amend N.J.A.C. 7:31-7.2(a)3iv to replace "in a process" with "at a facility."

The Department does not anticipate that these amendments will make additional facilities (stationary sources) subject to the rules. Following the 1998 change to threshold quantity determination based on covered process, no stationary sources deregistered from the program because of the new threshold quantity determination method.

Additional Rule Revisions

N.J.A.C. 7:31-1.1(c)3ii, which incorporates 40 CFR 68.10(a)(1) with changes, sets forth the schedule according to which an owner or an operator of a stationary source that has at least a threshold quantity of a regulated substance in a process must comply with the TCPA rules. The Department is proposing to delete the extraneous phrase that begins with "September 30, 2004" and ends with "shall be in accordance with," such that the scheduling requirements will only be those that are cross referenced in N.J.A.C. 7:31-7.5.

N.J.A.C. 7:31-1.1(c)5i, which incorporates 40 CFR 68.15 with changes, requires the owner or operator of a stationary source to develop a management system to oversee the implementation of the risk management program elements. The Department is proposing to amend its existing changes to 40 CFR 68.15 to require that, rather than providing a "means of" identifying all documentation required by this chapter, that the management system will include a list identifying all documentation required by this chapter including the document title, identification number, and storage location of that documentation.

At N.J.A.C. 7:31-1.1(c)5ii, which incorporates 40 CFR 68.15 with changes, the Department is proposing to delete the requirement that the management system provide a means for recording the daily quantity of each EHS contained in storage vessels and shipping containers. Instead, the Department is proposing new text that requires that the management system shall include a means of tracking and recording the EHS inventory at the stationary source against the Risk Management Plan registration quantity to ensure that the EHS registration quantity of each registered covered process is not exceeded. Some processes, such as closed loop ammonia refrigeration systems, contain an EHS in which the quantity is continuously fluctuating among the process vessels and piping within the system. In this case, the requirement to record the daily inventory in shipping containers and storage vessels is not applicable; however, the owner or operator must provide a means to track the EHS quantity to verify that the registration quantity is not exceeded in the process. Other owners or operators that handle EHSs in shipping containers and storage vessels must continue to record the quantity of EHS in those containers and vessels frequently enough to ascertain that they do not exceed the EHS registration quantity of each registered covered process.

In the State definitions section at N.J.A.C. 7:31-1.5, the Department is proposing to delete "into the environment" from the definition of "EHS release," and to add the phrase "from a piece of equipment in which it is contained." The Department also proposes to delete the cross reference to the Air Pollution Control Act rules. As a result, "EHS release" would mean a discharge or emission of an EHS from a piece of EHS equipment in which it is contained, excluding discharges or emissions occurring pursuant to and in compliance with the conditions of any State permit or regulation, not just the Air Pollution Control Act rules.

The Department is proposing to add a new definition to N.J.A.C. 7:31-7:31-1.5, "maximum achievable temperature." This temperature would be the highest temperature that can be attained during abnormal conditions in a process vessel taking into consideration the vessel design, heating and cooling systems connected to the vessel, and the potential chemical reactions

involving the vessel's contents. Abnormal conditions include scenarios such as: 1) a vessel having a steam heating system where maximum heating is applied to the vessel; 2) a vessel having a cooling system where there is a total loss of cooling; 3) an exothermic reaction generating heat that takes place inside the vessel; 4) contamination to the normal vessel contents causing an exothermic reaction; 5) external fire; and 6) unintended ratio or amounts of reaction ingredients. "Maximum achievable temperature" is used at proposed new N.J.A.C. 7:31-6.3(b)5i, which is discussed later in this summary.

Also at N.J.A.C. 7:31-1.5, the Department is proposing to move the second sentence of the existing definition of "reactive hazard substance (RHS) mixture" to the end of the definition and to modify that sentence such that the heat of reaction is expressed as a negative value for an exothermic reaction, that has an absolute value greater than or equal to 100 calories per gram of the substance with the specified functional group, instead of per gram of RHS mixture. This proposed amendment to the reactive hazard substance mixture definition is consistent with proposed amendments to N.J.A.C. 7:31-6.3(b)1, which concerns determining the applicability of the rules to a reactive hazard substance mixture, described later in this Summary.

Also at N.J.A.C. 7:31-1.5, the Department proposes deleting the definition of "stationary source emergency response team" in its entirety and adding a new definition of "emergency response team" that tracks the existing definition of "stationary source emergency response team," except that the first reference to "stationary source" is replaced with "facility" and the second reference to "stationary source" is deleted.

N.J.A.C. 7:31-1.11A concerns fees. Subsection (q) requires that a confidentiality claim substantiation form must be accompanied by a fee of \$350.00 to cover the Department's cost to review the claim. N.J.A.C. 7:31-1.11A(r) requires that each owner or operator submitting a petition to withhold privileged trade secret or security information in accordance with N.J.A.C. 7:31-10.6 also submit a fee of \$350.00. Because these fees were originally put in place in 1988, they are in 1988 dollars. The Department is proposing at new N.J.A.C. 7:31-1.11A(u) that the owner or operator use the Consumer Price Index to adjust these fees and the proposed new fee for exemption requests at N.J.A.C. 7:31-1.11A(t) (discussed below), from the July 1988 value to the value reflecting the month in which the applicable request is submitted.

At proposed new N.J.A.C. 7:31-1.11A(t), the Department is proposing a new fee for the Department's review of the proposed exemption request submitted in accordance with N.J.A.C. 7:31-6.2(i). Proposed N.J.A.C. 7:31-6.2(i) allows the owner or operator to request an exemption from the rules for EHS equipment containing a reactive hazard substance mixture. The Department proposes that the owner or operator submit a fee of \$275.50 in 1988 dollars. The Department back calculated this fee from \$500.00 in 2008 dollars using the CPI in July 1988 and the CPI in May 2008, so that the same formula (at proposed new N.J.A.C. 7:31-1.11A(u)) could also be used to adjust this fee, going forward. The Department proposes that this fee also be adjusted by the Consumer Price Index from 1988 to the current month of the exemption request, and that the fee be submitted in accordance with the remittance information contained on the bill provided by the Department.

Proposed new N.J.A.C. 7:31-1.11A(u) sets forth the CPI for July 1988 and contains the formula for use in updating the fees codified in N.J.A.C. 7:31-1.11A(q), (r) and proposed new (t). Since the CPI is updated on a monthly basis, the CPI to be used in this formula is the most recent CPI-U available at the time the applicable request is submitted to the Department. All fee calculations are to be rounded up to the nearest half dollar. If the percentage increase is a negative number, the fee to be submitted shall not be decreased.

N.J.A.C. 7:31-2.2 concerns Hazard Assessments. At N.J.A.C. 7:31-2.2(b)3, the Department is proposing to amend the parameters to be used to perform the Reactive Hazard Substance (RHS) hazard assessment. The Department is proposing that when using a TNT-equivalent explosion method to conduct the RHS hazard assessment, the owner or operator shall use a 100 percent yield factor for a Table I, Part D, Group I RHS in a storage vessel instead of 28 percent, and that 28 percent of the heat of combustion may be used as an approximation if the detailed heat of reaction data is not available. This is consistent with the method used to establish the threshold quantity of reactive hazard substances.

At N.J.A.C. 7:31-4.1(c)1, which incorporates 40 CFR 68.65(c)(1)(i) with changes, the Department is proposing to delete "block flow diagram" from the EPA requirement. This proposed amendment will require all owners or operators to have process flow diagrams as defined at N.J.A.C. 7:31-1.5.

At N.J.A.C. 7:31-4.1(c)24, which incorporates 40 CFR 68.65(b)(4) with changes, the Department is proposing to add additional requirements at subparagraph (c)24iv that will modify the EPA requirement for "reactivity data." The Department proposes to require for covered RHS mixtures, detailed reactivity data including the rate of pressure rise (dP/dt), the rate of temperature rise (dT/dt), and the onset temperature at which the rate of temperature change due to uncontrolled reaction, decomposition, change in molecular structure, or polymerization exceeds 0.01 degrees Celsius per minute, all of which are corrected to a thermal inertia (φ) of 1.0. The rule currently requires some specified reactivity data to be provided. However, these data are not sufficient to provide necessary data for relief system design evaluations, which are also required by the rule. The most recognized model to design relief systems for reactive systems is the Design Institute for Emergency Relief Systems (DIERS) model developed by the Center for Chemical Process Safety of the American Institute of Chemical Engineers. The additional reactivity data proposed to be added to the rule are those data needed for relief system calculations using the DIERS or similar two-phase flow models.

At proposed new N.J.A.C. 7:31-4.1(c)27, the Department proposes to incorporate 40 CFR 68.73(b) with changes that would require that the written procedures to maintain the on-going integrity of the equipment include a procedure for the owner or operator to periodically review, document, and approve delays in conducting preventive maintenance of EHS equipment.

At proposed new N.J.A.C. 7:31-4.1(c)28, the Department proposes to incorporate 40 CFR 68.73(e) with changes that would clarify what is meant by "the timely correction of equipment deficiencies identified during preventive maintenance/mechanical integrity inspections or tests." The Department is proposing that equipment deficiencies shall be corrected as soon as feasibly

possible but in no case to exceed three months without providing a written justification, including an explanation of the necessary measures taken to ensure safe operation.

At proposed new N.J.A.C. 7:31-4.1(c)29, the Department proposes to incorporate 40 CFR 68.87(c) with changes that would clarify the EPA provisions for contract owner operator responsibilities. The Department is proposing to add "Owner or operator's oversight of" before the heading of "Contract owner or operator responsibilities." After the heading of "Contract owner or operator responsibilities," the Department proposes to add, "The owner or operator shall require the contract owner or operator to complete the following prior to a contract owner or operator performing work at a covered process." These amendments to the EPA rule are necessary because the Department has enforcement authority over the regulated owner or operator, not the contract owner or operator.

N.J.A.C. 7:31-4.2(b)2; requires the owner or operator of a covered process to perform a process hazard analysis with risk assessment, otherwise known as a consequence analysis, that includes consideration of toxicity, flammability and reactivity for those EHSs specified in this paragraph. The Department is proposing to add to the types of hazards that are required to be considered in the consequence analysis. The Department is proposing to require the owner or operator to consider toxicity, flammability, explosion, and reactivity hazards applicable to the EHS, but consideration of toxicity shall be required only for those EHSs that appear in N.J.A.C. 7:31-6.3(a), Table I, Parts A and/or B as a toxic substance. For example, ethylene oxide is a toxic EHS on the Table I, Parts A and B, toxic substance list, but it is not included on Part C as a flammable substance. However, ethylene oxide does have a flammability hazard, which would also have to be modeled using the appropriate endpoint parameters specified at N.J.A.C. 7:31-4.2(b)3ii. Data on the flammability endpoints is readily available in various technical references. On the other hand, the toxicity hazard for a substance included on Part C as a flammable substance does not have to be modeled because the substances on Part C are not as acutely toxic as those on Parts A and B.

At N.J.A.C. 7:31-4.2(b)3, the Department is proposing to qualify the requirement for the types of consequence analyses required in the risk assessment. The Department is proposing to delete "or" and add "and" to ensure that the owner or operator will use all three types of analyses (dispersion, thermal, and overpressure) in the consequence analysis. Additionally, the Department proposes that the consequence analysis will be as applicable to the EHS and scenario.

At N.J.A.C. 7:31-4.2(b)3i, the Department proposes to specify that the wind speed of 1.5 meters per second, which is one of the required parameters for dispersion modeling to determine the downwind distance of an EHS release in the risk assessment, be measured at 10 meters height. The 10-meter measurement height is consistent with that of the USEPA's height measurement to be used in the modeling of worst case and alternate case release scenarios.

At N.J.A.C. 7:31-4.3(b)5iv, the Department is proposing to revise the exception for operator attendance at ammonia refrigeration systems monitored by leak detection equipment by deleting the provision for emptying of equipment. With this proposed amendment, an EHS operator is not required to be in attendance at all times during mechanical refrigeration using

anhydrous ammonia within a closed loop system, if the Department determines that anhydrous ammonia detection monitoring equipment is capable of automatically isolating and shutting down EHS equipment and is provided with alarms reporting to a continuously attended station whose personnel are trained to take action to prevent an EHS accident. However, operator attendance must be provided at all times if required by any other applicable State and/or Federal requirements.

- At N.J.A.C. 7:31-4.9(b)4 and 4ii, the Department is proposing to clarify that the annual report shall contain a summary of potential catastrophic events in addition to EHS accidents that occurred during the previous year. A potential catastrophic event currently is defined at N.J.A.C. 7:31-1.5 as an incident that could have reasonably resulted in a catastrophic release of an EHS. If no EHS accidents or potential catastrophic events occurred since the last annual report, the owner or operator shall state this in the annual report.
- At N.J.A.C. 7:31-4.11(a), the Department is proposing two amendments. The first proposed amendment is to replace the term "stationary source" with "facility," described above. The other proposed amendment is to replace the abbreviation for risk management plan, RMP, with the phrase "risk management plan."
- At N.J.A.C. 7:31-4.11(d), the Department is proposing to specify that a consent agreement or addendum must be executed subsequent to a Department audit or inspection, rather than only an inspection, since the Department may conduct an audit or inspection in connection with its review of a new covered process.
- At N.J.A.C. 7:31-5.1(c)1 and 2, which incorporates 40 CFR 68.90(b) with specified changes, the Department is proposing amendments to specify that the owner or operator of a facility whose employees will not respond to accidental releases of regulated substances must meet the following specified requirements:
- (1) For facilities with any regulated toxic substance at or above the threshold quantity, the stationary source must be included in the community emergency response plan developed under 42 U.S.C. §11003;
- (2) For facilities with only regulated flammable substances at or above the threshold quantity, the owner or operator must coordinate response actions with the local fire department; and
- (3) The owner or operator must have appropriate mechanisms in place to notify emergency responders when there is a need for a response. Also, the owner or operator must obtain documentation from the local fire department or other outside emergency responder agencies, as applicable, that they will be responsible for responding to accidental releases at the owner or operator's facility.
- At N.J.A.C. 7:31-5.2(b)3, the Department is proposing to amend the requirement for the information to be included in the written assessment of the annual full scale emergency response exercise. The Department is proposing that the written assessment include the adequacy of notification to outside agencies and the public in addition to a written assessment of the ER plan

and of the adequacy or need for ER equipment after each ER plan implementation or each ER exercise.

At N.J.A.C. 7:31-5.2(b)4iii, the Department is proposing to delete the citations from the provision to exempt the Department's notification of specified EHS accidental releases. However, owners or operators must record and investigate the EHS accidents in accordance with the accident investigation procedures at the facility. Also, the Department is proposing to delete the references to Program 2 and Program 3 rule requirements and specify that an EHS accident be recorded in accordance with the procedures established for EHS accident for the facility.

At N.J.A.C. 7:31-6.1(c)3, which incorporates 40 CFR 68.115(b), (b)(1) and (b)(2) with changes, the Department is proposing to expand the EPA rule cite references to 40 CFR 68.115(b)(1) through (5) for the deletion of the phrase "more than" from "more than a threshold quantity" and the reference of the phrases "regulated toxic substance" with "toxic EHS" and "regulated flammable substance" with "flammable EHS."

At N.J.A.C. 7:31-6.1(c)4, which incorporates 40 CFR 68.115(b)(5)(ii) with specified changes, the Department is proposing to amend the text of the provision to state that the exemption for activities in laboratories does not apply to manufacturing, processing, or use of substances in pilot plant scale operations; however, only pilot plant scale operations handling the substances and threshold quantities listed at 40 CFR 68.130 in a process shall be covered under this chapter.

At N.J.A.C. 7:31-6.2(g) and (h), the Department is proposing to clarify the way to determine the threshold quantities for an RHS mixture. At N.J.A.C. 7:31-6.2(g), the Department is proposing to delete "of the intended mixture" and correct the erroneous cross reference to N.J.A.C. 7:31-6.3(b)2iv so that it correctly cross references N.J.A.C. 7:31-6.3(b)1 through 6.

At N.J.A.C. 7:31-6.2(h,) the Department is proposing that whether a threshold quantity of an RHS mixture is present shall be determined at the facility rather than in a process. Additionally, for purposes of determining whether that threshold quantity is present at the facility, the maximum capacity of the process vessel containing the RHS mixture shall be used assuming that the vessel is filled to capacity with the reactive ingredients of the RHS mixture. The Department is proposing to additionally require that the maximum capacity of each individual process vessel containing a RHS mixture shall be compared to the threshold quantity to determine applicability. Also, the Department is proposing that administrative controls that limit the maximum quantity in the process vessel shall not be taken into account; however, if the total quantity of reactant ingredients used in the RHS mixture present at the facility is less than the amount of the vessel capacity, that total quantity may be used for threshold quantity determination.

At N.J.A.C. 7:31-6.3(a), Table I, Part D, Group I, List of Individual Reactive Hazard Substances, the Department is proposing to correct errors in the listing of the CAS numbers for butyl hypochlorite tertiary, dinitro resourcinol (wetted with not less than 15% water), isosorbide dinitrate, and magnesium diamide. Also, a spelling error in the name of isosorbide dinitrate is proposed to be corrected.

At N.J.A.C. 7:31-6.3(a), Table I, Part D, Group II, Reactive Hazard Substance Mixtures Functional Groups, the Department is proposing to correct an error in one of molecular structure formulas listed at item 6 of the Table.

At N.J.A.C. 7:31-6.3(b)2iv(1) (proposed to be recodified at N.J.A.C. 7:31-6.3(b)5i, the Department is proposing an amendment to the temperature criteria to determine and document the heat of reaction of an RHS mixture. It is proposed that the heat of reaction be determined by calorimetry testing or using a generally accepted practice such as a literature review or engineering calculations to the lower temperature of 400 degrees Celsius or the maximum achievable temperature in the process vessel. In the current rule, there is a third temperature criterion of 100 degrees Celsius higher than the maximum projected or observed processing temperature. However, this criterion is not needed with the proposed definition of "maximum achievable temperature" included at N.J.A.C. 7:31-1.5.

Also at N.J.A.C. 7:31-6.3(b)2iv(1) (proposed to be recodified at N.J.A.C. 7:31-6.3(b)5), the Department is proposing to delete the word "acceptable" to clarify the provision for conducting calorimetry testing, which is one of the methods that an owner or operator may use to determine the heat of reaction. An owner or operator may use any standard industry calorimetry test method.

At proposed new N.J.A.C. 7:31-6.3(b)6, the Department is proposing another condition to clarify the method to determine the heat of reaction of an RHS mixture. The Department is proposing that the heat of reaction of an RHS mixture in a semi-batch reaction be determined assuming that all reactants are added at the same time as in a batch reaction. A batch reaction is a type of reaction in which the reactant ingredients are charged to the reactor vessel at once, or in steps, and the reactor vessel is then closed to complete the reaction. A semi-batch reaction is a type of reaction in which some reactants are first charged to a reactor vessel, and then one or more other reactants are charged to the vessel at a slower measured rate. However, errors or equipment failures may occur in which the expected charge rate or amount is exceeded.

At N.J.A.C. 7:31-6.3(b)2, the Department is proposing to clarify the unit for the heat of reaction value so that it is expressed as calories per gram of the substance with the specified functional group rather than calories per gram of the RHS mixture. The Department is also proposing that the heat of reaction shall be calculated using that substance which yields the highest value if more than one substance in the RHS mixture has a specified functional group. This way of expressing the heat of reaction value reflects the way the data is typically reported when performing calorimetry testing. Also, expressing the heat of reaction with this unit will eliminate the consideration of non-reacting components such as solvents in the heat of reaction calculation. Solvents act as a heat sink in a reaction mixture, and their inclusion in the heat of reaction calculation lowers the resulting heat of reaction calculated value. In this way, they act as a safeguard. However, mistakes could be made in the amount of solvent fed to a reaction process. The proposed method of expressing the heat of reaction value takes this into account and is a more conservative way to determine the applicability of the rules to a reactive hazard substance mixture.

At N.J.A.C. 7:31-6.3(c), the Department is proposing to delete "of RHS mixture" from the units in the heat of reaction column of Table II to reflect proposed amendments to the definition of heat of reaction and heat of reaction determination at N.J.A.C. 7:31-6.3(b)1.

The Department is proposing to delete N.J.A.C. 7:31-6.3(d), which states if an EHS is listed in Table I, Part D, Group I as an individual RHS and is also part of an RHS mixture in a covered process as determined in accordance with N.J.A.C. 7:31-6.3(b)2, the lower threshold quantity shall apply throughout this chapter. This provision is not necessary since applicability of the rules is determined based on whether an owner or operator is subject to the rules pursuant to the criteria of a Group I RHS or an RHS mixture.

At N.J.A.C. 7:31-7.2(a)2v, the Department is proposing to delete the requirement for owners or operators to provide one of the items of supplemental TCPA program information. This item included information for RHS mixtures containing one or more EHSs listed in Parts A, B, or C of Table I, on identification of each covered process containing an RHS mixture and the number of process vessels in which the RHS mixture is present at or above its threshold quantity. This requirement and information are no longer necessary as a result of the proposed amendment at N.J.A.C. 7:31-7.2(a)3iv discussed below.

At N.J.A.C. 7:31-7.2(a)3iii, the Department is proposing to delete the extraneous phrase "of RHS mixture" from the requirement that the heat of reaction of an RHS mixture be reported in the New Jersey Risk Management Plan in the units of calories/gram to reflect the proposed amendment at Table II of N.J.A.C. 7:31-6.3(c).

At N.J.A.C. 7:31-7.2(a)3iv, the Department is proposing that for RHS mixtures containing one or more EHS(s) listed in Parts A, B, or C of N.J.A.C. 7:31-6.3(a) Table I, at or above the threshold quantity at the facility, an owner or operator shall register the EHS listed on Part A, B, or C as a toxic or flammable substance, as applicable, and the RHS mixture. The Department is also proposing to delete the requirement that registration of RHS mixtures shall be made in accordance with N.J.A.C. 7:31-7.2(a)2v.

At N.J.A.C. 7:31-7.2(b), the Department is proposing that in addition to updates required by N.J.A.C. 7:31-7.1(c)3 through 5, all owners or operators shall submit a correction, rather than an update, to the Department within 60 days of an increase in maximum inventory of a covered process. In the current rule, an update of the Risk Management Plan (RMP) is specified. For an RMP update, the data of the entire RMP is required to be updated and submitted. However, for a correction to the RMP, only the specified data field, in this case the maximum inventory quantity, is required to be revised in the RMP submitted to the Department.

At proposed new N.J.A.C. 7:31-7.2(c), the Department is proposing to require the owner or operator to submit to the Department a Risk Management Plan correction within one month of a change in the qualified person or position. The correct current responsible person is necessary because this is the person to whom the Department sends official correspondence.

At N.J.A.C. 7:31-7.3(b), the Department is proposing to amend the provision to state that owners or operators that have an existing approved risk management program at their facility shall

be audited or inspected pursuant to N.J.A.C. 7:31-8, rather than in accordance with 40 CFR 68.220 with specified changes.

At N.J.A.C. 7:31-7.3(c), the Department is proposing that the RMPs of owners or operators that do not have an approved risk management program at their facility shall be reviewed by the Department to determine whether the facility has an established risk management program. Owners or operators that have at least one process hazard analysis (for Program 3 covered processes) shall be determined to have an established risk management program and shall be notified and audited or inspected in accordance with N.J.A.C. 7:31-8.

N.J.A.C. 7:31-7.5(a) requires that owners or operators having an approved risk management program shall comply with their approved risk management program for EHSs listed in N.J.A.C. 7:31-6.3, Table I, Parts A, B, and/or C until the risk management program is revised to reflect the new requirements of this chapter. The Department is proposing to add Part D to this list and to change the date from January 1, 2004 to no later than 365 days from the effective date of these amendments. This applies to the proposed deletion of Program 2 effective 365 days from the effective date of publication of these amendments and also to proposed amendments to Program 3 risk management program requirements.

N.J.A.C. 7:31-7.5(b) requires that owners or operators of facilities having listed EHSs on N.J.A.C. 7:31-6.3(a), Table I, Part D, at or above threshold quantities, shall be in compliance with this chapter by September 30, 2004. The Department is proposing to make this requirement applicable to owners or operators of facilities rather than covered processes. Also, the Department is proposing that the owners or operators of facilities having currently listed EHSs on N.J.A.C. 7:31-6.3(a), Table I, Part D, at or above threshold quantities, continue to be required to be in compliance with this chapter from September 30, 2004; however, all owners or operators having a reactive hazard substance mixture subject to this chapter with newly listed functional group number 44 on N.J.A.C. 7:31-6.3(a), Table 1, Part D, Group II, at or above threshold quantities shall be in compliance with this chapter no later than 365 days from the date of publication of these amendments.

At proposed new N.J.A.C. 7:31-7.5(e), the Department is proposing to require owners or operators of facilities having propane (CAS No. 74-98-6), propylene (CAS No. 115-07-1), butanes (normal butane (CAS No. 106-97-8) or isobutane (CAS No. 75-28-5), or butylenes (1-butene (CAS No. 106-98-9), 2-butene (CAS No. 107-01-7), butene (CAS No. 25167-67-3), 2-butene-cis (CAS No. 590-18-1), 2-butene-trans (CAS No. 624-64-6), and 2-methylpropene (CAS No. 115-11-7), listed at N.J.A.C. 7:31-6.3(a), Table I, Part C, at or above threshold quantities to be in compliance with this chapter no later than 365 days from the effective date of these amendments.

At proposed new N.J.A.C. 7:31-7.5(f), the Department is proposing that owners or operators of facilities having individual RHSs listed in Table 1, Part D, Group I, that are received, stored and handled in combination with one or more other chemical substances specifically formulated to inhibit the reactive hazard (such as water reactivity, pyrophoric, or self-reacting) where the RHS is at or above the threshold quantity shall be in compliance with this chapter no later than 365 days from the effective date of these amendments.

At proposed new N.J.A.C. 7:31-7.5(g), the Department is proposing to require all owners or operators that have an approved risk management program for EHSs listed in N.J.A.C. 7:31-6.3, Table I, Parts A, B, C, or D to comply with the process hazard analysis with risk assessment requirements of 40 CFR 68.67 with changes specified at N.J.A.C. 7:31-4.1(c) and 4.2. The effect of this proposed amendment would be that previous Program 2 processes that are required to perform a hazard review update any time following the effective date of these amendments would then have to instead perform process hazard analysis with risk assessment pursuant to N.J.A.C. 7:31-4.1(c) and 4.2.

At N.J.A.C. 7:31-8.1(c)1, which incorporates 40 CFR 68.200 with specified changes, the Department is proposing that the owner or operator shall maintain records supporting the implementation of this chapter for five years unless otherwise provided in N.J.A.C. 7:31-4 and require that the enumerated records be kept as follows: mechanical integrity/preventive maintenance records for the lifetime of EHS equipment, design safety review reports for the lifetime of a covered process, and hot work permits until they are reviewed in the next Department audit or inspection.

At N.J.A.C. 7:31-8.1(c)3, which incorporates 40 CFR 68.220(a) with changes, the Department is proposing to delete its current change to the Federal requirement in favor of replacing the Federal requirement with a similar requirement that requires the Department to periodically perform audits and inspections to determine compliance with risk management programs and risk management plans and to require revisions when necessary to ensure compliance with N.J.A.C. 7:31 and the TCPA. The Department is proposing to delete N.J.A.C. 7:31-8.1(c)4 because the provisions of this Department rule change over the Federal rule are proposed to be included in the amended N.J.A.C. 7:31-8.1(c)3.

At N.J.A.C. 7:31-8.1(c)6, which incorporates 40 CFR 68.220(e) with changes, the Department is proposing to delete the cross references to Subchapters 3, 4, and 7 of this chapter to clarify that the Department will evaluate compliance with the entire chapter during an audit and not only with those specified subchapters.

The Department is proposing to add the phrase "and inspections" to the heading of N.J.A.C. 7:31-8.2, which currently covers audits.

At N.J.A.C. 7:31-8.2(c), the Department is proposing to add a new requirement for owners or operators to provide a certification with any risk management program document submitted to the Department for review. The Department is proposing at N.J.A.C 7:31-8.2(c)1 that the owner or operator shall include the following certification with any risk management program required to be submitted: "I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant civil and criminal penalties for submitting false, inaccurate, or incomplete information." The Department is proposing at N.J.A.C. 7:31-8.2(c)2 that the certification shall be signed by the qualified person or position specified in the owner or operator's risk management plan, or person of higher authority

for the owner or operator. This certification requirement parallels the certification for submitted Risk Management Plans specified at 40 CFR 68.185 incorporated at N.J.A.C. 7:31-7.1(a).

At proposed new N.J.A.C. 7:31-8.2(e), the Department is proposing a new requirement for the owner or operator to make all documentation required pursuant to this chapter readily accessible for review by the Department during an audit or inspection. This will prevent unnecessary delays to the Department in the performance of an inspection or audit.

At N.J.A.C. 7:31-9.5(f), the Department is proposing to correct an erroneous cross reference.

At N.J.A.C. 7:31-10.6(b)2, the Department is proposing to add the word "program" after "risk management."

N.J.A.C. 7:31-11.4 Civil administrative penalties

The Department is proposing to amend N.J.A.C. 7:31-11.4, Civil administrative penalty determination, Table III, which provides the list of violations of the rule requirements including the penalty amounts for first, second, and third offenses and the designation as a minor or non-minor penalty. The Department proposes to revise Table III to reflect the proposed amended rule requirements discussed previously, which includes changes to existing violations, designation that violations related to Program 2 requirements will expire 365 days from the effective date of the rules, deletion of some violations, and addition of new violations.

Violations that are proposed to be amended to reflect proposed amendments to their corresponding rule requirement include current violation numbers 1, 4, 20, 23, 24, 106, 255 through 260, 262, 263, 267 through 271, 274, 275, 301 through 304, 322, 328, 399 through 403, 409 through 412, 419 through 430, 448, 460, 461, 462, 474, 475, 480, 497, 506, 580, 594 through 601, 607, and 631.

Violations that are proposed to be deleted in conjunction with the expiration of their corresponding Program 2 requirement 365 days from the effective date of these amendments include current violation numbers 10 through 14, 108 through 208, and 522 through 540. Violations that are proposed to be deleted in conjunction with the expiration of their corresponding Program 2 requirement 365 days from the effective date of these amendments include current violation 580 and 584.

Violations that are proposed to be deleted in conjunction with the proposed deletion of their corresponding rule requirement include current violation numbers 5 through 8, 276, 591, and 625 through 629.

Violation number 446 is proposed to be amended to correct an editorial error in the category of offense description to make the description consistent with the corresponding rule requirement of N.J.A.C. 7:31-4.12(f)6.

New violations are proposed for corresponding proposed new requirements at new violation numbers 215A, 596, 601, 602, 603, 612, 613, 614 and 615. In April 2006, the Department published amendments to N.J.A.C. 7:31-11.4, Civil administrative penalty determination, to reflect the requirements of the Grace Period Law, N.J.S.A. 13:1D-125 et seg. (See 37 N.J.R. 1595(a), 38 N.J.R 1678(a).) The adopted rules established the framework for the implementation of the Grace Period Law for purposes of imposing penalties for violations of the TCPA rules. Based upon the same standards, the Department is proposing to amend the penalty provisions to designate violations of the proposed new rule requirements as minor or non-minor and establish compliance grace periods for those violations identified as minor. In applying the statutory criteria to the proposed violations, the Department determined that violations that are purely administrative, such as submittal of the annual or triennial report, are minor. Violations that may result in a potential for a catastrophic release, such as failure to perform maintenance on equipment or failure to train operators, are non-minor because they pose more than a minimal risk to the public health, safety and natural resources and they materially and substantially undermine or impair the goals of the regulatory program. Designating these violations as non-minor is also consistent with the rules as currently codified. For example, a failure to comply with the IST evaluation pursuant to existing N.J.A.C. 7:31-4.2(g) is a non-minor violation because potential risk reduction measures would not be identified. A grace period is not appropriate for any violation that is non-minor.

The Department is proposing that new violation 215A be designated as non-minor with penalties for first, second, and third offenses in amounts of \$500.00, \$1,000, and \$2,500, respectively. This violation corresponds to failure to comply with proposed N.J.A.C. 7:31-4.1(c)24iv, which incorporates with changes 40 CFR 68.65(b)(4), which is a requirement to provide specific reactivity data in the process safety information. This violation and requirement is similar to other items of reactivity data required in the process safety information, which have the same penalty amounts and are also designated as non-minor. Failure to comply would not pose minimal risk to the public health, safety and natural resources and would materially and substantially undermine or impair the goals of the TCPA program.

The Department is proposing that new violation 596 be designated as minor with a 30-day grace period and penalties for first, second, and third offenses in amounts of \$500.00, \$1,000, and \$2,500, respectively. This violation corresponds to failure to comply with proposed N.J.A.C. 7:31-7.2(c), which is a requirement to submit to the Department a Risk Management Plan correction within one month of a change in the qualified person or position. This violation and requirement is similar to other items in the Risk Management Plan such as current violation 160, failure to include in the registration the name and title of the person or position with overall responsibility for RMP elements and implementation, which have the same penalty amounts and are also designated as minor. Failure to comply would pose minimal risk to the public health, safety and natural resources, would not materially and substantially undermine or impair the goals of the TCPA program, and is capable of being corrected within the time prescribed by the Department.

The Department is proposing that new violations 601 and 602 be designated as non-minor with penalties for first, second, and third offenses in the amounts of \$2,000, \$4,000, and \$10,000,

respectively. These violations correspond to failure to comply with proposed N.J.A.C. 7:31-7.5(e) and (f), which are a requirements for owners or operators of newly regulated facilities with LPG substances and reactive hazard substances to comply with this chapter by 365 days from the effective date of this rule. These violations and requirements are similar to other schedule of risk management program implementation requirements such as N.J.A.C. 7:31-7.5(a) and (b), which have the same penalty amounts and are also designated as non-minor. Failure to comply would not pose minimal risk to the public health, safety and natural resources and would materially and substantially undermine or impair the goals of the TCPA program.

The Department is proposing that new violation 603 be designated as non-minor with a penalty for first, second, and third offenses in amounts of \$4,000, \$8,000, and \$20,000, respectively. This violation corresponds to failure to comply with proposed N.J.A.C. 7:31-7.5(g), which requires owners or operators of a previous Program 2 process to update the next hazard review in accordance with the process hazard analysis and risk assessment requirements. This violation and requirement are similar to that for N.J.A.C. 7:31-4.1(c)7 which incorporates with changes 40 CFR 68.67(f), which has the same penalty amounts and is also designated as non-minor. Failure to comply would not pose minimal risk to the public health, safety and natural resources and would materially and substantially undermine or impair the goals of the TCPA program.

The Department is proposing that new violations 612 and 614 be designated as minor with a 30-day grace period and penalties for first, second, and third offenses in amounts of \$2,000, \$4,000, and \$10,000, respectively. These violations correspond to failure to comply with proposed N.J.A.C. 7:31-8.2(c)1 and 2, which are requirements to include a certification statement with any document submitted to the Department and having the certification statement signed by the qualified person or person of higher authority. Failure to comply would pose minimal risk to the public health, safety and natural resources, would not materially and substantially undermine or impair the goals of the TCPA program, and is capable of being corrected within the time prescribed by the Department.

The Department is proposing that new violations 613 and 615 be designated as non minor with penalties for first, second, and third offenses in amounts of \$2,000, \$4,000, and \$10,000, respectively. These violations correspond to failure to submit true accurate or complete information proposed at new N.J.A.C. 7:31-8.2(c)1 and failure to make documentation required pursuant to this chapter readily accessible for review by the Department during an audit or inspection as proposed at new N.J.A.C. 7:31-8.2(e). Failure to comply with these requirements would materially and substantially undermine and impair the goals of the TCPA program because the Department must be able to rely on the accuracy of the information submitted by the regulated community and must be able to confirm compliance with the TCPA rules in a timely manner.

The Department is proposing to revise current violation 573 to change its designation from non-minor to minor. This violation corresponds to N.J.A.C. 7:31-7.1(a) which incorporates 40 CFR 68.185(b), which requires the owner or operator to submit a certification statement with the Risk Management Plan submittal. Failure to comply would pose minimal risk to the public health, safety and natural resources, would not materially and substantially undermine or impair the goals

of the TCPA program, and is capable of being corrected within the time prescribed by the Department.

The Department is also proposing amendments to update references to the name of the Bureau of Release Prevention.

Social Impact

The TCPA rules will continue to provide a positive social impact by requiring extraordinarily hazardous substances to be handled in a manner that protects public health, safety and the environment. The effectiveness of the TCPA program is reflected by the fact that, since its inception in 1988, no reported fatalities have occurred as a result of an accidental EHS release from a facility regulated under the TCPA program. The rules ensure reasonable and necessary standards for the regulation and management of EHSs.

The proposed amendments will enhance the TCPA program in several ways. The proposed amendments will clarify or supplement the current rules, which will facilitate increased understanding and compliance. Elimination of the Group I Reactive Hazard Substance exemption will expand program coverage to include a category of substances that have been identified as a contributing cause of industrial accidents. The TCPA rules will require owners and operators of facilities that handle these reactive substances to develop and implement risk management programs to minimize the risk of accidental releases. By regulating LPG gases as EHSs except when they are used as a fuel or for retail sale, the Department will regulate these flammable gases in the same manner as the Federal ARP program, without having a negative impact on fuel dealers and users. Regulation of reactive hazard substances and LPG gases as EHSs is expected to bring approximately 15 new stationary sources into the TCPA program, requiring their owners or operators to prepare and implement risk management programs. A detailed analysis of the numbers and types of businesses expected to be impacted by these proposed rules is presented in the Economic Impact statement below.

The proposed penalty provisions will have a positive social impact by encouraging compliance with the TCPA rules. The increased penalty for failure to register a Risk Management Plan will provide a greater deterrent for non-compliance.

Economic Impact

The proposed amendments to the TCPA rules are projected to bring 15 currently unregulated businesses into the TCPA program, increasing the census of regulated sources from the current 93 (based on the TCPA Fiscal Year 2008 Fee Report) to 108. This projection of 15 new regulated sources is based on the Department's review of Community Right to Know chemical inventory data for calendar year 2006, the most current year for which information is available, and Risk Management Plan information submitted to the EPA. It should be noted that the use of Community Right to Know data for this purpose has limitations due to the fact that the inventories of the chemicals are reported in quantity ranges, such as 100 to 499 pounds, 500 to 999 pounds,

1,000 to 9,999 pounds, etc., rather than in specific amounts. Thus, it is difficult to predict precisely how many businesses actually have the listed chemicals at threshold quantities and how many of these business entities will continue to use, manufacture or store these newly listed substances. Exhibit 1 below shows the projection of the numbers of new registered facilities, covered processes, and hazard units of EHS inventory, where each hazard unit is a multiple of the threshold quantity. The number of covered processes projected in June 2010 in Exhibit 1 includes the estimate of additional covered processes that will be affected by the proposed amendments that consider a petroleum refinery process unit as a covered process.

The proposed amendments to the definitions of "covered process" and "petroleum refining process unit" will affect the fees for the four petroleum refineries. The TCPA program fees are based on the level of effort expended by the Department to implement the program, and the refineries are some of the most complex facilities in the program, requiring extensive resources to inspect. One petroleum refining process unit is analogous to a covered process at a chemical facility in terms of size and Department review time. N.J.A.C. 7:31-1.11A provides requirements for the Department to prepare a fee schedule for registrants to cover the costs of the Department's implementation of the program. The fees are broken up into three components: a base fee, an inventory fee, and a process fee. The inventory fee is based on the number of hazard units (a hazard unit is the multiple of the threshold quantity for each EHS). In 2008, the base fee was \$3,215. The inventory fee was \$11.90 per hazard unit, and the process fee was \$4,865 per process.

With the increase in the number of registered covered processes resulting from the increased number of processes at petroleum refineries to which these rules will apply, and the increase in new registrants that will result from the proposed amendments to the list of Extraordinarily Hazardous Substances, the Department estimates that the process fee would decrease to about \$3,273 per process. The least and greatest number of petroleum refining process units is estimated at 10 and 20, respectively, resulting in an increase in process fees ranging from approximately \$32,730 to \$65,460 per year for the petroleum refineries based on actual Fiscal Year (FY) 2008 fees and projected FY 2010 fees. These projected fees are consistent with the annual staff resources found to be required by the Department to adequately audit these sites.

Exhibit 1 TCPA Registrant Census

Regulated Entity	October 2007 Census	Projected Census June, 2010
Facilities	93	108
Covered Process	121	194
Hazard Units of Inventory	49,600	65,700

The substances added to the EHS list are described earlier in this Summary. As shown in Exhibit 2 below, the addition of LPG and reactive hazard substances EHSs will result in the following increases in the number of sources, covered processes and hazard units.

Exhibit 2
Projected Census of New Facilities with New EHSs

	Number of	Number of	Number of Hazard
	<u>Facilities</u>	<u>Processes</u>	<u>Units</u>
LPG hydrocarbons added to the list	8	8	3,639
of flammable substances			
Newly regulated Reactive Hazard	7	7	16
Substances			
Total	15	15	3,655

Because of the fact that more TCPA facilities will regulated under the proposed amendments, the annual TCPA fee assessed to each current registrant is projected to decrease, resulting in a positive economic impact for the currently regulated registrants. The annual fees assessed to registrants are based on the costs to support the TCPA program. The larger census will reduce the fees to each current registrant because the current FY 2008 Department annual expense of \$1.472 million is projected to be unchanged in FY 2010 when regulation of the newly covered EHSs becomes effective and the annual cost will be divided among new registrants and current registrants. The TCPA fee is made up of three unit fees: a base fee paid by each stationary source. which is 40 percent of the cost of program; a covered process fee for each process covered under TCPA at each stationary source, which accounts for 40 percent of the program costs; and a hazard unit fee for each inventory multiple of EHS threshold quantity, which is 20 percent of the program costs. Fees are set each year based on the annual TCPA program expenses. Since program expenses are expected to remain the same for FY 2010, the unit fees paid by each owner or operator will be reduced since the program costs will be shared by more businesses. Listed below in Exhibit 3 are the unit fees projected for FY 2010 and those assessed for 2008. Exhibit 3A shows how the Department arrived at these unit fees.

Exhib	<u>it 3</u>
TCPA	Fees

	FY 2008	Projected FY 2010
	<u>Unit Fees</u>	<u>Unit Fees</u>
Base Fee (per source)	\$3,215	\$2,940
Process Fee (per covered process at a	\$4,865	\$3,273
source)		
Inventory Fee (per Unit of EHS	\$11.90	\$9.65
threshold quantity)		

Exhibit 3A
TCPA Program Base, Process and Inventory Annual Unit Fees Proposed Rule

Department Expense = \$1.472 million		Under Current Rule FY 2008		Under Proposed Rule FY 2010	
Percent Contribution	Aggregate Contribution	Census (1)	Unit Fee. Rounded	Census (1)	Unit Fee, Rounded
Base fee, 20 percent	\$294K	91.5 sources	\$3,215	108 sources	\$2,940
Process fee, 40 percent	\$589 K	121 covered processes	\$4,865	194 covered processes	\$3,273
Inventory fee, 40 percent	\$589 K	49.6K hazard units	\$11.90	65.7K hazard units	\$9.65

Notes:

(1) The 93 and 108 sources tabulated in Exhibit 1 translate to 91.5 and 108 full fee equivalent, respectively, for fee determination purposes.

The cost of compliance with the rules proposed for readoption with amendments will vary according to the current regulatory status of the business and whether the business has a newly listed EHS. New registrants will not only be assessed the TCPA fee, they will also be impacted by incurring costs to develop and implement risk management programs. Current registrants with newly regulated EHSs will incur the cost of modifying their risk management programs. Current registrants with Program 3 covered processes that do not have newly listed EHS should not incur any significant additional program costs; however, they will have to update their risk assessment to meet the new requirements of N.J.A.C. 7:31-4.2 when their next process hazard analysis with risk assessment revalidation is due, which is required every five years. Current registrants with Program 2 covered processes that do not have newly listed EHSs will have to update all their risk management program practices and procedures to meet the Program 3 requirements. Exhibit 4 below presents the initial and ongoing TCPA costs with a listing of the tasks and projected effort in person-hours for developing and implementing risk management programs plus salary rates on which the costs are based, plus the annual TCPA fee.

Exhibit 4
Effort and Cost Data of Representative Sources To Comply with Amended Rule

	Effort and Cost Data of Repre	sentative So	ources To (Comply witl	<u>h Amended l</u>	Rule
	Source ID (see descriptions below)	<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>	
	Processes, Total Program 3	1 1	1 1	1 1	1	
	Hazard Units RMPlan Submittal Cost, \$ Initial TCPA Cost, \$	1,070 4,570	1,730 15,850	0 980	410 7,840	
	Annual Ongoing TCPA Cost, \$	18,060	18,060	18,060	18,060	
	Annual TCPA Fee, \$ (FY 2010)	6,220	6,220	6,220	6,220	
1 1.1	Wage Rates, \$/hr Corporate	85	85	85	85	
1.2 1.3	Management Technical	60 41	60 41	60 41	60 41	
1.4	Production	24	24	24	24	
2 2.1 2.1.1	Activity Effort, Person Hours RMPlan Prep and Submittal Executive Summary					
	Technical Registration Data	12	12	0	4	
	Technical Accident History	2	4	0	4	
2.1.3.2	Corporate Technical	1 2	1 2	0 0	1 0	
2.1.4	Emergency Response Corporate	0		0	0	
2.1.4.1	Technical Offsite Consequence Analysis	0	2 2	0	0	
	Technical	8	16	0	0	
2.2 2.2.1	Initial TCPA Effort Rule Familiarization					
2.2.1.1	Management Technical	4	8 16	4 6	6 12	
2.2.2	PreStart Up Review					
2.2.3	Technical Accident Investigation	2	10	0	6	
2.2.3.1 2.2.4	Technical Management of Change	2	10	0	6	
	Management	1	12	0	6	

2.2.4.2 Technical	2	24	0	12
2.2.4.3 Production	1	12	0	6
2.2.5 Process Safety Information				
2.2.5.1 Technical	2	24	8	16
2.2.6 Process Hazard Analysis				
2.2.6.1 Management	20	24	0	16
2.2.6.2 Technical	40	48	4	24
2.2.7 Standard Operating Procedure				
2.2.7.1 Management	2	8	0	4
2.2.7.2 Technical	4	40	0	20
2.2.7.3 Production	4	20	0	10
2.2.8 Employee Training				
2.2.8.1 Technical	4	30	0	10
2.2.8.2 Production	4	20	0	10
2.2.9 Maintenance Development				
2.2.9.1 Management	1	10	0	5
2.2.9.2 Technical	2	40	0	10
2.2.9.3 Production	3	40	0	10

2.3	Ongoing Annual TCPA Effort (A	Assume similar effort for cases A, B, C, and D)
	Management of Change	
	Technical	24
2.3.1.2	Production	16
2.3.2	Refresher Training	
2.3.2.1	Technical	8
2.3.2.2	Production	32
2.3.3.	Maintenance	
2.3.3.1	Technical	32
2.3.4	Compliance Audit	
2.3.4.1	Corporate	4
2.3.4.2	Management	8
2.3.4.3	Technical	24
2.3.5	Emergency Response Training	
2.3.5.1	Technical	8
2.3.5.2	Production	64
2.3.6	Emergency Response Exercise	
2.3.6.1	Technical	16
2.3.6.2	Production	256
2.3.7	PHA/Risk Assessment	
2.3.7.1	Technical (per year, PHA/RA	30
	revalidated every five years)	

Description of Representative Sources

- Source A A currently regulated source with a newly regulated substance (Propane used as a previously unregulated raw material); Source A is an establishment of a medium non-chemical manufacturer with one covered process.
- Source B A newly regulated source with a newly regulated substance (a Group I reactive hazard substance inhibited, in one process); Source B is a medium chemical manufacturing establishment.
- Source C A currently regulated source with only a toxic EHS; Source C is a small industrial establishment with one current Program 3 covered process and no newly listed EHSs.
- Source D A currently regulated source with one process previously regulated as a Program 2 process who must update the risk management program to Program 3; Source D is an establishment of a medium chemical manufacturer with one covered process.

The method for determination of representative estimates of start up and annual costs employs the approach originally developed by USEPA in their 1996 Economic Analysis Report for the 112r Clean Air Act rule which the Department used for this rule in 1998 and described in that Proposal Summary. For this economic analysis the estimates are updated to reflect program experience.

The values for start up and annual costs below are taken from Exhibit 4 and rounded to the nearest \$10.00. For example, the risk management plan preparation and submittal portion of the start up cost of Source B, one of the 14 newly regulated sources, as determined using Exhibit 4 is \$1,730. That value is the sum of the products of the wage rates (Exhibit 4 line 1) and the personhours for risk management plan elements prepared (Exhibit 4 line 2.1.1 through 2.1.5).

A representative newly regulated source, Source B, with a newly regulated Group I reactive hazard substance is projected to experience start up and annual costs presented in Exhibit 4 as follows:

Source B (newly regulated source)

Start up costs

-Initial risk management program cost (Exhibit 4, 2.2.1through 2.2.9.3) \$15,850 -Risk management plan preparation \$1,070

and submittal, etc. (Exhibit 4, 2.1-2.1.5.1)

	\$16,920
Annual costs -On going risk management cost (Exhibit 4, 2.3.1-2.3.5.1) -TCPA fee (Exhibit 4-rounded)	\$18,060 \$6,220
	\$24,280

Nine of the current registrants with currently regulated toxic or flammable EHSs already listed in Table I are projected to have at least one newly regulated substance in addition to their currently regulated toxic and flammable substances. Currently, this group has ten covered processes handling 13,644 hazard units. The census of processes and hazard unit inventory expected to be added with corresponding hazard unit inventory by category of newly regulated substance is shown in Exhibit 5 below. This group of registrants includes only industrial facilities; no water treatment facilities are projected to have newly regulated substances. As shown in Exhibit 5 below, the Department estimates that 58 additional processes and 12,509 hazard units of EHSs will become regulated under the proposal.

Exhibit 5 Current Registrants Having New Covered Processes and EHS Inventory Census

	Number of New <u>Processes</u>	Number of Additional Hazard Units
LPG hydrocarbons added to the list	57	12,508
of flammable substances	1	1
Individual reactive hazard substances added at Part D, Group I	I	I
Reactive hazard substance mixture	0	0
functional groups added to Part D,		-
Group II		
Total	58	12,509

A representative of this group of 22 current registrants, with a currently regulated flammable EHS in the process that includes a newly regulated LPG substance, is projected to experience start up and annual costs presented in Exhibit 4 as follows:

Source A (currently regulated source with propane)

Start-up Costs	
-Initial risk management program cost (Exhibit 4, 2.2.1 through 2.2.9.3) -Risk management plan preparation	\$4,570
	¢5 (40
and submittal, etc. (Exhibit 4, 2.1through 2.1.5.1)	\$5,640
	\$8,540
	Ψ0,5 10
Annual costs	
-On going incremental risk management cost	
(Exhibit 4, 2.3.1 through 2.3.5.1)	\$18,060
-TCPA fee (Exhibit 4-rounded)	\$6,220
	\$24,280

The projected FY 2010 TCPA fee of Source A is \$1,869 less than that paid for FY 2008, because of lower unit fee rates.

Eighty-four of the current registrants are projected to have no newly regulated substances. This group of registrants includes industrial facilities and water treatment facilities. Exhibit 6 shows the census of processes and hazard unit inventory for these sources.

Exhibit 6 Current Registrants with No New Covered Processes or Regulated Substances

	Number of Sources	Number of Processes	Number of Hazard Units
Currently regulated toxic and	69	95	35,518
flammable substances in industrial			
facilities			
Currently regulated toxic and	15	16	414
flammable substances in water			
treatment facilities			
Total	84	111	35,932

Since these sources have no newly regulated EHSs, these registrants are projected to experience no start up costs and minor additional annual risk management program implementation costs. These minor costs will be incurred as a result of revisions to Program 3 prevention program requirements. Their annual TCPA fees for FY 2010 will be lower than their FY 2008 fees because of the lower projected unit fees. A representative currently regulated registrant with a toxic EHS will experience the following start up and annual costs:

Source C (currently regulated source with no newly regulated EHSs)

Start up costs		
-Initial risk management program cost (Exhibit 4, 2.2.1through 2.2.9.3)		\$980
-Risk management plan preparation (Exhibit 4, 2.1 through 2.1.5.1)	0	
and submittal, etc.		
		\$980
Annual costs		
-On going risk management cost		
(Exhibit 4, 2.3.1 through 2.3.5.1)		\$18,060
-TCPA fee (Exhibit 4-rounded)		\$6,220
		\$24 280

The projected FY 2010 TCPA fee for this representative source is \$2,312 less than the FY 2008 fee paid resulting in a positive economic impact.

Environmental Impact

Readoption of the TCPA rules will ensure that they will continue to have a positive impact on the environment by continuing to regulate the management of EHSs and ensuring that processes and equipment that handle EHSs are properly designed and maintained. Regulating previously exempted Group I reactive substances under the TCPA program will have a positive effect by reducing the risk of accidental releases of these substances. Regulating LPG gases will require owners and operators whose manufacturing processes utilize these flammable gases or who use them as feedstocks in their processes to implement comprehensive risk management programs to prevent catastrophic accidents that impact the public and the environment. The penalty provisions of the rules act as a deterrent to those who would violate the regulatory requirements. The risk assessment requirements will have a positive environmental impact by reducing the potential for accidental releases.

Federal Standards Analysis

N.J.S.A. 52:14B-1 et seq. (P.L. 1995, c. 65) and Executive Order No. 27 (1994) require State agencies that adopt, readopt, or amend any rule or regulation that exceeds any Federal standards or requirements to include in the rulemaking document a Federal Standards Analysis. This proposed readoption of the TCPA rules at N.J.A.C. 7:31 with amendments includes the requirements of the Federal accidental release prevention program (ARP program) at 40 CFR 68, which were incorporated by reference into the TCPA rules in 1998. Based on its past experience in implementing a release prevention program since 1988 and the mandates of the TCPA, the Department supplemented the Federal rules with additional requirements at that time. The current TCPA rules contain requirements that are more stringent and/or broader in scope than the Federal rules at 40 CFR 68. Many of these requirements are statutory mandates from the TCPA that

predate Section 112(r) of the Federal Clean Air Act Amendments of 1990 that established the Federal ARP program. Other requirements that exceed Federal standards are needed to protect the public from the threat of accidental releases of EHSs in New Jersey, which is more highly industrialized and densely populated than other states.

The TCPA rules and the Federal ARP rules currently regulate toxic and flammable substances. There are more toxic substances regulated as EHSs under New Jersey's TCPA Accidental Release Prevention program than under the Federal program. Listed below are the toxic substances on the TCPA EHS list that are not regulated toxic substances under the Federal program. The basis for the selection criteria used for listing substances is found in the TCPA definition of extraordinarily hazardous substance (EHS). The current TCPA list is comprised of toxic substances at threshold quantities that meet the statutory definition of an EHS, which is any substance ". . . in sufficient quantities . . . such that its release into the environment would produce a significant likelihood that persons exposed will suffer acute health effects resulting in death or permanent disability." The selection criterion, used by the Department in 1988 for including substances on the EHS list, the Substance Hazard Index (SHI), fulfills the statutory requirement to regulate substances having significant potential for lethal acute toxicity and high volatility.

The Substance Hazard Index (SHI) is a single value computed for a substance based on the following two factors combined as a ratio: equilibrium vapor concentration at 20 degrees Celsius divided by the ATC or the lethal concentration to five percent of the exposed population (LC_5). The greater the volatility and the greater the acute toxicity (that is, the lower the acute toxicity concentration), the greater the SHI of a substance will be. The TCPA SHI criterion for selecting substances is the specific SHI value of 1,388, which reflects the equilibrium vapor concentration and ATC of 36 percent concentration solution of hydrogen chloride (hydrochloric acid). All substances regulated under TCPA are as hazardous as this substance, which in itself is highly hazardous and regulated as an EHS.

SUBSTANCES ON THE TCPA EHS LIST THAT ARE NOT ON THE

USEPA

TOXIC SUBSTANCES LIST

(Note: Substances with asterisks are also listed on the EPA flammable substances list.)

NAME OF EHS	CAS	<u>SHI</u>
	NUMBER	
ACETALDEHYDE*	00075-07-0	6579
ALLYL CHLORIDE	00107-05-1	13384
BORON TRIBROMIDE	10294-33-4	1447
BROMINE CHLORIDE	13863-41-7	10000
BROMINE PENTAFLUORIDE	07789-30-2	45132
CARBON MONOXIDE	00630-08-0	1751
(10% by volume or greater)		
CARBONYL FLUORIDE	00353-50-4	27778
CHLORINE	13637-63-3	175439
PENTAFLUORIDE		

CHLORINE TRIFLUORIDE	07790-91-2	104167
CHLOROPICRIN	00076-06-2	6579
CHLOROPRENE	00126-99-8	1419
CYANOGEN*	00460-19-5	28571
DIAZOMETHANE	00334-88-3	100000
DICHLOROACETYLENE	07572-29-4	346260
DICHLOROSILANE*	04109-96-0	36765
DIETHYLAMINE	00109-89-7	1493
DIMETHYLAMINE*	00124-40-3	4975
ETHYL MERCAPTAN*	00075-08-1	2100
ETHYLAMINE*	00075-04-7	8157
HEXAFLUOROACETONE HYDROBROMIC ACID	00684-16-2	36364
	10035-10-6	2105
(conc. 62% or greater) HYDROGEN BROMIDE	10035-10-6	20000
(anhydrous)	10033-10-6	20000
ISOPROPYLAMINE*	00075-31-0	8103
KETENE	00463-51-4	588235
METHACRYLALDEHYDE	00078-85-3	6316
METHYL BROMIDE	00078-83-9	38462
METHYL DICHLOROSILANE	00074-83-9	1548
METHYL FLUOROACETATE	00453-18-9	39277
METHYL FLUOROSULFATE	00433-18-9	92105
METHYL IODIDE	00074-88-4	18716
METHYL VINYL KETONE	00074-33-4	389254
METHYLAMINE*	00074-89-5	10000
NITROGEN DIOXIDE	10102-44-0	141398
(10% by volume or greater)	10102 11 0	111370
NITROGEN TETROXIDE	10544-72-6	141398
10% by volume or greater)		
NITROGEN TRIFLUORIDE	07783-54-2	5000
NITROGEN TRIOXIDE	10544-73-7	141398
OSMIUM TETROXIDE	20816-12-0	95943
OXYGEN DIFLUORIDE	07783-41-7	6666667
OZONE	10028-15-6	2083333
PENTABORANE	19624-22-7	750000
PERCHLORYL FLUORIDE	07616-94-6	25974
PHOSPHORUS TRIFLUORIDE	07783-55-3	1890
PROPYLAMINE	00107-10-8	1413
SELENIUM HEXAFLUORIDE	07783-79-1	200000
STIBINE	07803-52-3	333333
SULFUR MONOCHLORIDE	10025-67-9	1864
SULFUR PENTAFLUORIDE	05714-22-7	738158
SULFURYL FLUORIDE	02699-79-8	3311
TELLURIUM	07783-80-4	1000000
HEXAFLUORIDE		
TETRAFLUOROHYDRAZINE	10036-47-2	20000
THIONYL CHLORIDE	07719-09-7	73680
TRICHLOROSILANE*	10025-78-2	25155
TRIFLUOROCHLOROETHYL	00079-38-9	11547
ENE*	00407 00 0	* •= :
TRIMETHOXYSILANE	02487-90-3	9474
TRIMETHYLAMINE*	00075-50-3	4022
VINYL TRICHLOROSILANE	00075-94-4	1551
		16

USEPA's criteria for selecting substances differ from TCPA's Substance Hazard Index (SHI) criterion. USEPA used two separate criteria, one representing substance toxicity, and the other representing volatility.

The USEPA criteria are not based on a specific substance, but are designed to limit the list to a practical number of the most hazardous substances. The USEPA criteria for selecting substances are a median lethal concentration (LC₅₀) of 2.0 grams per cubic meter (g/m³) or lower in all but the case of chloroform and a vapor pressure of 10 torr or higher at 25 degrees Celsius.

A total of 47 substances meet both TCPA's and USEPA's selection criteria. For example, a substance such as acrylonitrile is listed by USEPA because it has an LC_{50} of 1.27 g/m³ and a vapor pressure of 115 torr at 25 degrees Celsius. The SHI for acrylonitrile is 1,896 and, therefore, it is listed in the TCPA regulations.

A total of 57 substances meet the TCPA SHI criterion but not USEPA criteria. For example, boron tribromide was selected for the TCPA list because it has an SHI of 1, 447. It has sufficient vapor pressure, 55 torr, to meet the first part of the USEPA criteria, but with an LC_{50} of 5.2 g/m³, it does not meet the second part of the USEPA criteria.

Finally, 30 substances meet USEPA criteria but not the TCPA SHI criterion. For example, carbon disulfide meets USEPA criteria with an LC_{50} of 1.0 g/m³ and a vapor pressure of 360 torr at 25 degrees Celsius, but its SHI of 1,236 falls just below the TCPA SHI criterion of 1388. These 30 substances are included in the Table I, Part B list because the TCPA program must regulate all Federally regulated toxic substances.

The threshold quantities assigned to the toxic EHSs were established to attain the statutory goal and were individually set by using the TCPA threshold determination method. Each threshold quantity established under this method is that quantity whose potential release over a one hour period at a point 100 meters from the property boundary would result in a death beyond the boundary. This method assumes a population density of 10,000 persons per square mile, a value chosen to reflect the average population density of New Jersey cities. The 100 meter distance between the point of potential release and the site boundary was chosen as representative of distances to property boundaries in New Jersey. Each threshold quantity has been calculated using dispersion modeling and mortality curves that directly reflect the acute toxicity concentration (ATC) of the respective substance, and its equilibrium vapor pressure at 20 degrees Celsius for substances that are normally liquid.

USEPA also determines threshold quantity of a substance by a method different from that used by the TCPA program. While substances regulated by both programs represent a hazard to the community at specific acute toxicity concentrations, in the TCPA program, each substance is assigned a unique threshold value. The TCPA program determined the threshold value as the quantity whose release would disperse as a cloud covering an area having specified population density to result in a consequence of death or permanent disability. In contrast, the USEPA

method ranks substances by a toxicity/volatilization rate ratio into classes to which arbitrary threshold values have been assigned. Thus, USEPA assigns several substances with disparate characteristics to share the same threshold value.

As a result of the differences in threshold quantity determination, the TCPA threshold quantity is lower than the USEPA threshold quantity in 54 out of 58 cases where the toxic substance is listed on the existing TCPA list (Table I, Part A) and the USEPA list (Table I, Part B). Currently, 14 facilities are regulated under TCPA rules that would otherwise be unregulated if the Department adopted the Federal thresholds for toxic substances.

The Department believes the existing TCPA threshold quantity values are appropriate for New Jersey because of the number of small congested industrial sites in New Jersey handling such substances and the State's high population density in areas surrounding those industrial sites, which the TCPA threshold determination method takes into account. A TCPA threshold quantity release modeled by this method would result in the potential for 15 persons to suffer from acutely toxic effects with, statistically, one fatality. By comparison, the average USEPA threshold quantity of a substance when modeled by the same TCPA threshold determination method shows the potential for 606 persons to suffer from acutely toxic effects with statistically 108 fatalities. For 33 of the 47 toxic substances listed by both TCPA and USEPA, the USEPA threshold quantity, if released, based on the same acute toxic effect criteria, would potentially affect from 127 persons to as many as 11,426 persons, as compared to 15 persons potentially affected by the release of the TCPA threshold quantity of the same substance.

The TCPA toxic substances that are not also on the USEPA toxic substances list, but which meet the SHI criteria, represent hazards at least as severe as those of substances on the USEPA list. The benefits of their continued inclusion as EHSs are significant reductions of scientifically supported estimates of potential deaths or permanent disability in the communities surrounding these existing sites.

Owners and operators having EHSs regulated only under the TCPA rules or having EHSs at lower State thresholds incur the costs of implementing a risk management program and paying annual fee assessments. The Department believes the benefits of protecting the public and the environment outweigh any incurred costs, which are described fully in the Economic Impact statement above.

The Department is proposing to change the means of determining rule applicability based on the threshold quantity of an EHS present from the quantity within a covered process, which is a smaller set of equipment within a stationary source, to the quantity at the entire facility. This is consistent with the intent of the TCPA Act. The TCPA rules determined threshold quantity applicability in this way in the rules initially adopted in 1988, but this method was changed to the current method with the incorporation of the EPA's Chemical Accident Prevention in 1998 to be consistent with the EPA rules. Basing threshold quantity applicability on the covered process is less stringent because an owner or operator could potentially have less than the threshold quantity present in several processes but have greater than the threshold quantity present for the overall stationary source without being subject to the rules. However, the Department does not anticipate

that these amendments will make additional stationary sources subject to the rules. Following the change to threshold quantity determination based on covered process in 1998, no stationary sources deregistered from the program because of the new threshold quantity determination method.

Changes to the applicability provision at 40 CFR 68.10(a), incorporated with changes at N.J.A.C. 7:31-1.1(c)3i, and the definitions of covered process, process, threshold quantity, facility, and inventory, are proposed to make these rule provisions consistent with the proposed amendments that will base threshold quantity applicability for the entire stationary source.

Several owners or operators are subject to these rules because one or more of their processes generates, or is capable of generating, an EHS at threshold quantities over a one-hour period of time. The TCPA statute explicitly includes both "generation" and "storage and handling" of extraordinarily hazardous substances as regulated activities, while the Federal ARP program does not include generation. One group that may be affected by this if their processes are capable of generating ozone at threshold quantities is New Jersey water purveyors using ozone to disinfect potable water. Because ozone is not a Federally regulated substance, these owners and operators come under the purview of the TCPA rules solely because ozone is a State-regulated EHS generated by their processes.

There is a possibility that an owner or operator can be subject to the TCPA rules and not be subject to the Federal ARP program because New Jersey regulates EHSs at quantities that meet or exceed the threshold quantity, while Federal program applicability is based on exceeding, rather than meeting, the threshold. While the chances are small of an owner or operator having the threshold quantity of a regulated substance without exceeding it, it is possible that this difference in determining program applicability may subject an owner or operator to the TCPA rules.

As discussed above, the TCPA rules list a greater number of toxic substances as EHSs than the number of toxic substances regulated under the Federal ARP program. Also, some of the toxic substances regulated under both programs have lower State thresholds. Because of this, the TCPA program is broader in scope than the Federal program and affects more owners and operators. Owners or operators that are affected by New Jersey's more inclusive EHS list or lower thresholds are already regulated under TCPA and have existing approved risk management programs.

In addition, owners or operators in New Jersey may come under the purview of the TCPA rules because of their EHS mixtures. Under the Federal program, amounts of regulated substances contained in mixtures where the concentration of the regulated substance is below one percent by weight or its partial pressure is less than 10 millimeters of mercury, need not be considered when determining whether more than a threshold quantity is present at the stationary source. The TCPA rules require that amounts of EHSs contained in mixtures at a concentration at or above the acute toxicity concentration must be considered when determining whether more than a threshold quantity is present. In general, the acute toxicity concentration of an EHS is much less than one percent. However, the stricter requirement for determining thresholds for EHSs in mixtures should have very little effect on the scope of stationary sources subject to the rules since EHSs are

generally found stored at much higher concentrations. The different concentration cutoffs may affect whether equipment in a downstream process is subject to the rules.

Owners and operators regulated under TCPA but not the Federal ARP program for any of the reasons discussed above (EHS list and threshold differences, EHS generation, having an EHS at, but not above, the threshold quantity, or differences in calculating EHSs in mixtures) will be expected to continue to implement their risk management programs, and incur the costs associated with these activities as discussed in the Economic Impact statement above.

The Department will continue to regulate flammable substances at the current 10,000 pound threshold, which is the same threshold as the Federal program. By regulating LPGs, the TCPA list of flammable EHSs will be the same as the Federal list of regulated flammable substances.

The listing of reactive chemicals as EHSs is a significant requirement that is part of the amendments to the TCPA rules. This requirement is not part of the Federal ARP rules. The Department is proposing to list reactive substances as EHSs that are subject to the TCPA rules because of their identification as contributors to the cause of past industrial accidents. The Department has determined that TCPA coverage of reactive substances is warranted to protect the public and the environment from accidental releases. Adding reactive substances to the EHS list will ensure that owners or operators handling reactive substances at quantities that meet or exceed the proposed thresholds develop and implement risk management programs to minimize the risk of an accidental release.

As discussed in the Summary above, the Department considered the causes of past industrial accidents and weighed the projected cost of compliance against the costs to the public and the environment associated with a reactive hazard substance accident and determined that the benefit to the public derived from regulation outweighs the cost of compliance.

Proposed amendments to these rules will also require owners and operators of New Jersey stationary sources to comply with additional State risk management program requirements due, in part, to the statutory mandates of the TCPA and to the experience gained by the Department in implementing its accidental release prevention program over the past 20 years.

The TCPA Act defines a risk management program as containing eight elements designed to minimize the risk of EHS accidents. The Federal ARP program, which mirrors the State TCPA program in its intent and scope, contains similar elements but lacks the detail for developing and implementing these risk management program elements.

In developing the TCPA rules, the Department evaluated the Federal rules against the current TCPA rules and found that the current State program defines with more specificity how to develop program elements that reach risk management goals. Wherever the Department believed a performance based, less prescriptive Federal regulatory approach would not compromise public safety, the Federal rules were incorporated by reference with no changes. This approach allows owners and operators to develop individual risk management programs and maintain program

documentation in accordance with company policies and procedures as long as all aspects of the eight required elements are reflected and properly documented.

There are several TCPA program elements that are more stringent than their Federal counterparts. The State requirement for the performance of a risk assessment as part of the process hazard analysis at N.J.A.C. 7:31-4.2 is one such element. As indicated above, risk assessment is one of the eight risk management program elements originally mandated by the TCPA statute. The risk assessment element reflects TCPA statute requirements to anticipate circumstances that could result in environmental accidents and take the necessary steps to prevent their occurrence. Risk assessment is commonly defined as a quantitative analysis to determine risk reduction measures that should be implemented by identifying release scenarios, estimating their consequences, and calculating their likelihood. The Department currently requires that for Program 3 covered processes an estimate of the consequences be made by performing modeling to determine whether a consequence criterion of the EHS will extend beyond the source boundary, and an estimate of the likelihood of the accident. The Federal rules require that only a process hazard analysis be performed, but do not specify that consequence modeling or likelihood analysis be included. Personnel to perform the TCPA risk assessment may be supplied by the owner or operator's staff or by consultants. There is a continuing cost estimated at \$6,150 (150 hours x \$41.00/hr) to update the risk assessment every five years. In addition to these periodic updates, it may also be necessary for New Jersey owners and operators to perform a process hazard analysis with risk assessment if an anticipated process or equipment change is likely to have offsite impacts.

The Department is also proposing to require an evaluation of risk reduction options for owners and operators of Program 3 covered processes as part of their process hazard analysis with risk assessment (PHA/RA). As discussed above, risk assessment is one of the eight risk management program elements mandated by the TCPA statute. An evaluation of options for risk reduction is part of the risk assessment. Following the evaluation of currently available technologies to reduce the risk of accidental releases, an owner or operator is required to incorporate these measures if they determine the technology will be cost effective. The Department estimates owners and operators will incur costs once every five years to research and evaluate options for risk reduction. The cost of researching risk reduction technologies depends on the expertise of the reviewer and the complexity of the covered process. The additional cost this evaluation is anticipated to be under \$1,000 every five years. The potential benefit to the public of the use of risk reduction technologies exceeds the cost of the evaluation of new technologies.

The rules proposed for readoption with amendments include requirements for owners or operators to perform inherently safer technology reviews, which is not required by the Federal CAP rule. The Federal CAP rule and TCPA rule include the requirement to perform process hazard analyses. The process hazard analysis (PHA) is a type of study in which various methodologies such as "what if" checklist and hazard and operability study are employed to identify potential release scenarios, their causes, existing safeguards, and recommendations to reduce the risk of the release. The IST review is more extensive than the Federal PHA requirements in that the purpose of the IST review is to attempt to identify ways to reduce or eliminate the inherent hazards that are characteristic with the process substances and chemistry

and the process equipment, variables, and operating conditions. Identifying and implementing IST alternatives will provide additional risk reduction for covered processes. It is not expected that performing the IST review will be financially burdensome to owners or operators, and the potential to identify additional risk reduction measures to protect the citizens of the state and the environment is justified.

The Department is proposing to eliminate the Subchapter 3 Program 2 Prevention Program requirements, so that all owners or operators currently covered under Program 2 would have to revise their risk management programs to comply with the Program 3 requirements. Several of the risk management program elements are affected by this change. Additional process safety information such as process chemistry, safe upper and lower limits, consequences of deviation, electrical classification, relief system design, safety systems, electrical one-line diagrams, site plan, firewater system diagram, sewer system diagram, and external forces and events data are required. Elements such as standard operating procedures, operator training, mechanical integrity/preventive maintenance, and compliance audits are more detailed. The Program 2 hazard review and Program 3 process hazard analysis (PHA) studies are similar, but the PHA has more detail. Also, the risk assessment to determine the consequences and likelihood of releases is not required under Program 2. Finally, the elements of safety review, management of change, employee participation, hot work permit, and contractors are not required under Program 2.

Many owners or operators of Program 2 covered processes already have incorporated all or many of the additional Program 3 requirements into their risk management programs. Those owners or operators needing to revise their programs to include the additional Program 3 requirements will incur an initial cost estimated to be \$7,840. Their ongoing implementation cost is not expected to be substantially higher than their current Program 2 risk management program implementation costs. Implementation of the additional Program 3 requirements will ensure that those previous Program 2 owners or operators address all currently accepted process safety management practices to reduce the risk of an accidental release.

The TCPA rules also contain additional risk management program requirements, at N.J.A.C. 7:31-4, which are described below, that are more comprehensive than the Federal program. In comparing the current TCPA rules to the Federal rules the Department determined that additional requirements are needed in order to implement the goals of State law. The cost of these additional requirements is expected to be minimal for currently regulated owners and operators since they are already complying with the requirements of the rule.

The TCPA rules supplement Federal requirements for the Program 3 release prevention program. For Program 3, the Department requires the submittal of annual reports every year containing program information updates and describing significant program changes, EHS accidents, updated process hazard analysis/risk assessment results, and compliance audits that occurred over the previous year (see N.J.A.C. 7:31-4.9). There is no Federal requirement for the submittal of annual reports for Program 3. The annual report is a program update and summary of certain required activities that the Department uses to prepare for and conduct on-site audits and inspections, which will continue under the proposed rules. The minimal cost of such reporting is the cost for gathering and submitting the required information.

Owners or operators of Program 3 covered processes are currently subject to a greater degree of emergency response planning than is required under the Federal program. The Federal program allows any owner or operator whose employees will not respond to emergencies to coordinate response activities with local agencies. These rules proposed for readoption with amendments offer this option only after coordination with local agencies is documented, and the owner or operator must still prepare an emergency response plan describing their emergency response procedures and program. The Department also currently requires owners and operators of Program 3 covered processes to conduct a full scale exercise annually. The Federal program does not require emergency response exercises. The Department believes regular emergency response exercises are necessary to ensure the adequacy of the owner or operator's emergency response plan and that drills are effective in protecting public safety. At a source with complex Program 3 covered processes, this cost is estimated as \$6,800 per exercise based on sixteen technical effort hours at \$41.00 per hour and 256 production effort hours at \$24.00 per hour.

The rules proposed for readoption with amendments also specify that an owner or operator shall conduct an internal compliance audit annually rather than every three years as required under the Federal program. See N.J.A.C. 7:31-4.1(c)13. Annual audits enable owners and operators to monitor their programs frequently and make necessary changes to ensure the risk of accidental releases is minimized. The cost of performing an audit is minimal, approximately \$1,800, when compared to the benefits derived from the avoidance of an accidental release.

Owners and operators of new facilities will continue to comply with additional State requirements because the additional information or activity required has been beneficial to ensure public safety, to enhance the quality of risk management programs beyond what is specified in the Federal rules, or to enable the Department to adequately monitor risk management programs for covered processes. These requirements are not expected to significantly raise the cost of program implementation, but will ensure that owners and operators develop meaningful, effective risk management programs that ensure the safety of the public by reducing the risk of a catastrophic accidental EHS release.

Jobs Impact

The rules proposed for readoption with amendments are not expected to have a significant impact on jobs at New Jersey's regulated facilities. The cost of compliance with these rules will vary depending on the current regulatory status of the company and whether the company has any newly listed reactive hazard substances or LPG gases. As discussed in the Economic Impact statement, businesses having newly listed EHSs that are not currently in the program will incur higher costs of establishing risk management programs than businesses already implementing risk management programs. In some cases, an increase in the cost of compliance may result in a shift of monetary resources away from staffing in order to apply additional resources toward program compliance creating a negative jobs impact or loss of jobs. In other cases, the need to establish risk management programs may require a newly regulated company to hire technical staff to develop and implement a risk management program, resulting in a positive impact by creating more jobs.

It is difficult to assess the impact on jobs since each member of the regulated community will deal with additional costs incurred in accordance with its own goals and priorities. Because business entities may respond in different ways depending on their circumstances, it is not possible to accurately estimate the extent, if any, to which this rulemaking would affect employment in New Jersey; therefore, the Department cannot quantify the job impacts connected with this proposal. However, based on past experience with the TCPA program, the Department anticipates that a reduction of certain job opportunities would be offset by an increase in other job opportunities created to enable owners and operators to comply with the requirements of these rules. The Department has found that job impact will not turn on TCPA rules related costs. Any past job loss among businesses covered under the TCPA rules, due to relocation to another state or shutting down an EHS covered process, occurred primarily because of location economics, process economics (including pollution prevention strategies), or market factors. Since the Federal ARP program has been national since 1999 and is being implemented in all states, owners and operators of every covered process in the country are required to comply with 40 CFR 68, even if they decide to relocate away from New Jersey.

The potential jobs impact for New Jersey businesses affected by these rules are as follows:

- 1. Owners and operators of businesses that are currently regulated under TCPA but have no newly regulated reactive hazard substances to register under the program should experience no new job impacts. As explained above, the history of the TCPA program has shown that the impact of these rules on jobs is minimal and that while there may be a shift in the types of jobs available at TCPA regulated sources, there will be no significant change in the number of jobs at these businesses.
- 2. Owners and operators of currently regulated businesses that have newly regulated reactive substances or LPG should experience no job impacts because they should be easily able to incorporate the new EHSs into their current, approved risk management programs. It is possible that staff resources may need to be shifted from other jobs within the company to update the approved risk management programs; however the Department anticipates that there will be no net loss or gain in the number of jobs at these businesses.
- 3. Owners and operators that will become covered under TCPA for the first time because of a newly regulated reactive hazard substance or LPG may experience a loss of jobs due to the costs of developing risk management programs. Although this expenditure may impact some types of jobs by diverting monetary resources towards program development, there is the likelihood that jobs will be created for those charged with program development and implementation.

Because the rules proposed for readoption with amendments are expected to have little or no job impact on the regulated community, they are not expected to have secondary or tertiary job impacts on other New Jersey businesses that may be customers of, or suppliers to TCPA regulated sources.

In addition, no impact is expected to the number of jobs within the Department as a result of the rules proposed for readoption with amendments. Although the Department estimates 15 currently unregulated companies may be brought into the TCPA program, no new State positions

will be created to review and approve risk management programs for these newly regulated facilities. Rather, the Department will accomplish these tasks by redistributing routine tasks within the program.

Agriculture Industry Impact

In accordance with N.J.S.A. 4:1C-10.3, the Right to Farm Act, the Department has reviewed this proposal and has determined that the rules proposed for readoption with amendments are expected to have no detrimental impact on the State's agriculture industry. Rather, the rules proposed for readoption with amendments will have a positive impact. As discussed in the Environmental Impact statement above, one of the primary environmental benefits expected to result from the rules proposed for readoption with amendments will be a reduction or elimination of the risk of a catastrophic release, which would benefit agricultural properties located near subject facilities.

Regulatory Flexibility Analysis

In accordance with the New Jersey Flexibility Act, N.J.S.A. 52:14B-16 et seq., small businesses are defined as those that are independently owned and operated, not dominant in their field and that employ fewer than 100 full-time employees. Based upon this definition, small businesses may be subjected to additional requirements by the rules proposed for readoption with amendments.

Currently, approximately 50 TCPA registered companies have fewer than 100 full-time employees, and it is estimated that 17 of these companies meet the small business definition. The rules proposed for readoption with amendments are projected to bring approximately 15 additional sites into the TCPA program. Eight of these businesses use LPG gases as feedstocks or ingredients in their industrial processes. Of these companies, three are estimated to be small businesses. An additional seven companies are projected to be brought into the program because they use, store, manufacture or generate newly covered reactive hazard substances above threshold quantities. Some of these companies may be small businesses.

In order to comply with the TCPA rules, owners and operators are required to submit risk management plans reflecting programs that address the risk of accidental EHS releases. In addition to the submittal of their risk management plans to the Department for approval, owners and operators are required to keep records of equipment maintenance, EHS operator training, accidental releases, process safety information, emergency response activities, and operating procedures. Also, process hazard analysis/risk assessment summary reports are required to be sent to the Department every five years. Reports of risk management activities are required to be submitted to the Department annually for Program 3 covered processes.

The costs of compliance with the TCPA rules are discussed in the Economic Impact statement above. These costs are based on the number of covered processes at the source and the quantity of EHS inventory present. In general, the costs are proportional to the complexity of the ongoing activities and the risk presented by the quantity of EHS inventory at the source. It is

expected that small businesses to whom the rules apply consist of smaller, one-process facilities. Many businesses choose to employ the services of consultants to help manage the development and implementation of their risk management programs. Although this option is used by both large and small businesses for varying reasons, it is more commonly used by small businesses, which may lack the staff resources to ensure that compliance with the rules is achieved. Past experience has shown that businesses using consultants have employed them primarily for assistance in the completion and preparation of process hazard analyses with risk assessments, inherently safer technology reviews, compliance audits, and risk management plans.

Fuel merchants and users of LPG fuels, many of which represent small businesses, already benefit from the exclusion from TCPA coverage of flammable LPG gases when they are held for sale or used as fuels by eliminating the expense of program compliance.

Since the TCPA program applies to owners or operators of facilities handling, using, manufacturing, storing, generating extraordinarily hazardous substances, or capable of producing EHSs at threshold quantities or greater, the potential exists for catastrophic accidental EHS releases, regardless of the size of the business. Further reducing the requirements for small businesses would present potential risks to public safety and the environment and are not warranted at this time.

Smart Growth Impact

Executive Order No. 4 (2002) requires State agencies that adopt, amend or repeal any rule adopted pursuant to the Administrative Procedure Act to describe the impact of the proposed rule on the achievement of smart growth and implementation of the New Jersey State Development and Redevelopment Plan (State Plan). The Department has evaluated this rulemaking and has determined that the nature and extent of the rules proposed for readoption with amendments will have no impact on smart growth and the implementation of the State Plan. Since the rules proposed for readoption with amendments will encourage protection of the environment, they will support the conservation and environmental protection goals and policies underlying the State Plan.

Housing Affordability Impact

Pursuant to N.J.S.A. 52:14B-4, as amended effective July 17, 2008, by P.L. 2008, c. 46, the Department has evaluated the TCPA rules as proposed for readoption with amendments to determine their impact, if any, on the affordability of housing. The Department has determined that the rules will impose an insignificant impact because there is an extreme unlikelihood that the rules will evoke a change in the average costs associated with housing. However, the rules do provide an overall positive impact to residences in the vicinity of facilities subject to the TCPA rules since the risk of a catastrophic EHS release that could impact the surrounding community is reduced by facilities' implementation of a risk management program. Accordingly, while the TCPA rules support the continued use and habitability of existing residences, they do not affect the average costs of housing.

Smart Growth Development Impact

Pursuant to N.J.S.A. 52:14B-4, as amended effective July 17, 2008, by P.L. 2008, c. 46, the Department has evaluated the TCPA rules as proposed for readoption with amendments to determine their impact, if any, on smart growth development. The Department has determined that the rules will impose an insignificant impact because there is an extreme unlikelihood that the rules will evoke a change in housing production in Planning Areas 1 or 2, or within designated centers, under the State Development and Redevelopment Plan. The TCPA rules require facilities to identify and plan for the risk of a catastrophic EHS release that could impact the surrounding community, which supports the continued use and habitability of existing residences. Therefore the rules will not evoke a change in housing production in Planning Areas 1 or 2, or within designated centers.

<u>Full text</u> of the rules proposed for readoption may be found in the New Jersey Administrative Code at N.J.A.C. 7:31.

<u>Full text</u> of the rules proposed for repeal may be found in the New Jersey Administrative Code at N.J.A.C. 7:31-3.

Full text of the proposed amendments follows (additions indicated in boldface **thus**; deletions indicated in brackets [thus]):

SUBCHAPTER 1. GENERAL PROVISIONS

7:31-1.1 Incorporation by reference

- (a) (No change.)
- (b) The following provisions of 40 CFR Part 68 Subpart A are not incorporated by reference: 40 CFR 68.2, Stayed provisions; 40 CFR 68.10(b) and 40 CFR 68.10(e) Applicability; and 40 CFR 68.12(b) and (c), General requirements.
- (c) The following provisions of 40 CFR 68 Subpart A are incorporated by reference with the specified changes:
 - 1. (No change.)
 - 2. 40 CFR 68.3, Definitions:
- i. At the definition of "covered process," delete "a regulated substance present in more than a threshold quantity as determined under § 68.115" and replace with "an EHS [inventory that meets or exceeds the threshold quantity] **present** as determined under N.J.A.C. 7:31-6.3. **A petroleum refining process unit having an EHS present is considered a single covered process.**"
- [ii. At the definition of "process," add "at a facility" after "Process means any activity" and before "involving a regulated substance."]
- <u>ii. At the end of the definition of "petroleum refining process unit," add "Each petroleum refining process unit having an EHS present is a single covered process."</u>
- [iii. At the definition of "threshold quantity," delete, "quantity specified for regulated substances pursuant to section 112(r)(5) of the Clean Air Act as amended, listed in § 68.130 and

determined to be present at a stationary source as specified in § 68.115 of this part." and replace with, "minimum quantity of an EHS handled, used, manufactured, stored, or capable of being produced in one hour at a covered process that determines whether or not an owner or operator must register under the program.]

- <u>iii.</u> Replace the definition of "threshold quantity" with "Threshold quantity means the quantity specified for EHSs pursuant to N.J.A.C. 7:31-6."
 - iv. (No change in text.)
- <u>v.</u> Replace the definition of "owner or operator" with "Owner or operator means any person who owns, leases, operates, controls, or supervises a facility (stationary source)."
 - 3. 40 CFR 68.10, Applicability
 - i. At 40 CFR 68.10(a), delete the [phrase, "more than a threshold quantity" and replace with the phrase, "at least the threshold quantity", and delete the phrase, "as determined under 40 CFR 68.115" and replace with "as determined under N.J.A.C. 7:31-6" and at 40 CFR 68.10(a)(3) delete the phrase, "above a threshold quantity" and replace with "at a threshold quantity."] introductory paragraph, and replace with, "An owner or operator of a facility (stationary source) that uses, manufactures, stores or has the capability of producing at least the threshold quantity of an EHS as determined under N.J.A.C. 7:31-6 shall comply with the requirements of this Chapter. Determination of whether a threshold quantity is present at the facility shall be made using the sum of the EHS inventory of all covered processes at the facility. The EHS inventory of a covered process shall be the greatest of the instantaneous static inventory of the EHS contained and stored, the hourly generation rate of the EHS, or the amount of the EHS that can be released in one hour from any EHS equipment within a covered process. The owner or operator shall comply no later than the latest of the following dates:". At 40 CFR 68.10(a)(3), delete the phrase, "above a threshold quantity in a process" and replace with "at or above a threshold quantity at the facility."
- ii. At 40 CFR 68.10(a)1, delete June 21, 1999 and add the following, "[September 30, 2004, for covered purposes with EHSs listed in N.J.A.C. 7:31-6.3 in Table I, Part D. For covered processes with EHSs listed in N.J.A.C. 7:31-6.3 Table I Part A, B, or C, the obligation to comply with this chapter shall continue and the obligation to revise an owner or operator's risk management program shall be in accordance with] the schedule set forth in N.J.A.C. 7:31-7.5."
- iii. After 40 CFR 68.10(a)(1)-(3), add another item, "For new covered processes, in accordance with the requirements at [N.J.A.C. 7:31-3.4 (for Program 2 covered processes) or] N.J.A.C. 7:31-4.11 [(for Program 3 covered processes)]."
- iv. [At] <u>Replace</u> 40 CFR 68.10(c)[, delete the words "either paragraph (b) or paragraph (d) of this section," and replace] with ["Program 3 eligibility requirements."] , "A covered process is subject to Program 2 requirements if it does not meet Program 3 requirements. However, any covered process that is subject to Program 2 requirements shall, on or after (effective date of these amendments plus 365 days) be subject to only Program 3 requirements.
- v. At 40 CFR 68.10(d), delete the phrase "if the process does not meet the requirements of paragraph (b) of this section", <u>delete the phrase</u> and <u>if either of the following conditions is</u> met" and <u>delete 40 CFR 68.10(d)(1) and (2).</u>
 - 4. 40 CFR 68.12, General requirements:
 - i. (No change.)

- [ii. At 40 CFR 68.12(c), change the following:
- (1) At 40 CFR 68.12(c), add "with changes specified at N.J.A.C. 7:31-1.1(c)3iv" after "§ 68.10(c)."
- (2) At 40 CFR 68.12(c)(1), add "with changes specified at N.J.A.C. 7:31-1.1(c)5" after "§ 68.15."
- (3) At 40 CFR 68.12(c)(2), delete the semicolon at the end of the sentence and add ", with changes specified at N.J.A.C. 7:31-2.1(c)1 and 2 and N.J.A.C. 7:31-2.2."
- (4) At 40 CFR 68.21(c)(3), insert the phrase "with changes specified at N.J.A.C. 7:31-3.1(c)1-10 and N.J.A.C. 7:31-3.2 through 3.5" after "68.60," and delete the semicolon at the end of the sentence and add "with changes specified at N.J.A.C. 7:31-4.1(c)1-23 and N.J.A.C. 7:31-4.2 through 4.11."
- (5) At 40 CFR 68.12(c)(4), insert "with changes specified at N.J.A.C. 7:31-5.1(c)1-4 and N.J.A.C. 7:31-5.2" between "§ 68.95" and the semicolon.]
 - ii. Delete the entirety of 40 CFR 68.12(c)(1) through (5).
 - iii. (No change.)
- 5. At 40 CFR 68.15, Management, add the [following] <u>text as indicated in (c)5i and ii below</u> and delete the text as indicated in (c)5iii and iv below:
- i. The management system shall include a documentation plan which shall: (1) provide a [means of] <u>list</u> identifying all documentation required by this chapter <u>including the document</u> <u>title, identification number, and storage location</u>; and (2) describe how the owner or operator of a covered process will store, maintain and update all documentation required by this chapter.
- ii. The management system shall provide a means [for recording the daily quantity of each extraordinarily hazardous substance (EHS) contained in storage vessels and shipping containers] of tracking and recording the EHS inventory at the facility against the Risk Management Plan registration quantity to ensure that the EHS registration quantity of each registered covered process is not exceeded.
 - iii. At 40 CFR 68.15(a), delete the phrase "of a stationary source." iv. At 40 CFR 68.15(a), delete "Program 2 and Program 3."

7:31-1.5 State definitions

(a) The following words and terms, when used in this chapter, shall have the following meanings, unless the context clearly indicates otherwise:

•••

"EHS release" means a discharge or emission of an EHS [into the environment] **from a piece of EHS equipment in which it is contained**, excluding discharges or emissions occurring pursuant to and in compliance with the conditions of any State permit or [a] regulation [promulgated pursuant to the Air Pollution Control Act, N.J.S.A. 26:2C-1 et seq].

• • •

"Emergency response team" means those personnel identified in the emergency response plan that respond to an emergency at the facility which involves an EHS. Functions for which the emergency response team shall be responsible include activities such as alarm

identification and response, response to an EHS release, use of emergency protective equipment, rescue procedures, evacuation procedures, medical assistance, action plans for dealing with specific scenarios, and specifically assigned emergency response duties. Owners or operators of a covered process may arrange with outside providers for any portion of these functions as needed.

• • •

"Facility" means [a building, equipment, and contiguous area which embodies a process] the combination of all structures, buildings, and processes that are located on a single property site or on contiguous or adjacent property sites and that are under common control of the same owner or operator. Facility shall not include a research and development laboratory, which means a specially designated area used primarily for research, development, and testing activity, and not primarily involved in the production of goods for commercial sale, in which extraordinarily hazardous substances are used by or under the supervision of a technically qualified person. Facility shall include pilot plant scale operations as specified at 40 CFR 68.115(b)(5)(ii) with changes specified at N.J.A.C. 7:31-6.1(c)4.

•••

"Feasible" means capable of being successfully accomplished, taking into account environmental, public health and safety, legal, technological, and economic factors.

• • •

["Industrial complex" means the overall property of at least two contiguous TCPA regulated stationary sources which meet the following criteria:

- 1. Owners and operators of each source provide access to the hazard review, process hazard analyses with risk assessment and accident or potential catastrophic event investigation reports to the qualified person or the assigned designee of each of the other stationary sources, and the qualified person or the assigned designee of each source signs a certification statement annually that the records have been reviewed;
- 2. Employees of each of the individual sources have access to these reports and all information required to be developed under this chapter;
- 3. The owners or operators of each source have implemented security measures to restrict uncontrolled public access to the entire property; and
- 4. There is a previous history of ownership of the complex, now occupied by the individual regulated stationary sources, by one company.]

. . .

"Inventory" means the [EHS quantity contained in a process or the quantity of EHS generated within one hour by the process] <u>instantaneous static quantity of the EHS contained and stored in a process, the hourly generation rate of the EHS in a process, or the amount of the EHS that can be released in one hour from the process, whichever is [greater] greatest.</u>

••

- "Maximum achievable temperature" means the highest temperature that can be attained during abnormal conditions in a process vessel taking into consideration the vessel design, heating and cooling systems connected to the vessel, and the potential chemical reactions involving the vessel's contents. Abnormal conditions include scenarios such as:
- 1. A vessel having a steam heating system where maximum heating is applied to the vessel; 2. A vessel having a cooling system where there is a total loss of cooling;
- 3. An exothermic reaction generating heat that takes place inside the vessel;

4. Contamination to the normal vessel contents causing an exothermic reaction;5. External fire; and

6. Unintended ratio or amounts of reaction ingredients.

•••

"Qualified person or position" means the member of management who has the overall responsibility for the development, implementation and integration of the risk management program elements for the [stationary source] **facility** and who shall possess sufficient corporate authority and technical background to adjudicate issues relating to the execution of the risk management program based on information provided by manufacturing, engineering, maintenance, safety and environmental representatives.

•••

"Reactive hazard substance (RHS) mixture" means an EHS that is a combination of substances intentionally mixed in a process vessel and is capable of undergoing an exothermic chemical reaction which produces toxic or flammable EHSs or energy. [An RHS mixture has a heat of reaction which, by convention, is expressed as a negative value for an exothermic reaction, that has an absolute value greater than or equal to 100 calories per gram of RHS mixture.] RHS mixtures include a reactant, product, or byproduct that is a chemical substance or a mixture of substances having one or more of the chemical functional groups specified in N.J.A.C. 7:31-6.3(a), Table I, Part D, Group II. An RHS mixture has a heat of reaction which, by convention, is expressed as a negative value for an exothermic reaction, that has an absolute value greater than or equal to 100 calories per gram of the substance with the specified functional group.

"Registered EHS" means an EHS which is [handled, used, manufactured or stored, or is capable of being generated within one hour, at] **listed in the Risk Management Plan for** a covered process [in a quantity equal to or greater than the threshold quantity for that EHS in Table I of N.J.A.C. 7:31-6.3].

•••

"Security information" means information the release of which could either compromise the physical security of the covered process or its operations, or adversely affect national security. Examples include, but are not limited to, offsite consequence analysis data and quantities and locations of EHSs at facilities.

•••

["State-of-the-art" means current technology that, when applied to an owner or operator's EHS equipment and procedures, will result in a significant reduction of risk. The technology represents an advancement in reduction of risk and shall have been demonstrated at a similar referenced facility to be reliable in commercial operation or in a pilot operation on a scale large enough to be translated into commercial operation. The technology shall be in the public domain or otherwise available at reasonable cost commensurate with the reduction of risk achieved.

"Stationary source emergency response team" means those personnel identified in the emergency response plan that respond to an emergency at the stationary source which involves an EHS. Functions for which the stationary source emergency response team shall be responsible include activities such as alarm identification and response, response to an EHS release, use of emergency

protective equipment, rescue procedures, evacuation procedures, medical assistance, action plans for dealing with specific scenarios, and specifically assigned emergency response duties. Owners or operators of a covered process may arrange with outside providers for any portion of these functions as needed.]

•••

7:31-1.8 Document availability

(a) Copies of the CFR (40 CFR Part 68) as adopted and incorporated by reference are available for review. Publications incorporated by reference within the Code of Federal Regulations are also available for review. These may be reviewed by contacting the Department at:

New Jersey Department of Environmental Protection

[Division of Waste Compliance and Enforcement and] **<u>Bureau of</u>** Release Prevention PO Box 424

Trenton, NJ 08625-0424

Telephone: (609) 633-[7289]0610

(b) - (c) (No change.)

7:31-1.9 Prohibitions

- (a) (No change.)
- (b) No owner or operator of a [stationary source] **facility** for which there is no previously approved risk management program shall construct a new covered process or utilize an existing process for a new EHS service unless the owner or operator has complied with N.J.A.C. 7:31-3.4 (Program 2) or N.J.A.C. 7:31-4.11 (Program 3).
- 1. As of (365 days from the effective date of these amendments), no owner or operator of a facility for which there is no previously approved risk management program shall construct a new covered process or utilize an existing process for a new EHS service unless the owner or operator has complied with N.J.A.C. 7:31-4.11.
- (c) No owner or operator of a newly constructed covered process or an existing process being utilized for a new EHS service at a [stationary source] **facility** for which there is no previously approved risk management program shall begin operating that covered process until the Department and the owner or operator have executed a consent agreement containing an approved risk management program.
- (d) No owner or operator of a [stationary source] **facility** with an approved risk management program shall operate a new process or utilize an existing covered process for a new EHS service before submitting to the Department the documentation required by N.J.A.C. 7:31-3.4(c) or (d) (Program 2) or N.J.A.C. 7:31-4.11(c) or (d) (Program 3), and the fee required by N.J.A.C. 7:31-1.11. The owner or operator shall not operate the new covered process before executing a consent agreement to update the approved risk management program for the new covered process.
- 1. As of (365 days from the effective date of these amendments), no owner or operator of a facility with an approved risk management program shall operate a new process or utilize an existing covered process for a new EHS service before submitting to the Department the documentation required by N.J.A.C. 7:31-4.11(c) or (d) (Program 3) and the fee required by N.J.A.C. 7:31-1.11.

(e) (No change.)

7:31-1.11A Fees

- (a) (b) (No change.)
- (c) The Department shall annually determine during the month of October the base fee and the covered process fee and the inventory derived fee unit rates, taking the following steps:
 - 1.- 4. (No change.)
- 5. Determine the total amount to be contributed by the base fee to the aggregate fee of each owner or operator. The determination shall be based on the following data and steps:
- i. Determine the total number of [stationary sources] **facilities** as of October 1 of the fiscal year during which the determination is made;

ii.-iii. (No change.)

- 6. (No change.)
- (d) (n) (No change.)
- (o) The annual fee for an owner or operator who has temporarily discontinued use, handling, storage or generation of all EHSs at the [stationary source] **facility** and has signed a consent agreement or consent agreement addendum pursuant to N.J.A.C. 7:31-4.10 (for the Program 3 covered processes) shall be 25 percent of the base fee.
- (p) The annual fee for an owner or operator who has obtained a temporary discontinuance in accordance with N.J.A.C. 7:31-4.10 for one or more EHSs, but has retained other EHSs at the [stationary source] **facility** that are registered in the most current Risk Management Plan in amounts that meet or exceed threshold quantities shall be the full base fee and the covered process and inventory fees for the registered EHSs.
- (q) Each owner or operator submitting a confidentiality claim substantiation form in accordance with N.J.A.C. 7:31-10.5(d) shall submit a fee of \$350.00 in 1988 dollars, adjusted pursuant to (u) below by the Consumer Price Index from July 1988 to the month in which the claim is submitted, for the review of [his or her petition] the claim at the time of submitting the [petition] claim substantiation form. The fee shall be submitted in accordance with the remittance information contained on the bill.
- (r) Each owner or operator submitting a petition to withhold privileged trade secret or security information in accordance with N.J.A.C. 7:31-10.6 shall submit a fee of \$350.00 in 1988 dollars, adjusted pursuant to (u) below by the Consumer Price Index from July 1988 to the month in which the petition is submitted, for the review of his or her petition at the time of submitting the petition substantiation form. The fee shall be submitted in accordance with the remittance information contained on the bill.
 - (s) (No change.)
- (t) Each owner or operator submitting an exemption request in accordance with N.J.A.C. 7:31-6.3(e) shall submit a fee of \$275.50 in 1988 dollars, adjusted pursuant to (u) below by the Consumer Price Index from July 1988 to the month in which the exemption request is made, for the review of the request. The fee shall be submitted in accordance with the remittance information contained on the bill provided by the Department.
- (u) The Consumer Price Index used to adjust the fee submitted with a request pursuant to (q), (r) or (t) above shall be calculated using the CPI-U data published monthly by the U.S.

Department of Labor. The CPI-U data is re-published monthly in the Survey of Current Business, Bureau of Economic Analysis, U.S. Department of Commerce. The percentage increase in the CPI for the month in which a request pursuant to (q), (r) or (t) is made (the submittal month), relative to the CPI for July 1988, shall be determined in accordance with the following procedure:

- 1. The CPI for July 1988 is 117.2;
- 2. The CPI used in calculating the fee for the submittal month shall be the most recent CPI-U available at the time the request is submitted;
- 3. The percentage change in the CPI relative to the July 1988 CPI shall be calculated in accordance with the following formula:
 - i. Percentage Change = 100 x ((submittal month CPI 117.2)/117.2)
 - ii. Where:
 - (1) Submittal month CPI is the CPI determined pursuant to (u)2 above; and
 - (2) 117.2 is the CPI for July 1988, pursuant to (u)1 above;
- 4. If the percentage change is a negative number, the submittal fee shall not be decreased; and
 - 5. The submittal fee shall be rounded up to the nearest half dollar.

SUBCHAPTER 2. HAZARD ASSESSMENT

- 7:31-2.2 Reactive hazard substance (RHS) hazard assessment
 - (a) (No change.)
- (b) The owner or operator shall use the following parameters and methods for the RHS hazard assessment:
 - 1.- 2. (No change.)
- 3. A TNT-equivalent explosion method or any commercially or publicly available explosion modeling techniques, provided the techniques account for the modeling conditions and are recognized by industry as applicable as part of current practices. 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 upon request. When using a TNT-equivalent explosion method, the owner or operator shall use the following parameters:
 - i. ii. (No change.)
- iii. [Twenty-eight] <u>One hundred</u> percent of the potential heat release (heat of reaction) assumed to contribute to the explosion for a N.J.A.C. 7:31-6.3 Table I, Part D Group I RHS in a storage vessel <u>but 28 percent of the heat of combustion may be used as an approximation if the detailed heat of reaction data is not available; and</u>
 - 4. (No change.)
 - (c) (No change.)

SUBCHAPTER 3. (RESERVED)

SUBCHAPTER 4. MINIMUM REQUIREMENTS FOR A PROGRAM 3 TCPA RISK MANAGEMENT PROGRAM

- 7:31-4.1 Incorporation by reference
 - (a) (b) (No change.)
- (c) The following provisions of 40 CFR 68 Subpart D are incorporated by reference with the specified changes:
- 1. 40 CFR 68.65(c)(1)(i), before "process flow diagram" delete "block flow diagram or simplified."
 - 2.-23. (No change.)
- 24. 40 CFR 68.65(b)(4), after "Reactivity data," add "applicable to the process in which an EHS is being used, handled, stored or generated that includes the following:
 - i. (No change.)
- ii. Thermodynamic and reaction kinetic data including: heat of reaction, temperature at which instability (uncontrolled reaction, decomposition, and/or polymerization) initiates, and rate of energy release data at that temperature; [and]
- iii. Data regarding any incidental formation of byproducts that are reactive and unstable[.]: and
- iv. For covered RHS mixtures, detailed reactivity data including the rate of pressure rise (dP/dt), the rate of temperature rise (dT/dt), and the onset temperature at which the rate of temperature change due to uncontrolled reaction, decomposition, change in molecular structure, or polymerization exceeds 0.01 degrees Celsius per minute, all of which are corrected to a thermal inertia (ϕ) of 1.0.
 - 25.-26. (No change.)
- 27. 40 CFR 68.73(b), at the end, add "The owner or operator shall establish and implement a written procedure to periodically review, document, and approve delays in conducting preventive maintenance of EHS equipment."
- 28. 40 CFR 68.73(e), at the end, add "Timely shall mean as soon as feasibly possible but in no case shall exceed 3 months without providing a written justification including an explanation of the necessary measures taken to ensure safe operation."
- 29. 40 CFR 68.87(c), before "Contract owner or operator responsibilities." add "Owner or operator's oversight of". After "Contract owner or operator responsibilities." add "The owner or operator shall require the contract owner or operator to complete the following prior to a contract owner or operator performing work at a covered process:".
- 7:31-4.2 Process hazard analysis with risk assessment for specific pieces of EHS equipment or operating alternatives
 - (a) (No change.)

- (b) The owner or operator of a covered process shall perform a process hazard analysis with risk assessment which shall include the following:
 - 1. (No change.)
- 2. Consideration of toxicity, flammability, explosion and reactivity hazards applicable to the EHS; however, consideration of toxicity shall be required only for those EHSs which appear in N.J.A.C. 7:31-6.3(a), Table I, Parts A and/or B as a toxic substance[, Part C as a flammable substance and/or Part D as an RHS or RHS mixture]. The owner or operator shall consider both the explosive/flammability hazard and the capability to generate a toxic EHS, as applicable to the RHS or RHS mixture and process in which it is handled; and
- 3. Identification of all scenarios of toxic, flammable, and reactive hazards that have a potential offsite impact for the endpoint criteria at (b)3iii [and iv] below using a consequence analysis, consisting of dispersion analysis, thermal analysis [or] and overpressure analysis, as applicable to the EHS and scenario. The following parameters shall be used for the consequence analysis:
- i. 1.5 meters per second wind speed <u>measured at 10 meters height</u> and F atmospheric stability class;
 - ii. All parameters listed for alternative scenarios at 40 CFR 68.22(c) through (g); and
- [iii. As applicable to the scenario being analyzed, the endpoint criteria of 10 times the toxicity endpoint as designated at N.J.A.C. 7:31-2.1(c)2; 1,750 thermal dose units (equivalent to 17 kW/m² for 40 seconds); five psi overpressure; or the lower flammability limit. As an alternative to using the 10 times toxicity endpoint as designated at N.J.A.C. 7:31-2.1(c)2, the value of five times the Acute Toxicity Concentration (ATC) may be used for toxic release scenarios; and]
- [iv.] <u>iii.</u> As applicable to the scenario being analyzed, the endpoint criteria of five times the toxicity endpoint as designated at N.J.A.C. 7:31-2.1(c)2; [1,200 thermal dose units (equivalent to 15] <u>five kW/m²</u> for 40 seconds[)]; **the lower flammability limit**; or 2.3 psi overpressure. As an alternative to using the five times toxicity endpoint as designated at N.J.A.C. 7:31-2.1(c)2, the value of the ATC may be used for toxic release scenarios.
- (c) The owner or operator shall identify all release scenarios that have an offsite impact of the endpoint criteria specified at (b)3iii [and iv] above.
- [1. For each release scenario that has an offsite impact of the endpoint criteria specified at (b)3iii above, the owner or operator shall perform an evaluation of state-of-the-art, including alternative processes, procedures or equipment which would reduce the likelihood or consequences of an EHS release;]
- [2.] <u>1.</u> For each release scenario that has an offsite impact of the endpoint criteria specified at (b)3[iv]<u>iii</u> above, the owner or operator shall[:
- i. Perform an evaluation of state-of-the-art, including alternative processes, procedures or equipment which would reduce the likelihood or consequences of an EHS release; or
- ii. Determine] <u>determine</u> the likelihood of release occurrence. If the likelihood of release occurrence is greater than or equal to $[10^{-4}]$ <u>10⁻⁶</u> per year, the owner or operator shall perform an evaluation of [state-of-the-art, including alternative processes, procedures or equipment] <u>risk</u>

<u>reduction measures</u> which would reduce the likelihood or consequences of an EHS release. If the frequency of release occurrence is less [that 10⁻⁴] <u>than 10⁻⁶</u> per year, no further assessment is required.

- [3.]2. The owner or operator shall develop <u>and implement</u> a risk reduction plan for [the release scenarios requiring state-of-the-art evaluation] <u>feasible risk reduction measures</u> determined pursuant to (c)1 [and 2] above.
- (d) The following documentation from the process hazard analysis with risk assessment shall be maintained:
 - 1. (No change.)
 - 2. Table(s) summarizing each potential offsite release scenario identified that includes:
 - i.-ii. (No change.)
- iii. The distance to the endpoint determined in (b)3iii [and (b)3iv] above and the respective distance to the nearest property line; and
 - iv. The release likelihood determined pursuant to (c)[2ii]1 above[, if applicable].
 - 3. Information from the [dispersion] **consequence analysis** modeling that includes:
 - i. The identification of the [dispersion] consequence analysis model used; and
- ii. Printouts of the [dispersion] <u>consequence analysis</u> model inputs and outputs, if a [dispersion] <u>consequence analysis</u> model other than the lookup tables provided in the EPA's RMP Offsite Consequence Analysis Guidance current as of the time of modeling was used;
- 4. [An explanation why any risk reduction measures identified in (c) and (d)1 above have not been included in the risk reduction plan] **Documentation to justify the determination of why risk reduction measures are not feasible**; and
 - 5. (No change.)
- (e) The owner or operator of a covered process shall prepare a report of the process hazard analysis with risk assessment. The report shall include the following:
 - 1. (No change.)
 - 2. A description of each scenario identified in (b)3iii [and iv] above; and
 - 3. The risk reduction plan developed pursuant to (c)[3]2 and (d)1 above.
- [(f) The owner or operator of a stationary source that is part of an industrial complex as defined at N.J.A.C. 7:31-1.5 shall use either the property boundary of the industrial complex or the property boundary for the individual stationary source for the purpose of identifying release scenarios with offsite impact.]
- 7:31-4.3 Standard operating procedures
 - (a) (No change.)

- (b) The standard operating procedures shall include the following:
 - 1. 3. (No change.)
- 4. A statement as to the number of EHS operators required to meet safety needs for each operation with requirements for shift coverage;
- 5. A requirement that an EHS operator be in attendance at the [stationary source] **facility**, be able to acknowledge alarms and take corrective action to prevent an accident at all times during EHS handling, use, manufacturing, storage, or generation except:
 - i.-iii. (No change.)
- iv. Notwithstanding any other applicable State and/or Federal requirements, during mechanical refrigeration using anhydrous ammonia within a closed loop system, if the Department determines that anhydrous ammonia detection monitoring equipment is capable of automatically isolating[,] **and** shutting down[, and emptying] EHS equipment and is provided with alarms reporting to a continuously attended station whose personnel are trained to take action to prevent an EHS accident; and
 - 6. (No change.)
- 7:31-4.9 Annual reports
 - (a) (No change.)
 - (b) The annual report shall contain:
 - 1.-3. (No change.)
- 4. A summary of EHS accidents <u>and potential catastrophic events</u> that occurred during the previous years. If no EHS accidents <u>or potential catastrophic events</u> occurred since the last annual report, the owner or operator shall state this in the annual report. The summary [of EHS accidents] shall include:
 - i. (No change.)
- ii. The date and time of the EHS accident <u>and potential catastrophic event</u> and identification of the EHS equipment involved; and
 - iii. (No change.)
 - 5.-6. (No change.)
- 7:31-4.11 New covered processes construction and new EHS service
- (a) Owners or operators who plan to construct a new Program 3 covered process at a [stationary source] **facility** for which there is no previously approved [RMP] **risk management program** shall:
 - 1.-5. (No change.)

- (b) Owners or operators who plan to utilize existing equipment for a new Program 3 covered process at a [stationary source] **facility** for which there is no previously approved risk management program shall:
 - 1.-3. (No change.)
- (c) Owners or operators who plan to construct a new Program 3 covered process or utilize existing equipment for a new Program 3 covered process at a [stationary source] **facility** that has a previously approved risk management program shall:
 - 1.-3. (No change.)
- (d) Prior to placing equipment into EHS service, the owner or operator of a covered process shall enter into a consent agreement, or consent agreement addendum, for that equipment with the Department, subsequent to a [stationary source] **facility audit or** inspection by the Department, and complete any deficiencies in the consent agreement, or consent agreement addendum, for that equipment in accordance with the schedule in the consent agreement or consent agreement addendum.
 - (e) (No change.)

SUBCHAPTER 5. EMERGENCY RESPONSE

- 7:31-5.1 Incorporation by reference
 - (a) (b) (No change.)
- (c) The following provisions of 40 CFR 68 Subpart E are incorporated by reference with the specified changes:
- 1. 40 CFR 68.90(b), [after "The owner or operator of a stationary source" add, "of a Program 2 covered process", and after "§ 68.95" add "(a)(1)(ii) and (iii), (2), (3), and (4), (b) and (c)."] delete the introductory paragraph and replace with, "The owner or operator of a facility whose employees will not respond to accidental EHS releases shall comply with the following:".
- 2. 40 CFR 68.90(b)(1), delete, "For stationary sources with any regulated toxic substance held in a process above the threshold quantity, the stationary source" and replace with, "For facilities with any regulated toxic substance at or above the threshold quantity, the facility". 40 CFR 68.90(b)(2), delete, "For stationary sources with only regulated flammable substances held in a process about the threshold quantity" and replace with "For facilities with only regulated flammable substances at or above the threshold quantity". 40 CFR 68.90(b)(3), at the end, add "The owner or operator shall obtain documentation from the local fire department or other outside emergency responder agencies, as applicable, that they will be responsible for responding to accidental releases at the owner or operator's [stationary source] facility."
 - 3. 4. (No change.)
- 7:31-5.2 Emergency response program

- (a) (No change.)
- (b) Each owner or operator shall develop and implement a written emergency response (ER) program which shall include:
 - 1. (No change.)
- 2. Performance of at least one EHS ER exercise per calendar year in accordance with the following requirements:
 - i. [Owners or operators of stationary sources for Program 2 covered processes] <u>The owner or operator of a facility</u> whose employees will not respond to an EHS accident in accordance with 40 CFR 68.90(b) with changes specified at N.J.A.C. 7:31-5.1(c)<u>1 and</u> 2 shall invite at least one outside responder agency designated in the ER plan to participate in the ER exercise. Employees of the [stationary source] <u>facility</u> shall perform their assigned responsibilities for all ER exercises; and
 - ii. (No change.)
- 3. A written assessment of the ER plan, of the adequacy of notification to outside agencies and the public, and of the adequacy or need for ER equipment after each ER plan implementation or each ER exercise;
- 4. A description of the emergency notification system at the [stationary source] **facility** which shall include the following requirements for reporting EHS accidents:
 - i.-ii. (No change.)
- iii. The following EHS accidental releases shall be exempt from the notification provisions of (b)4 above provided the EHS accident is recorded in accordance with the procedures established for EHS accident investigation [at 40 CFR 68.60 with changes specified at N.J.A.C. 7:31-3.1(c)7 and 8 for Program 2 covered processes or 40 CFR 68.81 with changes specified at N.J.A.C. 7:31-4.1(c)15 through 21] for [Program 3 covered processes] **the facility**. This exemption does not affect any other State or Federal reporting requirements.
- (1) An EHS release that has no potential offsite impact [or that has no potential impact beyond the property boundary of the industrial complex];
 - (2)-(3) (No change.)

SUBCHAPTER 6. EXTRAORDINARILY HAZARDOUS SUBSTANCES

- 7:31-6.1 Incorporation by reference
 - (a) (b) (No change.)
 - (c) The following provisions are incorporated by reference with the specified changes:
 - 1.-2. (No change.)
- 3. 40 CFR 68.115(b), (b)(1)[, and] **through** (b)[(2)](5) at all occurrences delete "more than" before "a threshold quantity," and delete "regulated toxic substance" and replace with "toxic

EHS" and delete "regulated flammable substance" and replace with "flammable EHS". <u>Also, at all occurrences, delete "stationary source" and replace with "facility".</u>

- 4. 40 CFR 68.115(b)(5)(ii), after "operations;" replace "and" with "however, only <u>pilot</u> <u>plant scale operations handling</u> the substances [and threshold quantities] listed at 40 CFR 68.130 <u>in a covered process</u> shall be [used for determining whether a process containing an EHS is] covered under this chapter; and".
- 5. 40 CFR 68.130, all substances and their specified threshold quantities are incorporated by reference into two lists as follows:
 - i. (No change.)
- ii. 40 CFR 68.130 Table 3 (and 4), List of Regulated Flammable Substances, including all future amendments and supplements[, with the exception of propane (CAS No. 74-98-6), propylene (CAS No. 115-07-1), butanes (normal butane (CAS No. 106-97-8) or isobutane (CAS No. 75-28-5), and butylenes (1-butene (CAS No. 106-98-9, 2-butene (CAS No. 107-01-7), butene (CAS No. 25167-67-3), 2-butene-cis (CAS No. 590-18-1), 2-butene-trans (CAS No. 624-64-6), and 2-methylpropene (CAS No. 115-11-7)) are incorporated as N.J.A.C. 7:31-6.3(a), Table I, Part C].

7:31-6.2 Threshold quantity determination

- (a) (b) (No change.)
- (c) If a toxic EHS listed in N.J.A.C. 7:31-6.3(a) Table I, Part A is present in a mixture at a concentration which is lower than the acute toxicity concentration (ATC), the amount of the EHS in the mixture shall not be considered in determining if the threshold quantity is present at a [covered process] **facility**.
- (d) For mixtures of EHS listed in N.J.A.C. 7:31-6.3(a) Table I, Parts A or D, Group I, for which no concentration is specified, the threshold quantity shall be calculated using the weight percent of EHS contained in the mixture. When the weight of the total mixture times the weight percent is equal to or greater than the threshold quantity for that EHS, the owner or operator must comply with this chapter.
- 1. For EHS's in Table I, Part A listed with a concentration in weight percent, the total weight of the solution shall be used to determine whether a threshold quantity is present [in a process] at a facility.
- 2. For EHS's in Table I, Part A listed with a concentration in volume percent, the weight of only the pure EHS shall be used to determine whether a threshold quantity is present [in a process] at a facility.
 - (e) (No change.)
- (f) For mixtures containing toxic EHSs listed in N.J.A.C. 7:31-6.3(a) Table I, Part B, the weight of the pure EHS shall be considered in determining whether a threshold quantity is present at a [covered process] **facility**.
- (g) For intentional mixtures involving one or more functional groups listed on <u>N.J.A.C. 7:31-6.3(a)</u> Table I, Part D, Group II, the threshold quantity shall be based on the heat of reaction (ΔH_R

-) [of the intended mixture] as determined in accordance with N.J.A.C. 7:31-6.3(b)[2iv]<u>1 through</u> <u>6</u> and shall be derived from Table II at N.J.A.C. 7:31-6.3(c).
- (h) For the purpose of determining whether a threshold quantity of an RHS mixture is present [in a process] at a facility, the maximum capacity of the process vessel containing the RHS mixture shall be used assuming that the vessel is filled to capacity with the reactive ingredients of the RHS mixture. The maximum capacity of each individual process vessel containing an RHS mixture shall be compared to the threshold quantity to determine applicability. Administrative controls that limit the maximum quantity in the process vessel shall not be taken into account; however, if the total quantity of reactant ingredients used in the RHS mixture present at the facility is less than the amount of the vessel capacity, that total quantity may be used for threshold quantity determination.
- (i) An owner or operator may request EHS equipment containing an RHS mixture that would otherwise meet the threshold quantity at (h) above to not be considered in determining if the threshold quantity is present at the facility. In the request for exemption, the owner or operator shall demonstrate to the satisfaction of the Department that there is no possibility of a runaway reaction, overpressurization, and accidental EHS release during either normal or abnormal conditions based on an evaluation, using calorimetry testing, of the reaction chemistry of the RHS mixture, and in accordance with the following:
- 1. The results of calorimetry testing shall be independently verified by a New Jersey licensed professional engineer and certified by that engineer as follows: "I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I further certify that the operation described herein satisfies the criteria for exemption as set forth in N.J.A.C. 7:31-6.2(i). I am aware that there are significant civil and criminal penalties for submitting false, inaccurate, or incomplete information."
- 2. The owner or operator shall include a certification statement specified at N.J.A.C. 7:31-8.2(c) with the request for exemption. Submittal of false information may be grounds for termination of any exemption.
- 3. The Department shall review the request for exemption and provide the owner or operator written notification of approval or denial of the exemption request.
- 7:31-6.3 Extraordinarily hazardous substance list
- (a) The substances listed in Table I, Parts A, B, C, and D Group I and Group II (with its correlated thresholds listed in Table II at (c) below) constitute the Department's extraordinarily hazardous substance list.

Table I
Part A – EHS List
(No change.)
Part B

(No change.) Part C

40 CFR 68.130 Table 3 (and 4) incorporated by reference [with the exception of propane (CAS No. 74-98-6), propylene (CAS No. 115-07-1), butanes (normal butane (CAS No. 106-97-8) or isobutane (CAS No. 75-28-5), and butylenes (1-butene (CAS No. 106-98-9, 2-butene (CAS No. 107-01-7), butene (CAS No. 25167-67-3), 2-butene-cis (CAS No. 590-18-1), 2-butene-trans (CAS No. 624-64-6), and 2-methylpropene (CAS No. 115-11-7))]

Part D Group I List of Individual Reactive Hazard Substances

	List of flidividual Reactive Hazard S	uostances		
	Substance	CAS#	Threshold Quantity (pounds)	Basis for Listing
12	(No change.)			
3.	Butyl hypochlorite tertiary	[none]	2,500	b
		507-40-4		
4	(No change.)			
10.				
11.	Dinitro resourcinol (wetted with not less than 15% water)	[35860-81-6]	2,500	a
		<u>35860-51-6</u>		
12	(No change.)			
16.				
17.	Isosorbide [dintrate] dinitrate	[88-33-2]	2,500	a
	·	87-33-2		
18.	Magnesium diamide	[7803-54-4]	2,500	b
		7803-54-5		
19	(No change.)			
30.				

Basis for listing:

a = DOT 4.1

b = DOT 4.2

c = DOT 4.3

d = NFPA 49

e = NFPA 325

f = NFPA 432

Part D, Group II

Reactive Hazard Substance Mixtures Functional Groups (For Threshold Quantity Determination See N.J.A.C. 7:31-6.3(b) and (c))

Functional Group(s) Reactive Substance Class

1.- 5. (No change.)

	<u>Functional Group(s)</u>	Reactive Substance Class
6.	-C-NO ₂	Nitroalkanes, C-nitro and
	$Ar-NO_2$, $Ar(NO_2)_n$	Nitroaryl and Polynitroaryl compounds
	$C(NO_2)_n$	Polynitroalkyl compounds
	O ₂ NC-CNO ₂	
	$HC[OCH_2C(NO_2)_3]_3$,	Trinitroethyl orthoesters
	$C[OCH_2C(NO_2)_3]_4$	
743.	(No change.)	
<u>44.</u>	-C-Metal	<u>Organometallics</u>

- (b) The following conditions apply for determining whether RHSs or RHS mixtures listed in Part D of Table I are subject to the requirements of this chapter.
- 1. Individual RHSs listed in Table I, Part D, Group I that are received, stored, and handled in combination with one or more other chemical substances specifically formulated to inhibit the reactive hazard (such as water reactivity, pyrophoric, or self-reacting) of the RHS shall <u>not</u> be exempt from this chapter [as long as the appropriate inhibitor concentration is maintained. The owner or operator shall document that the inhibitor concentration is maintained].
- 2. An RHS mixture is a combination of substances that is intentionally mixed in a process vessel and is capable of undergoing an exothermic chemical reaction which produces toxic or flammable EHSs or energy. [An RHS mixture has a heat of reaction which, by convention, is expressed as a negative value for an exothermic reaction, that has an absolute value greater than or equal to 100 calories per gram of RHS mixture.] RHS mixtures include a reactant, product, or byproduct that is a chemical substance or a mixture of substances having one or more of the chemical functional groups specified in Table I, Part D, Group II. An RHS mixture has a heat of reaction which, by convention, is expressed as a negative value for an exothermic reaction, that has an absolute value greater than or equal to 100 calories per gram of the substance with the specified functional group. If more than one substance in the RHS mixture has a specified functional group, the heat of reaction shall be calculated using that substance which yields the highest value.
- [i. The heat of reaction shall be determined in accordance with (b)2iv below.] Recodify existing ii. and iii. as <u>3. and 4.</u> (No change in text.)
- [iv.]5. The owner or operator shall determine and document the heat of reaction by using one of the following methods:
- [(1)]i. Testing the intended combination in [an acceptable] a calorimetry test [over the lowest temperature range of the following: up] to the lower of 400 degrees Celsius[, 100 degrees Celsius higher than the maximum projected or observed processing temperature,] or the maximum achievable temperature in the process vessel; or
- [(2)]<u>ii.</u> A generally accepted practice such as a literature review or engineering calculations applicable to the RHS mixture [over the lowest temperature range of the following: up] to <u>the</u> <u>lower of</u> 400 degrees Celsius[, 100 degrees Celsius higher than the maximum projected or

observed processing temperature,] or the maximum achievable temperature in the process vessel[;].

- <u>6. The heat of reaction of an RHS mixture in a semi-batch reaction shall be</u> determined assuming that all reactants are added at the same time as in a batch reaction.
 - (c) Table II Reactive Hazard Substance Mixture Threshold Quantities

- Heat of Reaction (Exothermic) $(-\Delta H_R)$	Threshold Quantity
(calories/g [of RHS Mixture])	(Pounds)
$100 \le -\Delta H_R < 200$	13,100
$200 \le -\Delta H_R < 300$	8,700
$300 \le -\Delta H_R < 400$	6,500
$400 \le -\Delta H_R < 500$	5,200
$500 \le -\Delta H_R < 600$	4,400
$600 \le -\Delta H_R < 700$	3,700
$700 \le -\Delta H_R < 800$	3,300
$800 \le -\Delta H_R < 900$	2,900
$900 \le -\Delta H_R < 1,000$	2,600
$-\Delta H_R \ge 1,000$	2,400

[(d) If an EHS is listed in Table I, Part D, Group I as an individual RHS and is also part of an RHS mixture in a covered process as determined in accordance with (b)2 above, the lower threshold quantity shall apply throughout this chapter.]

SUBCHAPTER 7. RISK MANAGEMENT PLAN AND TCPA PROGRAM SUBMISSION

- 7:31-7.1 Incorporation by reference
 - (a) (b) (No change.)
- (c) The following provisions of 40 CFR 68 Subpart G [,] are incorporated by reference with the specified changes:
 - 1. 6. (No change.)
- 7. 40 CFR 68.150(b)(3), delete "above a threshold quantity in a process" and replace with "at or above a threshold quantity at the facility."
- 8. 40 CFR 68.160(b)(7), in the phrase, "For each covered process, the name and CAS number of each regulated substance held above the threshold quantity in the process," replace "above the threshold quantity in the process" with "at or above the threshold quantity at the facility".
 - 9. 40 CFR 68.165(a)(2), delete all references to "Program 2".
 - 10. Delete 40 CFR 68.170.
 - 11. 40 CFR 68.190(b)5, delete "or hazard review".
 - 12. 40 CFR 68.195(a), delete "68.170(j)".
- 7:31-7.2 TCPA risk management plan submission and updates

- (a) All owners or operators [of a covered process] shall submit the following to the Department in a format to be specified:
 - 1. (No change.)
 - 2. The following supplemental TCPA program information:
 - i.-ii. (No change.)
- iii. Identification of insurance carriers underwriting the stationary source's environmental liability and workers compensation insurance policies including the address of the carrier, the type of policy, the amount of insurance and limitations or exclusions to the policy; **and**
 - iv. (No change.)
- [v. For RHS mixtures containing one or more EHSs listed in Parts A, B, or C of Table I, identification of each covered process containing an RHS mixture and the number of process vessels in which the RHS mixture is present at or above its threshold quantity; and]
- 3. The owner or operator shall identify and register each covered process having an individual RHS or an RHS mixture and provide the following information in the RMP registration section pursuant to 40 CFR 68.160(b)(7) incorporated at N.J.A.C. 7:31-7.1(a):
 - i. ii. (No change.)
- iii. For RHS mixtures, the heat of reaction range in calories/gram [of RHS mixture] as listed at Table II of N.J.A.C. 7:31-6.3(c). If more than one RHS mixture is present in the process vessel at different times, the owner or operator shall register the RHS mixture having the highest heat of reaction range as shown on N.J.A.C. 7:31-6.3(c) Table II.
- iv. For RHS mixtures containing one or more EHS(s) listed in Parts A, B, or C of N.J.A.C. 7:31-6.3(a) Table I, [in a process] <u>at or</u> above the threshold quantity <u>at the facility</u>, an owner or operator shall register [only] the EHS listed on Part A, B, or C as a toxic or flammable substance, as applicable, <u>and the RHS mixture</u>. [Registration of these RHS mixtures shall be made in accordance with N.J.A.C. 7:31-7.2(a)2v.]
- (b) In addition to updates required by N.J.A.C. 7:31-7.1(c)3 through 5, all owners or operators [of a covered process] shall submit [an update] <u>a correction</u> to the Department within 60 days of an increase in maximum inventory of a covered process.
- (c) The owner or operator shall submit to the Department a Risk Management Plan correction within one month of a change in the qualified person or position.
- 7:31-7.3 Risk management program and RMP initial evaluation
 - (a) (No change.)
- (b) The RMPs and risk management programs of owners or operators that have an existing approved risk management program at their stationary source shall be audited <u>or inspected</u> in accordance with [40 CFR 68.220 with changes specified at] N.J.A.C. 7:31-8[.1(c)2 through 12 and

- 8.2] for the covered processes that are already part of the approved risk management program and also for the newly regulated covered processes.
- (c) The RMPs of owners or operators that do not have an approved risk management program at their [stationary source] **facility** shall be reviewed by the Department to determine whether the [stationary source] **facility** has an established risk management program. Owners or operators that have at least one process hazard analysis (for Program 3 covered processes) [or at least one hazard assessment and one hazard review (for Program 2 covered processes)] shall be determined to have an established risk management program and shall be notified and audited **or inspected** in accordance with [40 CFR 68.220 with changes specified at] N.J.A.C. 7:31-8[.1(c)1 through 12 and 8.2].
 - (d) (No change.)
- (e) Owners or operators that do not have an approved risk management program at their [stationary source] **facility** and that the Department determines do not have an established risk management program shall be notified that they are subject to workplan in accordance with N.J.A.C. 7:31-9.

7:31-7.4 Transfer of risk management program

- (a) In the event of the transfer of the covered process to a new owner or operator, change in ownership or the name of an owner or operator, the new owner or operator shall, before operating EHS equipment, adopt the existing, or obtain a new, approved [Program 2 or Program 3] TCPA Risk Management Program for the covered process.
- (b) A new owner or operator shall adopt an existing approved [Program 2 or Program 3] TCPA Risk Management Program by submitting an updated registration in accordance with this subchapter and signing an addendum to the consent agreement that was previously signed by the Department and the former owner or operator.

7:31-7.5 Schedule for risk management program implementation

- (a) Owners or operators having an approved risk management program shall comply with their approved risk management program for EHSs listed in N.J.A.C. 7:31-6.3, Table I, Parts A, B, [and/or] C, or D until the risk management program is revised to reflect the new requirements of this chapter, which shall be no later than [January 1, 2004] (365 days from the effective date of these amendments).
- (b) All owners or operators of [covered processes] <u>facilities</u> having [newly] listed EHSs on N.J.A.C. 7:31-6.3(a), Table I, Part D, at or above threshold quantities, shall be in compliance with this chapter by September 30, 2004[.], <u>except that all owners or operators having reactive hazard substance mixtures subject to this chapter with newly listed functional group number 44 on N.J.A.C. 7:31-6.3(a), Table 1, Part D, Group II, at or above threshold quantities shall be in compliance with this chapter no later than 365 days from the effective date of these amendments.</u>
- (c) Owners or operators planning to put into EHS service a new covered process for an EHS listed in N.J.A.C. 7:31-6.3, Table I, Parts A, B and/or C shall comply with [N.J.A.C. 7:31-3.4 for Program 2 covered processed or] N.J.A.C. 7:31-4.11 for Program 3 covered processes.

- (d) Owners or operators planning to put into EHS service a new covered process for an EHS listed in N.J.A.C. 7:31-6.3, Table I, Part D on or after September 30, 2004, shall comply with [N.J.A.C. 7:31-3.4 for Program 2 covered processes or] N.J.A.C. 7:31-4.11 for Program 3 covered processes.
- (e) Owners or operators of facilities having propane (CAS No. 74-98-6), propylene (CAS No. 115-07-1), butanes (normal butane (CAS No. 106-97-8) or isobutane (CAS No. 75-28-5), or butylenes (1-butene (CAS No. 106-98-9), 2-butene (CAS No. 107-01-7), butene (CAS No. 25167-67-3), 2-butene-cis (CAS No. 590-18-1), 2-butene-trans (CAS No. 624-64-6), and 2-methylpropene (CAS No. 115-11-7)) listed at N.J.A.C. 7:31-6.3(a), at Table I, Part C, at or above threshold quantities shall be in compliance with this chapter no later than 365 days from the effective date of these amendments.
- (f) Owners or operators of facilities having individual RHSs listed in Table 1, Part D, Group I, that are received, stored and handled in combination with one or more other chemical substances specifically formulated to inhibit the reactive hazard (such as water reactivity, pyrophoric, or self-reacting) where the RHS is at or above the threshold quantity shall be in compliance with this chapter no later than 365 days from the effective date of these amendments.
- (g) As of (the effective date of these amendments) owners or operators having an approved risk management program for EHSs listed in N.J.A.C. 7:31-6.3, Table I, Parts A, B, C, or D shall comply with the process hazard analysis with risk assessment requirements of 40 CFR 68.67 with changes specified at N.J.A.C. 7:31-4.1(c) and 4.2.

SUBCHAPTER 8. OTHER FEDERAL REQUIREMENTS

- 7:31-8.1 Incorporation by reference
 - (a) (b) (No change.)
 - (c) The following provisions are incorporated by reference with the specified changes:
- 1. 40 CFR 68.200 Recordkeeping replace "part" with "Chapter" and replace "Subpart D of this part" with "N.J.A.C. 7:31-[3 and] 4 and as follows: mechanical integrity/preventive maintenance records for the lifetime of EHS equipment, design safety review reports for the lifetime of a covered process, and hot work permits until they are reviewed in the next Department audit or inspection."
 - 2. (No change.)
- 3. 40 CFR 68.220(a) [add the phrase "risk management programs and" before each occurrence of "RMPs."] <u>delete the Federal requirement and replace with "The Department shall periodically audit or inspect risk management programs and RMPs to review their adequacy and require revisions when necessary to ensure compliance with N.J.A.C. 7:31 and the Act.</u>
- 4. [40 CFR 68.220(a) add "and N.J.A.C. 7:31-3 (Program 2) and N.J.A.C. 7:31-4 (Program 3). The Department shall audit stationary sources to determine compliance with N.J.A.C. 7:31." to the end of the sentence.] (**Reserved.**)

- 5. (No change.)
- 6. 40 CFR 68.220(e) replace the first sentence with "Based on the audit, the Department shall issue the owner or operator of a [stationary source] **facility** a written preliminary determination of material deficiencies and necessary revisions to the owner or operator's RMP and risk management program for the [stationary source] **facility** to ensure that the RMP [meets the criteria of Subchapter 7 of this chapter] and [that] the risk management program meet[s] the criteria of N.J.A.C. 7:31[-3 (for Program 2 covered processes) and N.J.A.C. 7:31-4 (for Program 3 covered processes)].
 - 7. through 12. (No change.)

7:31-8.2 Audits and Inspections

- (a) The Department shall have the right to enter and inspect and/or audit any [stationary source] **facility**, building or equipment, or any portion thereof, at any time, in order to determine compliance with the TCPA, this chapter, or any order or consent order or agreement. Such right shall include, but not be limited to, the right to test or sample any materials at the [stationary source] facility, to sketch or photograph any portion of the [stationary source] facility, building or equipment, to copy or photograph any document or records necessary to determine such compliance or noncompliance, and to interview any employees or representatives of the owner or operator. Such right shall be absolute except for those parts or portions of any materials, equipment, documents and records which contain either privileged trade secret or security information or confidential information for which the owner or operator has submitted a petition in accordance with N.J.A.C. 7:31-10.6, or claim in accordance with N.J.A.C. 7:31-10.4, and which petition or claim has not been denied by the Department. Those parts or portions of any materials, equipment, documents and records containing privileged trade secret or security information shall be treated as provided in (b)1 below, and those parts or portions containing confidential information shall be treated as provided in (b)2 below. Such right of inspection and audit shall not be conditioned upon any action by the Department, except the presentation of appropriate credentials as requested. Owners, operators, employees, and representatives shall not hinder or delay, and shall **upon request** assist, the Department in the performance of all aspects of any inspection [and] or audit.
 - (b) (No change.)
- (c) The Department may require submittal of any risk management program document for review.
- 1. The owner or operator shall include the following certification with any risk management program document required to be submitted:

"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant civil and criminal penalties, including the possibility of fines or imprisonment or both, for submitting false, inaccurate or incomplete information."

2. The certification shall be signed by the qualified person or position specified in the owner or operator's RMP, or person of higher authority for the owner or operator.

- (d) (No change.)
- (e) The owner or operator shall make all documentation required pursuant to this chapter readily accessible for review by the Department during an audit or inspection.

SUBCHAPTER 9. WORK PLAN/EHSARA

7:31-9.1 Work plan preparation

- (a) (No change.)
- (b) The work plan shall consist of the [stationary source] **facility** data and the detailed scope of work necessary to perform an EHSARA. The EHSARA shall result in a recommended risk reduction plan that will include any deficiencies that when corrected shall result in an approved risk management program.
 - (c) (d) (No change.)

7:31-9.2 Generic scope of work

- (a) (No change.)
- [(b) The scope of work for the work plan for each owner or operator required to have an EHSARA performed by a consultant or the Department for a Program 2 covered process shall include the following:
- 1. A general description of how the owner or operator of a covered process uses EHSs at the stationary source;
- 2. A requirement for the verification of the quantities and methods of handling all EHSs at the stationary source against the registration submitted by the owner or operator of a covered process;
- 3. A requirement for the following reviews and, where necessary, the completion or creation of the documents necessary to perform the reviews:
- i. A review of process description and process chemistry to define all the possible chemical reactions at the stationary source that may cause or contribute to an EHS accident;
- ii. A review or creation of the codes and standards used to design, build and operate the process;
- iii. A review of the simplified EHS process flow diagrams and piping and instrument diagrams including those of process, utility or service units at the stationary source that are interactive with the EHS piping and instrument diagrams;
- (1) Completeness as defined in N.J.A.C. 7:31-1.5 for each document referred to in (a)3iii above;
 - (2) Legibility;
 - (3) Uniformity of symbols;
 - (4) Drawing title; and

- (5) Revision number and date;
- iv. A review of safety information related to the EHSs, processes, and equipment as specified at 40 CFR 68.48 with changes specified at N.J.A.C. 7:31-3.1(c)1 and 2.; and
- v. A review of standard operating procedures as required by 40 CFR 68.52 with changes specified at N.J.A.C. 7:31-3.1(c)3;
 - 4. A requirement for a hazard review in accordance with 40 CFR 68.50.
- 5. A requirement for a review of the owner or operator's preventive maintenance program by inspection of internal documents, correspondence and standard forms and by interviews with the owner or operator of a covered process's staff, and identification of those activities necessary to achieve compliance with 40 CFR 68.56;
- 6. A requirement for review of the owner or operator's operator training program by inspection of internal documents, correspondence and standard forms and by interviews with the owner or operator of a covered process's staff, and identification of those activities necessary to achieve compliance with 40 CFR 68.54 with changes specified at N.J.A.C. 7:31-3.1(c)4;
- 7. A requirement for review of the owner or operator's EHS accident investigation procedures by inspection of internal documents, correspondence and standard forms and by interviews with the owner or operator of a covered process's staff and identification of those activities necessary to achieve compliance with 40 CFR 68.60 with changes specified at N.J.A.C. 7:31-3.1(c)7 –and 8;
- 8. A requirement for review of the owner or operator's emergency response program by inspection of internal documents, correspondence and standard forms and by interviews with the owner or operator of a covered process's staff and identification of those activities necessary to achieve compliance with N.J.A.C. 7:31-5;
- 9. A requirement for review of the owner or operator's audit program by inspection of internal documents, correspondence and standard forms and by interviews with the owner or operator of a covered process's staff and identification of those activities necessary to achieve compliance with 40 CFR 68.58 with changes specified at N.J.A.C. 7:31-3.1(c)5 and 6; and
- 10. A requirement for preparation and submittal of progress reports to the Department detailing the status of implementation of the scope of work at intervals to be established by the Department and included in the work plan.]

(b) (Reserved.)

7:31-9.5 EHSARA report

- (a) (c) (No change.)
- [(d) The EHSARA report shall contain, but not be limited to, the following for Program 2 covered processes:
 - 1. The findings of the verification required by N.J.A.C. 7:31-9.2(b)2;
 - 2. The findings of the review required by N.J.A.C. 7:31-9.2(b)3;
- 3. The reports of the process hazard analysis with risk assessment required by N.J.A.C. 7:31-9.2(b)4;

- 4. The findings of the reviews required by N.J.A.C. 7:31-9.2(b)5 through 9;
- 5. The recommended risk reduction plan including the listing of all of the deficiencies identified in (c)1 through 4 above, the remedial actions and alternatives to correct the deficiencies and a proposed schedule for implementation.]

(d) (Reserved.)

and

- (e) The Department shall review the EHSARA report and prepare a risk reduction plan which will be incorporated into an administrative order which will be issued to the owner or operator. The administrative order shall direct the owner or operator to implement the risk reduction plan which shall include:
 - 1. (No change.)
- 2. The actions the owner or operator is to take to reduce the risks including those necessary to complete a risk management program meeting the requirements of [N.J.A.C. 7:31-3 for Program 2 covered processes or] N.J.A.C. 7:31-4 [for Program 3 covered processes] and the schedule within which the owner or operator shall complete the actions; and
 - 3. (No change.)
- (f) Any owner or operator aggrieved by the administrative order issued pursuant to [(k)](e) above may request an adjudicatory hearing by following the procedures set forth at N.J.A.C. 7:31-11.3.
 - (g) (h) (No change.)

SUBCHAPTER 10. CONFIDENTIALITY AND TRADE SECRETS

7:31-10.2 General provisions

- (a) (No change.)
- (b) The Department shall protect from disclosure to the public any <u>security information and</u> <u>any</u> confidential information obtained pursuant to the Act or this chapter.
 - (c) (No change.)
- (d) An owner or operator may file a claim with the Department to withhold from public disclosure confidential information required to be submitted to the Department at any time such information is required to be submitted [or disclosed] to the Department. An owner or operator may file a petition to withhold from the Department privileged trade secret or security information only at the time of filing the initial document submittals with the Department pursuant to N.J.A.C. 7:31-7.2, or within 30 days after receipt of a Department request for the [stationary source] **facility** data for owners or operators with no risk management program as provided by N.J.A.C. 7:31-9.1(c), or within 30 days of the creation of new privileged trade secret or security information. All such claims or petitions and any required substantiation shall be submitted in writing on forms provided by the Department in accordance with N.J.A.C. 7:31-10.4 and 10.6, respectively. If the space provided for responses on Department forms is not sufficient, additional pages, properly referenced, may be attached to the required forms to provide complete responses. All forms can be obtained from:

Chief, Bureau of [Chemical] Release [Information and] Prevention

New Jersey Department of Environmental Protection

PO Box 424

Trenton, New Jersey 08625-0424

- (e) (h) (No change.)
- 7:31-10.3 Exclusions from confidential information and privileged trade secret or security information
 - (a) (No change.)
- (b) At a minimum, the following information required to be submitted or disclosed to the Department pursuant to the Act or this chapter shall not be considered privileged trade secret or security information regardless of any petition either pending or approved:
 - 1. 8. (No change.)
 - 9. Training records and procedures; [and]
 - 10. Design criteria and standards and operating consensus standards[.]; and
 - 11. Inherently safer technology review reports.
- 7:31-10.4 Confidentiality claims
 - (a) (e) (No change.)
- (f) The confidential copy, containing the information which the claimant alleges to be entitled to confidential treatment, shall be sealed in an envelope which shall display the word "CONFIDENTIAL" in bold type or stamp on both sides. This envelope, together with the confidentiality claim form (which may or may not be enclosed in a separate envelope, at the option of the claimant), shall be enclosed in another envelope for transmittal to the Department, at the following address:

Chief, Bureau of [Chemical] Release [Information and] Prevention

New Jersey Department of Environmental Protection

PO Box 424

Trenton, New Jersey 08625-0424

The outer envelope shall bear no marking indicating the confidential nature of its contents.

- (g) (j) (No change.)
- 7:31-10.6 Petitions to withhold privileged trade secret or security information
 - (a) (No change.)
- (b) Any owner or operator petitioning the Department for the right to withhold privileged trade secret or security information shall do so in writing on a form provided by the Department at

the time of initial document submittal, or within 30 days after receipt of a Department request for the site data for owners or operators with no risk management program as provided by N.J.A.C. 7:31-9.1(c), or within 30 days of the creation of new privileged trade secret or security information. A petitioner shall also submit in writing substantiation on a form provided by the Department to support its assertion that the information sought to be withheld is privileged trade secret or security information and pay the fee set forth in N.J.A.C. 7:31-1.11(r) for review of its petition and substantiation in accordance with the following:

- 1. (No change.)
- 2. A petitioner whose risk management **program** is determined to be unacceptable shall submit its substantiation and fee at the time it submits the site data as required by N.J.A.C. 7:31-9.1(c), that is, within 30 days after receipt of notice that its risk management program is unacceptable.
 - 3. 4. (No change.)
 - (c) (No change.)
- (d) The [certification on the bottom of the] petition and substantiation form shall contain the [signatures and two part] certification specified [in 40 CFR 68.185(b)] at **N.J.A.C. 7:31-8.2(c)**.
 - (e) (f) (No change.)
- (g) The Department may request supplemental information from the petitioner in support of its petition and substantiation to withhold trade secret or security information. The Department may specify the kind of information to be submitted, and the petitioner may submit any additional detailed information which further supports the information previously supplied to the Department in the petitioner's initial substantiation within 30 days of receipt of the Department's request. The petitioner may claim as confidential any confidential information included in the supplemental information, and shall clearly designate those portions of the supplemental information claimed as confidential in the manner described in N.J.A.C. 7:31-10.4(d) and (e). Information not properly marked will be treated as public information and may be disclosed without notice to the petitioner. A petitioner submitting supplemental information shall include a certification [which shall contain the signatures and two part certification] specified [in 40 CFR 68.185(b)]at N.J.A.C. 7:31-8.2(c). If supplemental information is submitted by the petitioner and the petitioner claims portions of it as confidential information, then the petitioner shall initially submit to the Department only the confidential copy of the supplemental information as prescribed in N.J.A.C. 7:31-10.4(c).
 - (h) (j) (No change.)
- 7:31-10.7 Determinations of petitions to withhold privileged trade secret or security information
 - (a) (c) (No change.)
- (d) A substantiation submitted under N.J.A.C. 7:31-[5.6] **10.6** will be determined to be sufficient to support a petition to withhold privileged trade secret or security information if the substantiation asserts specific facts to support the following conclusions:
- 1. The petitioner has established that the information sought to be withheld as privileged trade secret or security information is [entitled to protection as confidential information] in accordance with the criteria in N.J.A.C. 7:31-[10.5(j)1]**10.6(c)1** through 10;
 - 2.-3. (No change.)

- (e) (f) (No change.)
- (g) Once a petition has been determined to be sufficient under (d) or (f)1 above, the Department will determine whether the petition to withhold trade secret or security information will be granted or denied.
- 1. The petitioner will be notified by regular mail that its petition has been granted if the Department determines that the information submitted in support of the petition is true and that the information sought to be withheld is a trade secret or security information which meets the following criteria:
- i. The information is trade secret or security information entitled to be treated as confidential information in accordance with the criteria established in N.J.A.C. 7:31-[10.5(j)1]**10.6(c)1** through 10;

ii. - iv. (No change.)

2. (No change.)

SUBCHAPTER 11. CIVIL ADMINISTRATIVE PENALTIES AND REQUESTS FOR ADJUDICATORY HEARINGS

7:31-11.4 Civil administrative penalty determination

(a)-(b) (No change.)

schedule set forth in N.J.A.C. 7:31-7.5.

(c) The Department shall determine the amount of the civil administrative penalty for the offenses described in Table III below on the basis of the category of offense, the frequency of the violation, the type of violation as minor (M) or non-minor (NM), and the applicable grace period if the violation is minor, as follows:

TABLE III

Penalty in U.S. Dollars By Offense Category

	Categories of Offense	Cite	First Offense	Second Offense	Subsequent Offenses	Type of Violation	Grace Period (days)
1.	Failure to comply with the requirements of 40 CFR 68 as incorporated at N.J.A.C. 7:31 by [September 30, 2004 for covered processes with EHSs listed in Table I, Part D or by June 18, 2003 for covered processes with EHSs listed in N.J.A.C. 7:31-6.3 Table 1 Part A, B, or C] the	40 CFR 68.10(a)(1), N.J.A.C. 7:31-1.1(c)3i and ii	2,000	4,000	10,000	NM	<u>(uays)</u>

2.-3. (No change.)

	Categories of Offense	Cite	First Offense	Second Offense	Subsequent Offenses	Type of Violation	
4.	Failure to comply with the requirements of 40 CFR 68 as incorporated at N.J.A.C. 7:31 for new covered processes in accordance with the requirements at [N.J.A.C. 7:31-3.4 (for Program 2 covered processes) or] N.J.A.C. 7:31-4.11 [(for Program 3 covered processes)].	40 CFR 68.10(a), N.J.A.C. 7:31-1.1(c)3iii	1,000	2,000	5,000	NM	(days)
[5.	Failure to determine that a covered process is subject to Program 2 requirements when the process does not meet the eligibility requirements of Program 3.	40 CFR 68.10(c), N.J.A.C. 7:31-1.1(c)3iv	1,000	2,000	5,000	M	30
6.	Failure to determine that a covered process in NAICS code 32211, 32411, 32511, 325181, 325188, 325192, 325199, 325211, 325311, or 32532 is subject to Program 3 requirements.	40 CFR 68.10(d)(1), N.J.A.C. 7:31-1.1(c)3v	2,000	4,000	10,000	NM	
7.	Failure to determine that a covered process subject to the OSHA process safety management standard, 29 CFR 1910.119, is subject to Program 3 requirements.	40 CFR 68.10(d)(2), N.J.A.C. 7:31-1.1(c)3v	2,000	4,000	10,000	NM	
8.	Failure to comply with the requirements of a new Program level that applies to the process and update the RMP as provided in 40 CFR 68.190 as incorporated at N.J.A.C. 7:31-7.1(c) at the time the covered process no longer meets the eligibility criteria of its Program level.	40 CFR 68.10(e), N.J.A.C. 7:31-1.1(a)	2,000	4,000	10,000	NM]	
58. 9. [10.	(Reserved.) (No change.) Failure to develop and implement a management system for a Program 2 covered process as provided in 40 CFR 68.15 with changes specified at N.J.A.C. 7:31-1.1(c)5 in addition to meeting the requirements of 40 CFR 68.12(a) as incorporated at N.J.A.C. 7:31-1.1(c)4.	40 CFR 68.12(c)(1), N.J.A.C. 7:31-1.1(c)4ii(1) and (2)	4,000	8,000	20,000	NM	
11.	Failure to conduct a hazard assessment as provided in 40 CFR 68.20 through 68.42, incorporated with changes specified at N.J.A.C. 7:31-2.1(c)1 and 2 and N.J.A.C. 7:31-2.2 in addition to meeting the requirements of 40 CFR 68.12(a) as incorporated at N.J.A.C. 7:31-1.1(c)4.	40 CFR 68.12(c)(2), N.J.A.C. 7:31-1.1(c)4ii(1) and (3)	6,000	12,000	30,000	NM	

	Categories of Offense	Cite	First Offense	Second Offense	Subsequent Offenses	Type of Violation	
12.	Failure to implement the Program 2 prevention steps provided in 40 CFR 68.48 through 40 CFR 68.60 incorporated with changes specified at N.J.A.C. 7:31-3.1(c)1 through 10 and N.J.A.C. 7:31-3.2 through 3.5 or implement the Program 3 prevention steps provided in 40 CFR 68.65 through 68.87, incorporated with changes specified at N.J.A.C. 7:31-4.1(c)1 through 23 and N.J.A.C. 7:31-4.2 through 4.11, in addition to meeting the requirements of 40 CFR 68.12(a) incorporated at N.J.A.C. 7:31-1.1(c)4.	40 CFR 68.12(c)(3), N.J.A.C. 7:31-1.1(c)4ii(1) and (4)	1,000	2,000	5,000	NM	(days)
13.	Failure to develop and implement an emergency response program as provided in 40 CFR 68.90 to 68.95 incorporated with changes specified at N.J.A.C. 7:31-5.1(c)1 through 4 and N.J.A.C. 7:31-5.2 in addition to meeting the requirements of 40 CFR 68.12(a) incorporated at N.J.A.C. 7:31-1.1(c)4.	40 CFR 68.12(c)(4), N.J.A.C. 7:31-1.1(c)4ii(1) and (5)	4,000	8,000	20,000	NM	
14.	Failure to submit as part of the RMP the data on prevention program elements for Program 2 processes as provided in 40 CFR 68.170 as incorporated at N.J.A.C. 7:31-7.1(a) in addition to meeting the requirements of 40 CFR 68.12(a) as incorporated at N.J.A.C. 7:31-1.1(c)4.	40 CFR 68.12(c)(5), N.J.A.C. 7:31-1.1(c)4ii(1) and (5)	500	1,000	2,500	NM]	
10. thr	ough 14. (Reserved.)						
15 1	9.	(No change.)					
20]	Failure to develop a management system to oversee the implementation of the risk management program elements for [Program 2 and Program 3] covered processes	40 CFR 68.15(a). N.J.A.C. 7:31- 1.1[(a)](c)5iv	4,000	8,000	20,000	NM	
21 2	2.	(No change.)					

	Categories of Offense	Cite	First Offense	Second Offense	Subsequent Offenses	Type of Violation	Grace Period
23	Failure to include in the management system a documentation plan which: (1) provides a [means of] <u>list</u> identifying all documentation required by this chapter <u>including the document title</u> , <u>identification number</u> , <u>and storage</u> <u>location</u> ; and (2) describes how the owner or operator of a covered process will store, maintain and update all documentation required by this chapter.	40 CFR 68.15, N.J.A.C. 7:31-1.1(c)5i	2,000	4,000	10,000	M	(days) 30
24.	Failure to provide in the management system a means [for recording the daily quantity of each extraordinarily hazardous substance (EHS) contained in storage vessels and shipping containers] of tracking and recording the EHS inventory at the facility against the Risk Management Plan registration quantity to ensure that the EHS registration quantity of each registered covered process is not exceeded.	40 CFR 68.15, N.J.A.C. 7:31-1.1(c)5ii	2,000	4,000	10,000	NM	
25 1	05.	(No change.)					
106.	Failure to use [28] <u>100</u> percent of the potential heat release (heat of reaction) assumed to contribute to the explosion for an RHS Mixture in a process vessel when using a TNT-equivalent explosion method for the RHS hazard assessment.	N.J.A.C. 7:31-2.2(b)3iii	4,000	8,000	20,000	NM	
107.	(No change.)						
[108.	Failure to include Material Safety Data Sheets that meet the requirements of 29 CFR 1910.1200(g) in the up-to-date safety information required to be compiled and maintained for the regulated substances, processes, and equipment.	40 CFR 68.48(a)(1), N.J.A.C. 7:31-3.1(a)	2,000	4,000	10,000	NM	
109.	Failure to include the maximum intended inventory of equipment in which the regulated substances are stored or processed in the up-to-date safety information required to be compiled and maintained for the regulated substances, processes, and equipment.	40 CFR 68.48(a)(2), N.J.A.C. 7:31-3.1(a)	2,000	4,000	10,000	NM	

	<u>Categories of Offense</u>	<u>Cite</u>	First Offense	Second Offense	Subsequent Offenses	Type of Violation	Grace Period (days)
110.	Failure to include safe upper and lower temperatures, pressures, flows, and compositions in the up-to-date safety information required to be compiled and maintained for the regulated substances, processes, and equipment.	40 CFR 68.48(a)(3), N.J.A.C. 7:31-3.1(a)	2,000	4,000	10,000	NM	(uays)
111.	Failure to include equipment specifications in the up-to-date safety information required to be compiled and maintained for the regulated substances, processes, and equipment.	40 CFR 68.48(a)(4), N.J.A.C. 7:31-3.1(a)	2,000	4,000	10,000	NM	
112.	Failure to include codes and standards used to design, build, and operate the process in the up-to-date safety information required to be compiled and maintained for the regulated substances, processes, and equipment.	40 CFR 68.48(a)(5), N.J.A.C. 7:31-3.1(a)	2,000	4,000	10,000	NM	
113.	Failure to include process flow diagrams and piping and instrumentation diagrams in the up-to-date safety information required to be compiled and maintained for the regulated substances, processes, and equipment.	40 CFR 68.48(a), N.J.A.C. 7:31-3.1(c)1i	2,000	4,000	10,000	NM	
114.	Failure to include flash point up to 200 degrees Fahrenheit (and method used), flammable limits (lower explosive limit and upper explosive limit), extinguishing media, special fire fighting procedures, and unusual fire and explosion hazards in the reactivity data applicable to the process in which an EHS is used, handled, stored or generated required to be compiled and maintained in the up-to-date-safety information for the regulated substances, processes, and equipment.	40 CFR 68.48(a), N.J.A.C. 7:31-3.1(c)1ii(1)	2,000	4,000	10,000	NM	

	<u>Categories of Offense</u>	<u>Cite</u>	First Offense	Second Offense	Subsequent Offenses	Type of Violation	Grace Period
115.	Failure to include thermal and chemical stability information: stability (unstable or stable), conditions to avoid (for instability), incompatibility (materials to avoid), hazardous decomposition (products or byproducts), hazardous polymerization (may occur or will not occur), and conditions to avoid (for polymerization) in the reactivity data applicable to the process in which an EHS is used, handled, stored or generated required to be compiled and maintained in the up-to-date-safety information for the regulated substances, processes, and equipment.	40 CFR 68.48(a), N.J.A.C. 7:31-3.1(c)1ii(2)	2,000	4,000	10,000	NM	(days)
116.	Failure to include thermodynamic and reaction kinetic data including: heat of reaction, temperature at which instability (uncontrolled reaction, decomposition, and/or polymerization) initiates, and energy release rate data in the reactivity data applicable to the process in which an EHS is used, handled, stored or generated required to be compiled and maintained in the up-to-date-safety information for the regulated substances, processes, and equipment.	40 CFR 68.48(a), N.J.A.C. 7:31-3.1(c)1ii(3)	2,000	4,000	10,000	NM	
117.	Failure to include incidental formation of byproducts that are reactive and unstable in the reactivity data applicable to the process in which an EHS is used, handled, stored or generated required to be compiled and maintained in the up-to-date-safety information for the regulated substances, processes, and equipment.	40 CFR 68.48(a), N.J.A.C. 7:31-3.1(c)1ii(4)	2,000	4,000	10,000	NM	
118.	Failure to include information showing the identity of toxic or flammable EHSs capable of being generated for individual RHSs listed at N.J.A.C. 7:31-6.3(a) Table I, Part D, Group I due to inadvertent mixing with incompatible substances, decomposition, and self-reaction in the reactivity data applicable to the process in which an EHS is used, handled, stored or generated required to be compiled and maintained in the up-to-date safety information for the regulated substances, processes, and equipment.	40 CFR 68.48(a), N.J.A.C. 7:31-3.1(c)1ii(5)	2,000	4,000	10,000	NM	

	Categories of Offense	Cite	First Offense	Second Offense	Subsequent Offenses	Type of Violation	Grace Period
119.	Failure to ensure that a process is designed in compliance with recognized and generally accepted good engineering practices. or Failure to comply with Federal or state regulations that address industry-specific safe design or industry-specific design codes and standards.	40 CFR 68.48(b), N.J.A.C. 7:31-3.1(a)	5,000	10,000	25,000	NM	(days)
120.	Failure to update the safety information for a change to a covered process that made the safety information inaccurate.	40 CFR 68.48(c), N.J.A.C. 7:31-3.1(c)2	500	1,000	2,500	NM	
121.	Failure to conduct a hazard review that identifies the hazards associated with a regulated substance, process, or procedures.	40 CFR 68.50(a)(1), N.J.A.C. 7:31-3.1(a)	4,000	8,000	20,000	NM	
122.	Failure to conduct a hazard review that identifies the opportunities for equipment malfunctions or human errors that could cause an accidental release.	40 CFR 68.50(a)(2), N.J.A.C. 7:31-3.1(a)	4,000	8,000	20,000	NM	
123.	Failure to conduct a hazard review that identifies the safeguards used or needed to control a hazard or prevent equipment malfunction or human error.	40 CFR 68.50(a)(3), N.J.A.C. 7:31-3.1(a)	4,000	8,000	20,000	NM	
124.	Failure to conduct a hazard review that identifies any steps used or needed to detect or monitor releases.	40 CFR 68.50(a)(4), N.J.A.C. 7:31-3.1(a)	4,000	8,000	20,000	NM	
125.	Failure to determine in a hazard review, by inspecting all equipment, whether the process is designed, fabricated, or operated in accordance with the applicable industry standards or Federal or state design rules, for processes designed to meet those standards or rules.	40 CFR 68.50(b), N.J.A.C. 7:31-3.1(a)	2,000	4,000	10,000	NM	
126.	Failure to document the results of a hazard review in a hazard review report prepared in accordance with N.J.A.C. 7:31-3.6 or ensure that problems identified are resolved in a timely manner.	40 CFR 68.50(c), N.J.A.C. 7:31-3.1(c)9	2,000	4,000	10,000	NM	
127.	Failure to update a hazard review at least once every five years.	40 CFR 68.50(d), N.J.A.C. 7:31-3.1(a)	2,000	4,000	10,000	NM	

	Categories of Offense	<u>Cite</u>	First Offense	Second Offense	Subsequent Offenses	Type of Violation	
128.	Failure to conduct a hazard review for a major change in a process.	40 CFR 68.50(d), N.J.A.C. 7:31-3.1(a)	2,000	4,000	10,000	NM	(days)
129.	Failure to resolve all issues identified in the hazard review before startup of a changed process.	40 CFR 68.50(d), N.J.A.C. 7:31-3.1(a)	2,000	4,000	10,000	NM	
130.	Failure to prepare 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. or Failure to write operating procedures in a manner and language that the EHS operators of a process are capable of understanding.	40 CFR 68.52(a); N.J.A.C. 7:31-3.1(c)3	4,000	8,000	20,000	NM	
131.	Failure to address initial startup in the operating procedures.	40 CFR 68.52(b)(1), N.J.A.C. 7:31-3.1(a)	1,000	2,000	5,000	NM	
132.	Failure to address normal operations in the operating procedures.	40 CFR 68.52(b)(2), N.J.A.C. 7:31-3.1(a)	1,000	2,000	5,000	NM	
133.	Failure to address temporary operations in the operating procedures.	40 CFR 68.52(b)(3), N.J.A.C. 7:31-3.1(a)	1,000	2,000	5,000	NM	
134.	Failure to address emergency shutdown and operations in the operating procedures.	40 CFR 68.52(b)(4), N.J.A.C. 7:31-3.1(a)	1,000	2,000	5,000	NM	
135.	Failure to address normal shutdown in the operating procedures.	40 CFR 68.52(b)(5), N.J.A.C. 7:31-3.1(a)	1,000	2,000	5,000	NM	
136.	Failure to address startup following a normal or emergency shutdown or a major change that requires a hazard review in the operating procedures.	40 CFR 68.52(b)(6), N.J.A.C. 7:31-3.1(a)	1,000	2,000	5,000	NM	
137.	Failure to address the consequences of deviations and steps required to correct or avoid deviations in the operating procedures.	40 CFR 68.52(b)(7), N.J.A.C. 7:31-3.1(a)	1,000	2,000	5,000	NM	
138.	Failure to address equipment inspections in the operating procedures.	40 CFR 68.52(b)(8), N.J.A.C. 7:31-3.1(a)	1,000	2,000	5,000	NM	

	<u>Categories of Offense</u>	Cite	First Offense	Second Offense	Subsequent Offenses	Type of Violation	Grace Period (days)
139.	Failure to ensure that the operating procedures were updated, if necessary, when a major change occurred and prior to startup of the changed process.	40 CFR 68.52(c), N.J.A.C. 7:31-3.1(a)	1,000	2,000	5,000	NM	<u>(uays)</u>
140.	Failure to ensure that each employee operating a process or each employee newly assigned to a covered process have been trained or tested competent in the operating procedures provided in 40 CFR 68.52 incorporated at N.J.A.C. 7:31-3.1(a) that pertain to their duties. or Failure to certify in writing that the employee already operating a process on June 21, 1999 has the required knowledge, skills, and abilities to safely carry out the duties and responsibilities as provided in the operating procedures.	40 CFR 68.54(a), N.J.A.C. 7:31-3.1(a)	2,000	4,000	10,000	NM	
141.	Failure to provide refresher training at least every three years, and more often as necessary, to each employee operating a process to ensure that the employee understands and adheres to the current operating procedures of the process. or Failure to determine the appropriate frequency of refresher training in consultation with the employees operating the process.	40 CFR 68.54(b), N.J.A.C. 7:31-3.1(a)	2,000	4,000	10,000	NM	
142.	Failure to ensure that operators are trained in updated or new procedures prior to startup of a process after a major change.	40 CFR 68.54(d), N.J.A.C. 7:31-3.1(a)	2,000	4,000	10,000	NM	
143.	Failure to prepare and implement procedures to maintain the on-going mechanical integrity of the process equipment.	40 CFR 68.56(a), N.J.A.C. 7:31-3.1(a)	2,000	4,000	10,000	NM	

	Categories of Offense	Cite	First Offense	Second Offense	Subsequent Offenses	Type of Violation	Grace Period
144.	Failure to train or cause to be trained each employee involved in maintaining the ongoing mechanical integrity of a process. or Failure to train each such employee 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 to ensure that the employee can perform the job tasks in a safe manner.	40 CFR 68.56(b), N.J.A.C. 7:31-3.1(a)	2,000	4,000	10,000	NM	(days)
145.	Failure to require a maintenance contractor to ensure that each contract maintenance employee is trained to perform the maintenance procedures developed under 40 CFR 68.56(a) incorporated at N.J.A.C. 7:31-3.1(a).	40 CFR 68.56(c), N.J.A.C. 7:31-3.1(a)	2,000	4,000	10,000	NM	
146.	Failure to perform or cause to be performed inspections and tests on process equipment. or Failure to follow recognized and generally accepted good engineering practices when performing inspection and testing procedures. or Failure to make the frequency of inspections and tests of process equipment consistent with applicable manufacturers' recommendations, industry standards or codes, good engineering practices, or prior operating experience.	40 CFR 68.56(d), N.J.A.C. 7:31-3.1(a)	2,000	4,000	10,000	NM	
147.	Failure to conduct a compliance audit and certify at least every three years that compliance with the provisions of 40 CFR 40 Subpart C as incorporated at N.J.A.C. 7:31-3 has been evaluated in order to verify that the procedures and practices developed under the rule are adequate and are being followed. or Failure to verify that the process technology and equipment, as built and operated, are in accordance with the safety information prepared pursuant to 40 CFR 68.48(a) and (b) as incorporated with changes at N.J.A.C. 7:31-3.1(c)1.	40 CFR 68.58(a), N.J.A.C. 7:31-3.1(c)5	5,000	10,000	25,000	NM	

	Categories of Offense	Cite	First Offense	Second Offense	Subsequent Offenses	Type of Violation	
148.	Failure to conduct a compliance audit with at least one person knowledgeable in the process.	40 CFR 68.58(b), N.J.A.C. 7:31-3.1(a)	1,000	2,000	5,000	NM	(days)
149.	Failure to develop a report of the audit findings that includes the scope, audit techniques, methods used or the names of the audit participants.	40 CFR 68.58(c), N.J.A.C. 7:31-3.1(c)6	1,000	2,000	5,000	NM	
150.	Failure to promptly determine and document an appropriate response to each of the findings of a compliance audit or document that deficiencies found during the audit have been corrected. or Failure to prepare and include in the compliance audit report a written schedule for the implementation of corrective actions or state that such actions have been completed.	40 CFR 68.58(d), N.J.A.C. 7:31-3.1(c)10	1,000	2,000	5,000	NM	
151.	Failure to retain the two most recent compliance audit reports.	40 CFR 68.58(e), N.J.A.C. 7:31-3.1(a)	1,000	2,000	5,000	NM	
152.	Failure to investigate each EHS accident or potential catastrophic event.	40 CFR 68.60(a), N.J.A.C. 7:31-3.1(c)7	5,000	10,000	25,000	NM	
153.	Failure to initiate an EHS accident or potential catastrophic event investigation as promptly as possible, but not later than 48 hours following the incident.	40 CFR 68.60(b), N.J.A.C. 7:31-3.1(c)8	1,000	2,000	5,000	NM	
154.	Failure to prepare a summary at the conclusion of an investigation which includes the date of an EHS accident or potential catastrophic event.	40 CFR 68.60(c)(1), N.J.A.C. 7:31-3.1(c)8	1,000	2,000	5,000	NM	
155.	Failure to prepare a summary at the conclusion of an investigation of an EHS accident or potential catastrophic event which includes the date the investigation began.	40 CFR 68.60(c)(2), N.J.A.C. 7:31-3.1(c)7	1,000	2,000	5,000	NM	
156.	Failure to prepare a summary at the conclusion of an investigation which includes a description of the EHS accident or potential catastrophic event.	40 CFR 68.60(c)(3), N.J.A.C. 7:31-3.1(c)8	1,000	2,000	5,000	NM	

	Categories of Offense	Cite	First Offense	Second Offense	Subsequent Offenses	Type of Violation	Grace Period (days)
157.	Failure to prepare a summary at the conclusion of an investigation of an EHS accident or potential catastrophic event which includes the factors that contributed to the EHS accident or potential catastrophic event.	40 CFR 68.60(c)(4), N.J.A.C. 7:31-3.1(c)8	1,000	2,000	5,000	NM	<u>(uays)</u>
158.	Failure to prepare a summary at the conclusion of an EHS accident or potential catastrophic event investigation which includes any recommendations resulting from the investigation.	40 CFR 68.60(c)(5), N.J.A.C. 7:31-3.1(a)	1,000	2,000	5,000	NM	
159.	Failure to promptly address and resolve the EHS accident or potential catastrophic event investigation findings and recommendations. or Failure to document the resolutions and corrective actions of an EHS accident or potential catastrophic event investigation.	40 CFR 68.60(d), N.J.A.C. 7:31-3.1(a)	2,000	4,000	10,000	NM	
160.	Failure to review the findings of an EHS accident or potential catastrophic event investigation with all affected personnel whose job tasks are affected by the findings.	40 CFR 68.60(e), N.J.A.C. 7:31-3.1(a)	1,000	2,000	5,000	NM	
161.	Failure to retain EHS accident or potential catastrophic event investigation summaries for five years.	40 CFR 68.60(f), N.J.A.C. 7:31-3.1(a)	2,000	4,000	10,000	NM	
162.	Failure to comply with the emergency response requirements of N.J.A.C. 7:31-5.	N.J.A.C. 7:31-3.2(a)	2,000	4,000	10,000	NM	
163.	Failure to submit within 90 days of the third anniversary date, and each subsequent third anniversary date, a triennial report to the Department reflecting the risk management program activities for the 36 month period ending on the anniversary date.	N.J.A.C. 7:31-3.3(a)	2,000	4,000	10,000	M	30

	<u>Categories of Offense</u>	<u>Cite</u>	First Offense	Second Offense	Subsequent Offenses	Type of Violation	
164.	Failure to include in the triennial report an update of the supplemental TCPA program information as specified in N.J.A.C. 7:31-7.2(a)2 if this supplemental information was not previously reported in a revised Risk Management Plan submittal. or Failure to state that there were no changes to the supplemental TCPA program information in the triennial report if there were no changes in this information since the last Risk Management Plan submittal.	N.J.A.C. 7:31-3.3(b)1	500	1,000	2,500	M	(days) 30
165.	Failure to include in the triennial report a description of significant changes to the management system. or Failure to state that there were no changes to the management system in the triennial report if there were no changes in this information since the last triennial report.	N.J.A.C. 7:31-3.3(b)2	500	1,000	2,500	M	30
166.	Failure to include in the triennial report the hazard review report required at N.J.A.C. 7:31-3.5 for each hazard review completed during the previous three years. or Failure to state that there were no hazard review reports completed in the triennial report if there were no hazard review reports completed since the last triennial report.	N.J.A.C. 7:31-3.3(b)3	500	1,000	2,500	M	30
167.	Failure to include in the triennial report a summary of any EHS accidents that occurred during the previous three years including the EHS involved and amount released if these facts could have been reasonably determined based on the information obtained through an investigation.	N.J.A.C. 7:31-3.3(b)4i	500	1,000	2,500	M	30
168.	Failure to include in the triennial report a summary of any EHS accidents that occurred during the previous three years that including the date and time of the EHS accident and identification of EHS equipment involved.	N.J.A.C. 7:31-3.3(b)4ii	500	1,000	2,500	M	30

	<u>Categories of Offense</u>	Cite	First Offense	Second Offense	Subsequent Offenses	Type of Violation	
169.	Failure to include in the triennial report a summary of any EHS accidents that occurred during the previous three years that including the basic and contributory causes.	N.J.A.C. 7:31-3.3(b)4iii	500	1,000	2,500	M	(days) 30
170.	Failure to include in the triennial report a summary of any EHS accidents that occurred during the previous three years that including a statement that there were no EHS accidents if no EHS accidents occurred since the last triennial report.	N.J.A.C. 7:31-3.3(b)4iv	500	1,000	2,500	M	30
171.	Failure to include in the triennial report the compliance audit report and documentation for the previous three years ending on the anniversary date prepared pursuant to 40 CFR 68.58(c) and (d) as incorporated with changes at N.J.A.C. 7:31-3.1(c)6 and 10.	N.J.A.C. 7:31-3.3(b)5	500	1,000	2,500	M	30
172.	Failure to include in the triennial report each inherently safer technology review update report completed pursuant to N.J.A.C. 7:31-3.6(b) and (f) during the previous three years.	N.J.A.C. 7:31-3.3(b)6	500	1,000	2,500	M	30
173.	Failure to submit the documentation required at N.J.A.C. 7:31-7.2 and 40 CFR 68.150 with changes specified at N.J.A.C. 7:31-7.1(c) at least 90 days prior to construction of a new Program 2 covered process at a stationary source for which there is no previously approved risk management program.	N.J.A.C. 7:31-3.4(a)(1)	2,000	4,000	10,000	M	30
174.	Failure to receive written approval from the Department before proceeding with construction of a new Program 2 covered process at a stationary source for which there is no previously approved risk management program.	N.J.A.C. 7:31-3.4(a)(2)	6,000	12,000	30,000	NM	
175.	Failure to submit to the Department, at least 90 days prior to the date the equipment was scheduled to be placed into EHS service, updates of the documentation as required by N.J.A.C. 7:31-3.4(a) 1 on a new Program 2 covered process at a stationary source for which there is no previously approved risk management program.	N.J.A.C. 7:31-3.4(a)(3)	2,000	4,000	10,000	M	30

	<u>Categories of Offense</u>	Cite	First Offense	Second Offense	Subsequent Offenses	Type of Violation	Grace Period (days)
176.	Failure to submit to the Department the fees required by N.J.A.C. 7:31-1.11A for a new Program 2 covered process at a stationary source for which there is no previously approved risk management program.	N.J.A.C. 7:31-3.4(a)(4)	one-third of fee	one-third of fee + 1000	one-third of fee + 2000	M	30
177.	Failure to submit the documentation required by N.J.A.C. 7:31-7.2 and 40 CFR 68.150 with changes specified at N.J.A.C. 7:31-7.1(c) at least 90 days prior to placing existing equipment for a new Program 2 covered process into EHS service at a stationary source for which there is no previously approved risk management program.	N.J.A.C. 7:31-3.4(b)(1)	2,000	4,000	10,000	M	30
178.	Failure to submit to the Department the fees required by N.J.A.C. 7:31-1.11A for a new Program 2 covered process at a stationary source for which there is no previously approved risk management program.	N.J.A.C. 7:31-3.4(b)(2)	one-third of fee	one-third of fee + 1000	one-third of fee + 2000	M	30
179.	Failure to update documentation in accordance with N.J.A.C. 7:31-7.2 and 40 CFR 68.150 with changes specified at N.J.A.C. 7:31-7.1(c) at least 90 days prior to the scheduled placing of existing equipment for a new Program 2 covered process into EHS service at a stationary source that has a previously approved risk management program.	N.J.A.C. 7:31-3.4(c)(1)	2,000	4,000	10,000	M	30
180.	Failure to submit to the Department the fees required by N.J.A.C. 7:31-1.11A for a new Program 2 covered process at a stationary source that has a previously approved risk management program.	N.J.A.C. 7:31-3.4(c)(2)	one-third of fee	one-third of fee + 1000	One-third of fee + 2000	M	30

	<u>Categories of Offense</u>	Cite	First Offense	Second Offense	Subsequent Offenses	Type of Violation	
181.	Failure to enter into a consent agreement or consent agreement addendum with the Department prior to placing equipment into EHS service for a new covered process and subsequent to a stationary source inspection by the Department. or Failure to complete items of the consent agreement, or consent agreement addendum, for equipment in a new covered process in accordance with the schedule in the consent agreement or consent agreement addendum.	N.J.A.C. 7:31-3.4(d)	5,000	10,000	25,000	NM	(days)
182.	Failure to complete an inherently safer technology review and report pursuant to N.J.A.C. 7:31-3.6(c) through (f) for each new covered process; And/or Failure to submit the inherently safer technology review report with the submittal required at N.J.A.C. 7:31-3.4(a)1, (b)1, or (c)1, as applicable.	N.J.A.C. 7:31-3.4(e)	2,000	4,000	10,000	NM	
183.	Failure to prepare a hazard review report which includes identification of the covered process.	N.J.A.C. 7:31-3.5(a)1	500	1,000	2,500	NM	
184.	Failure to prepare a hazard review report which includes the date the hazard review was performed.	N.J.A.C. 7:31-3.5(a)2	500	1,000	2,500	NM	
185.	Failure to prepare a hazard review report which includes the date of the completed hazard review report.	N.J.A.C. 7:31-3.5(a)3	500	1,000	2,500	NM	
186.	Failure to prepare a hazard review report which includes the names, positions, and affiliation of the hazard review participants.	N.J.A.C. 7:31-3.5(a)4	500	1,000	2,500	NM	
187.	Failure to prepare a hazard review report which includes documentation of the hazards associated with the process and regulated substances.	N.J.A.C. 7:31-3.5(a)5	500	1,000	2,500	NM	
188.	Failure to prepare a hazard review report which includes documentation of the opportunities for equipment malfunctions or human errors that could cause an accidental release.	N.J.A.C. 7:31-3.5(a)6	500	1,000	2,500	NM	

	Categories of Offense	Cite	First Offense	Second Offense	Subsequent Offenses	Type of Violation	Grace Period
189.	Failure to prepare a hazard review report which includes documentation of the safeguards used or needed to control the hazards or prevent equipment malfunction or human error.	N.J.A.C. 7:31-3.5(a)7	500	1,000	2,500	NM	(days)
190.	Failure to prepare a hazard review report which includes documentation of any steps used or needed to detect or monitor releases.	N.J.A.C. 7:31-3.5(a)8	500	1,000	2,500	NM	
191.	Failure to prepare a hazard review report which includes documentation on the implementation of recommended corrective actions including a schedule for such implementations and the resolution and status for completing the corrective actions.	N.J.A.C. 7:31-3.5(a)9	500	1,000	2,500	NM	
192.	Failure to retain all hazard review reports and documentation for the life of the covered process.	N.J.A.C. 7:31-3.5(b)	2,000	4,000	10,000	NM	
193.	Failure to complete an initial inherently safer technology review and submit to the Department an inherently safer technology review report for each covered process at the stationary source by 120 days from the effective date of this rule.	N.J.A.C. 7:31-3.6(a)	2,000	4,000	10,000	NM	
194.	Failure to update the inherently safer technology review on the same schedule as the hazard review updates for each covered process at the stationary source, including each new covered process brought on line since the date of the previous inherently safer technology review. and/or Failure to address the inherently safer technologies that have been developed since the last inherently safer technology review.	N.J.A.C. 7:31-3.6(b)	2,000	4,000	10,000	NM	
195.	Failure to conduct each inherently safer technology review with a team of qualified of qualified experts whose members have expertise in environmental requirements, chemistry, design and engineering, process controls and instrumentation, maintenance, production and operations, and chemical process safety.	N.J.A.C. 7:31-3.6(c)	1,000	2,000	5,000	NM	

	Categories of Offense	<u>Cite</u>	First Offense	Second Offense	Subsequent Offenses	Type of Violation	Grace Period
196.	Failure to include an analysis of the following principle and technique in each inherently safer technology review to identify available inherently safer technology alternatives, or combinations of alternatives, that minimize or eliminate the potential for an EHS release: reducing the amount of EHS material that potentially may be released.	N.J.A.C. 7:31-3.6(d)1	1,000	2,000	5,000	NM	(days)
197.	Failure to include an analysis of the following principle and technique in each inherently safer technology review to identify available inherently safer technology alternatives, or combinations of alternatives, that minimize or eliminate the potential for an EHS release: substituting less hazardous materials.	N.J.A.C. 7:31-3.6(d)2	1,000	2,000	5,000	NM	
198.	Failure to include an analysis of the following principle and technique in each inherently safer technology review to identify available inherently safer technology alternatives, or combinations of alternatives, that minimize or eliminate the potential for an EHS release: using EHSs in the least hazardous process conditions or form.	N.J.A.C. 7:31-3.6(d)3	1,000	2,000	5,000	NM	
199.	Failure to include an analysis of the following principle and technique in each inherently safer technology review to identify available inherently safer technology alternatives, or combinations of alternatives, that minimize or eliminate the potential for an EHS release: designing equipment and processes to minimize the potential for equipment failure and human error.	N.J.A.C. 7:31-3.6(d)4	1,000	2,000	5,000	NM	
200.	Failure to determine whether the inherently safer technologies are feasible, which means capable of being accomplished in a successful manner, taking into account environmental, public health and safety, legal, technological, and economic factors.	N.J.A.C. 7:31-3.6(e)	1,000	2,000	5,000	NM	
201.	Failure to prepare and submit to the Department a report to document each inherently safer technology review.	N.J.A.C. 7:31-3.6(f)	1,000	2,000	5,000	NM	

	Categories of Offense	<u>Cite</u>	First Offense	Second Offense	Subsequent Offenses	Type of Violation	Grace Period
202.	Failure to include in an inherently safer technology review report an identification of the covered process that is the subject of the review; a list of the review team members with name, position, affiliation, responsibilities, qualifications and experience for each; the date of report completion; and the inherently safer technology analysis method used to complete the review.	N.J.A.C. 7:31-3.6(f)1	500	1,000	2,500	NM	(days)
203.	Failure to include in an inherently safer technology review report the questions asked and answered to address the inherently safer technology principles and techniques pursuant to N.J.A.C. 7:31-3.6(d).	N.J.A.C. 7:31-3.6(f)2	500	1,000	2,500	NM	
204.	Failure to include in an inherently safer technology review report a list of inherently safer technologies determined to be already present in the covered process.	N.J.A.C. 7:31-3.6(f)3	500	1,000	2,500	NM	
205.	Failure to include in an inherently safer technology review report a list of additional inherently safer technologies identified.	N.J.A.C. 7:31-3.6(f)4	500	1,000	2,500	NM	
206.	Failure to include in an inherently safer technology review report a list of the additional inherently safer technologies selected to be implemented with a schedule for their completion.	N.J.A.C. 7:31-3.6(f)5	500	1,000	2,500	NM	
207.	Failure to include in an inherently safer technology review report a list of the inherently safer technologies determined to be infeasible.	N.J.A.C. 7:31-3.6(f)6	500	1,000	2,500	NM	
208.	Failure to include a written explanation justifying the infeasibility determination for each inherently safer technology determined to be infeasible; and/or Failure to substantiate the infeasibility determination using a qualitative and quantitative evaluation of environmental, public health and safety, legal, technological, and economic factors.	N.J.A.C. 7:31-3.6(f)7	500	1,000	2,500	NM]	

108. - 208. (Reserved.)

	<u>Categories of Offense</u>	<u>Cite</u>	First Offense	Second Offense	Subsequent Offenses	Type of Violation	Grace Period
209	215.	(No change.)					(days)
215A	Failure to provide in the process safety information reactivity data including for covered RHS mixtures, detailed reactivity data including the rate of pressure rise (dP/dt), the rate of temperature rise (dT/dt), and the onset temperature at which the rate of temperature change due to uncontrolled reaction, decomposition, change in molecular structure, or polymerization exceeds 0.01 degrees Celsius per minute, all of which are corrected to a thermal inertia (φ)of 1.0.	40 CFR 68.65(b)(4), N.J.A.C. 7:31-4.1(c)24iv	<u>500</u>	<u>1,000</u>	<u>2,500</u>	<u>NM</u>	
216	254.	(No change.)					
255.	Failure to include in the process hazard analysis with risk assessment consideration of toxicity, flammability, explosion and reactivity hazards applicable to the EHS; however, consideration of toxicity shall be required only for those EHSs which appear in N.J.A.C. 7:31-6.3(a), Table I, Parts A and/or B as a toxic substance[, Part C as a flammable substance and Part D as a Reactive Hazard Substance.] or Failure to consider in the process hazard analysis with risk assessment both the explosive/flammability hazard and the capability to generate a toxic EHS, as applicable to the RHS or RHS Mixture and process in which it is handled[, for RHSs or RHS Mixtures identified and listed at N.J.A.C. 7:31-6.3(a) Table I, Part D, Groups I and II].	N.J.A.C. 7:31-4.2(b)2	5,000	10,000	25,000	NM	
256.	Failure to identify all scenarios of toxic, flammable, and reactive hazards that have a potential offsite impact for the endpoint criteria defined at N.J.A.C. 7:31-4.2(b)3iii [and iv] using a consequence analysis consisting of dispersion analysis, thermal analysis [or] <u>and</u> overpressure analysis <u>as applicable to the EHS and scenario</u> .	N.J.A.C. 7:31-4.2(b)3	2,000	4,000	10,000	NM	

	Categories of Offense	<u>Cite</u>	First Offense	Second Offense	Subsequent Offenses	Type of Violation	Grace Period (days)
257.	Failure to use the parameters of 1.5 meters per second wind speed <u>measured at 10</u> meters height and F atmospheric stability class for the consequence analysis of a process in the process hazard analysis with risk assessment.	N.J.A.C. 7:31-4.2(b)3i	2,000	4,000	10,000	NM	(uays)
258.	(No change.)						
[259.	Failure to use the appropriate parameters for the consequence analysis in the process hazard analysis with risk assessment for the scenario being analyzed: the endpoint criteria of 10 times the toxicity endpoint as designated at N.J.A.C. 7:31-2.1(c)2 or the value of five times the Acute Toxicity Concentration (ATC); 1750 thermal dose units (equivalent to 17 kW/m2 for 40 seconds); five psi overpressure; or the lower flammability limit.	N.J.A.C. 7:31-4.2(b)3iii	2,000	4,000	10,000	NM]	
259. 260.	(Reserved.) Failure to use the appropriate parameters for the consequence analysis of the process hazard analysis with risk assessment for the scenario being analyzed: the endpoint criteria of five (5) times the toxicity endpoint as designated at N.J.A.C. 7:31-2.1(c)2 or the value of the ATC; [1200 thermal dose units (equivalent to 15 kW/m2 for 40 seconds)] five kW/m² for 40 seconds; the lower flammability limit; or 2.3 psi overpressure.	N.J.A.C. 7:31-4.2(b)3[iv] <u>iii</u>	2,000	4,000	10,000	NM	
[261.	[Failure to perform an evaluation of state-of-the-art, including alternative processes, procedures or equipment, which would reduce the likelihood or consequences of an EHS release, for each release scenario that has an offsite impact of the endpoint criteria specified at N.J.A.C. 7:31-4.2(b)3iii.	N.J.A.C. 7:31-4.2(c)1	2,000	4,000	10,000	NM]	

<u>261.</u> (Reserved.)

	Categories of Offense	Cite	First Offense	Second Offense	Subsequent Offenses	Type of Violation	
262.	[Failure to perform an evaluation of state-of-the-art, including alternative processes, procedures or equipment which would reduce the likelihood or consequences of an EHS release for each release scenario that has an offsite impact of the endpoint criteria specified at N.J.A.C. 7:31-4.2(b)3iv or] Failure to determine whether the likelihood of release occurrence is greater than or equal to [10 ⁻⁴] 10 ⁻⁶ per year. or Failure to perform an evaluation of risk reduction measures which would reduce the likelihood or consequences of an EHS release if the likelihood of offsite impact is greater than or equal to 10 ⁻⁶ per year.	N.J.A.C. 7:31-4.2(c)[2] <u>1</u>	2,000	4,000	10,000	NM	(days)
263.	Failure to develop <u>and implement</u> a risk reduction plan for [release scenarios requiring a state-of-the-art evaluation] <u>feasible risk reduction measures</u> .	N.J.A.C. 7:31-4.2(c)3	2,000	4,000	10,000	NM	
264 266.		(No change.)					
267.	Failure to maintain documentation from the process hazard analysis with risk assessment including table(s) summarizing each potential offsite release scenario identified including the distance to the endpoint determined in N.J.A.C. 7:31-4.2(b)3iii [and (b)3iv] and the respective distance to the nearest property line.	N.J.A.C. 7:31-4.2(d)2iii	2,000	4,000	10,000	NM	
268.	Failure to maintain documentation from the process hazard analysis with risk assessment including table(s) summarizing each potential offsite release scenario identified including the release likelihood determined pursuant to N.J.A.C. 7:31-4.2(c)1.	N.J.A.C. 7:31-4.2(d)2iv	2,000	4,000	10,000	NM	
269.	Failure to maintain documentation from the process hazard analysis with risk assessment containing [dispersion modeling] consequence analysis information that identifies the [dispersion] consequence analysis model used.	N.J.A.C. 7:31-4.2(d)3i	2,000	4,000	10,000	NM	

	Categories of Offense	Cite	First Offense	Second Offense	Subsequent Offenses	Type of Violation	Grace Period
270.	Failure to maintain documentation from the process hazard analysis with risk assessment containing [dispersion] consequence analysis modeling information that includes printouts of the [dispersion] consequence analysis model inputs and outputs for a [dispersion] consequence analysis model other than the lookup tables provided in the EPA's RMP Offsite Consequence Analysis Guidance current as of the time the modeling was performed.	N.J.A.C. 7:31-4.2(d)3ii	2,000	4,000	10,000	NM	(days)
271.	Failure to maintain documentation from the process hazard analysis with risk assessment including [an explanation as to why any risk reduction measures identified in N.J.A.C. 7:31-4.2(c) and (d)1 have not been included in the risk reduction plan] documentation to justify the determination of why risk reduction measures are not feasible.	N.J.A.C. 7:31-4.2(d)4	2,000	4,000	10,000	NM	
272 273.		(No change.)					
274.	Failure to prepare a report of the process hazard analysis with risk assessment that	N.J.A.C. 7:31-4.2(e)2	2,000	4,000	10,000	NM	
	includes a description of each scenario identified in N.J.A.C. 7:31-4.2(b)3iii [and iv].						
275.	includes a description of each scenario identified in N.J.A.C. 7:31-4.2(b)3iii [and	N.J.A.C. 7:31-4.2(e)3	2,000	4,000	10,000	NM	
275. [276.	includes a description of each scenario identified in N.J.A.C. 7:31-4.2(b)3iii [and iv]. Failure to prepare a report of the process hazard analysis with risk assessment that includes the risk reduction plan developed pursuant to N.J.A.C. 7:31-4.2(c)[3]2 and	N.J.A.C. 7:31-4.2(e)3 N.J.A.C. 7:31-4.2(f)	2,000 500	4,000 1,000	10,000 2,500	NM NM]	

	Categories of Offense	Cite	First Offense	Second Offense	Subsequent Offenses	Type of Violation	
301.	Failure to include in the standard operating procedures a requirement that an EHS operator be in attendance at the [stationary source] <u>facility</u> to acknowledge alarms and take corrective action to prevent an accident at all times during EHS handling, use, manufacturing, storage or generation unless the conditions of N.J.A.C. 7:31-4.3(b)5i, are met. or Failure to provide EHS monitoring equipment with alarms reporting to a continuously attended station whose personnel are trained to take action to prevent an EHS accident.	N.J.A.C. 7:31-4.3(b)5i	500	1,000	2,500	NM	(days)
302.	Failure to include in the standard operating procedures a requirement that an EHS operator be in attendance at the [stationary source] <u>facility</u> to acknowledge alarms and take corrective action to prevent an accident at all times during EHS handling, use, manufacturing, storage or generation unless the conditions of N.J.A.C. 7:31-4.3(b)5ii are met. or Failure to provide EHS monitoring equipment with alarms reporting to a continuously attended station whose personnel are trained to take action to prevent an EHS accident.	N.J.A.C. 7:31-4.3(b)5ii	500	1,000	2,500	NM	
303.	Failure to include in the standard operating procedures a requirement that an EHS operator be in attendance at the [stationary source] facility to acknowledge alarms and take corrective action to prevent an accident at all times during EHS handling, use, manufacturing, storage or generation unless the conditions of N.J.A.C. 7:31-4.3(b)5iii are met. or Failure to provide EHS monitoring equipment with alarms reporting to a continuously attended station, and failure to demonstrate that an EHS operator is not necessary during the specified activity by performing a risk assessment pursuant to N.J.A.C. 7:31-4.2.	N.J.A.C. 7:31-4.3(b)5iii	500	1,000	2,500	NM	

	<u>Categories of Offense</u>	<u>Cite</u>	First Offense	Second Offense	Subsequent Offenses	Type of Violation	Grace Period
304.	Failure to include in the standard operating procedures a requirement that an EHS operator be in attendance at the [stationary source] facility to acknowledge alarms and take corrective action to prevent an accident at all times during EHS handling, use, manufacturing, storage or generation unless the conditions of N.J.A.C. 7:31-4.3(b)5iv are met. or Failure to implement anhydrous ammonia detection monitoring equipment capable of automatically isolating[,] and shutting down[, and emptying] EHS equipment and provided with alarms reporting to a continuously attended station whose personnel are trained to take action to prevent an EHS accident.	N.J.A.C. 7:31-4.3(b)5iv	500	1,000	2,500	NM	(days)
305	321.	(No change.)					
322.	Failure to establish and implement written procedures to maintain the on-going integrity of process equipment. or Failure to establish and implement a written procedure to periodically review, document, and approve delays in conducting preventive maintenance of EHS equipment.	40 CFR 68.73(b), N.J.A.C. 7:31-4.1(a)	2,000	4,000	10,000	NM	
323	327.	(No change.)					
328.	Failure to correct deficiencies in equipment that are outside acceptable limits (defined by the process safety information in 40 CFR 68.65 as incorporated at N.J.A.C. 7:31-4.1(a)) before further use or in a safe and timely manner when necessary means are taken to assure safe operation. or Failure to correct a deficiency within three months without providing a written justification including an explanation of the necessary means taken to ensure safe operation.	40 CFR 68.73(e), N.J.A.C. 7:31-4.1(a)	2,000	4,000	10,000	NM	
329	398.	(No change.)					

	<u>Categories of Offense</u>	<u>Cite</u>	First Offense	Second Offense	Subsequent Offenses	Type of Violation	Grace Period
399.	Failure [of] to require the contract owner or operator to assure that each contract employee is trained in the work practices necessary to safely perform his/her job.	40 CFR 68.87(c)(1), N.J.A.C. 7:31-4.1(a)	2,000	4,000	10,000	NM	(days)
400.	Failure [of] to require the contract owner or operator to assure that each contract employee is instructed in the known potential fire, explosion, or toxic release hazards related to his/her job and the process, and the applicable provisions of the emergency action plan.	40 CFR 68.87(c)(2), N.J.A.C. 7:31-4.1(a)	2,000	4,000	10,000	NM	
401.	Failure [of] to require the contract owner or operator to document that each contract employee has received and understood the training required by 40 CFR 68.87 as incorporated at N.J.A.C. 7:31-4.1(a). or Failure [of] to require the contract owner or operator to prepare a record which contains the identity of the contract employee, the date of training, and the means used to verify that each employee understood the training.	40 CFR 68.87(c)(3), N.J.A.C. 7:31-4.1(a)	1,000	2,000	5,000	NM	
402.	Failure [of] to require the contract owner or operator to assure that each contract employee follows the safety rules of the stationary source including the safe work practices required by 40 CFR 68.69(d) as incorporated as N.J.A.C. 7:31-4.1(a).	40 CFR 68.87(c)(4), N.J.A.C. 7:31-4.1(a)	2,000	4,000	10,000	NM	
403.	Failure [of] to require the contract owner or operator] to advise the owner or operator of any unique hazards presented by the contract owner or operator's work, or of any hazards found by the contract owner or operator's work.	40 CFR 68.87(c)(5), N.J.A.C. 7:31-4.1(a)	2,000	4,000	10,000	NM	
404	408.	(No change.)					
409.	Failure to include in the annual report a summary of any EHS accidents <u>and</u> <u>potential catastrophic events</u> that occurred during the previous year including the EHS involved and amount released if these facts could have been reasonably determined based on the information obtained through the investigation.	N.J.A.C. 7:31-4.9(b)4i	500	1,000	2,500	M	30

	<u>Categories of Offense</u>	<u>Cite</u>	First Offense	Second Offense	Subsequent Offenses	Type of Violation	
410.	Failure to include in the annual report a summary of any EHS accidents <u>and</u> <u>potential catastrophic events</u> that occurred during the previous year including the date and time of the EHS accident and identification of EHS equipment involved.	N.J.A.C. 7:31-4.9(b)4ii	500	1,000	2,500	M	(days) 30
411.	Failure to include in the annual report a summary of any EHS accidents <u>and</u> <u>potential catastrophic events</u> that occurred during the previous year including the basic and contributory causes.	N.J.A.C. 7:31-4.9(b)4iii	500	1,000	2,500	M	30
412.	Failure to include in the annual report a summary of any EHS accidents <u>and</u> <u>potential catastrophic events</u> that occurred during the previous year including a statement that there were no EHS accidents if no EHS accidents occurred since the last annual report.	N.J.A.C. 7:31-4.9(b)4iv	500	1,000	2,500	M	30
413	418.	(No change.)					
[419.] 413.	Failure to submit to the Department a report of safety review of design, in accordance with N.J.A.C. 7:31-4.7(b) and (c), and the documentation required at N.J.A.C. 7:31-7.2 and 40 CFR 68.150 with changes specified at N.J.A.C. 7:31-7.1(c)1 and 2, at least 90 days prior to construction of a new Program 3 covered process at a [stationary source] facility for which there is no previously approved risk management program.	N.J.A.C. 7:31-4.11(a)1	2,000	4,000	10,000	M	30
420.	Failure to receive written approval from the Department before proceeding with construction of a new Program 3 covered process at a [stationary source] facility for which there is no previously approved risk management program.	N.J.A.C. 7:31-4.11(a)2	6,000	12,000	30,000	NM	

	<u>Categories of Offense</u>	<u>Cite</u>	First Offense	Second Offense	Subsequent Offenses	Type of Violation	
421.	Failure to submit to the Department, at least 90 days prior to the date the equipment was scheduled to be placed into EHS service, any updates of the documentation as required by N.J.A.C. 7:31-4.11(a)1 for a new Program 3 covered process at a [stationary source] facility for which there is no previously approved risk management program.	N.J.A.C. 7:31-4.11(a)3	2,000	4,000	10,000	M	(days) 30
422.	Failure to conduct a pre-startup safety review in accordance with N.J.A.C. 7:31-4.7(d) and (e) for a new Program 3 covered process at a [stationary source] facility for which there is no previously approved risk management program.	N.J.A.C. 7:31-4.11(a)4	4,000	8,000	20,000	NM	
423.	Failure to submit to the Department the fees required by N.J.A.C. 7:31-1.11A for a new Program 3 covered process at a [stationary source] facility for which there is no previously approved risk management program.	N.J.A.C. 7:31-4.11(a)5	one-third of fee	one-third of fee + 1,000	one-third of fee + 2000	M	30
424.	Failure to submit a report of safety review of design in accordance with N.J.A.C. 7:31-4.7(b) and (c) and the documentation required at N.J.A.C. 7:31-7.2 and 40 CFR 68.150 with changes specified at N.J.A.C. 7:31-7.1(c)1 and 2 at least 90 days prior to placing the equipment into EHS service for a new Program 3 covered process that utilizes existing equipment at a [stationary source] <u>facility</u> for which there is no previously approved risk management program.	N.J.A.C. 7:31-4.11(b)1	2,000	4,000	10,000	M	30
425.	Failure to conduct a pre-startup safety review in accordance with N.J.A.C. 7:31-4.7(d) and (e) on a new Program 3 covered process that utilizes existing equipment at a [stationary source] facility for which there is no previously approved risk management program.	N.J.A.C. 7:31-4.11(b)2	2,000	4,000	10,000	NM	

	<u>Categories of Offense</u>	Cite	First Offense	Second Offense	Subsequent Offenses	Type of <u>Violation</u>	
426.	Failure to submit to the Department the fees required by N.J.A.C. 7:31-1.11A for a new Program 3 covered process that utilizes existing equipment at a [stationary source] <u>facility</u> for which there is no previously approved risk management program.	N.J.A.C. 7:31-4.11(b)3	one-third of fee	one-third of fee + 1,000	one-third of fee + 2,000	M	(days) 30
427.	Failure to submit a report of safety review of design in accordance with N.J.A.C. 7:31-4.7(b) and (c) and update documentation in accordance with N.J.A.C. 7:31-7.2 and 40 CFR 68.150 with changes specified at N.J.A.C. 7:31-7.1(c)1 and 2 at least 90 days prior to the scheduled placing of equipment into EHS service for a Program 3 covered process that is newly constructed or that utilizes existing equipment at a [stationary source] <u>facility</u> that has a previously approved risk management program.	N.J.A.C. 7:31-4.11(c)1	2,000	4,000	10,000	M	30
428.	Failure to conduct a pre-startup safety review in accordance with N.J.A.C. 7:31-4.7(d) and (e) for a new Program 3 covered process that is newly constructed or utilizes existing equipment at a [stationary source] <u>facility</u> that has a previously approved risk management program.	N.J.A.C. 7:31-4.11(c)2	2,000	4,000	10,000	NM	
429.	Failure to submit to the Department the fees required by N.J.A.C. 7:31-1.11A for a newly constructed Program 3 covered process or one that utilizes existing equipment at a [stationary source] facility that has a previously approved risk management program.	N.J.A.C. 7:31-4.11(c)3	one-third of fee	one-third of fee + 1,000	one-third of fee + 2,000	M	30
430.	Failure to enter into a consent agreement or consent agreement addendum with the Department prior to placing equipment into EHS service for a new covered process and subsequent to a [stationary source] <u>facility</u> <u>audit or</u> inspection by the Department. or Failure to complete corrective action of deficiencies in the consent agreement or consent agreement addendum for equipment in a new covered process in accordance with the schedule in the consent agreement or consent agreement addendum.	N.J.A.C. 7:31-4.11(d)	6,000	12,000	30,000	NM	

	Categories of Offense	Cite	First Offense	Second Offense	Subsequent Offenses	Type of Violation	
431	445.	(No change.)					(days)
446.	Failure to include in an inherently safer technology review report a list of the inherently safer technologies determined to be infeasible.	N.J.A.C. 7:31-4.12(f)6	500	1,000	2,500	NM	
	[Failure to include a written explanation to justify the infeasibility determination for each inherently safer technology determined to be not feasible; and/or Failure to substantiate the infeasibility determination using a qualitative and quantitative evaluation of environmental, public health and safety, legal, technological, and economic factors.]						
447.		(No change.)					
448.	Failure of an owner/operator [of a Program 2 covered process,] whose employees will not respond to accidental EHS releases [of regulated substances,] to [meet the emergency response exemption applicability and failure] comply with the requirements of 40 CFR 68.90(b)(1), (2), and (3) incorporated at N.J.A.C. 7:31-5.1(c)1 and 2 [and to develop and implement an emergency response program in accordance with 40 CFR 68.95].	40 CFR 68.90[(a)] N.J.A.C. 7:31-5.1(a)	1,000	2,000	5,000	NM	
449	459.	(No change.)					
460.	Failure to invite at least one outside responder agency who is designated in the ER plan to participate in the ER exercise at a [stationary source with a Program 2 covered process] <u>facility</u> whose employees will not respond to an EHS accident in accordance with 40 CFR 68.90(b) with changes specified at N.J.A.C. 7:31-5.1(c) <u>1</u> and 2. or Failure to require employees of the [stationary source] <u>facility</u> to perform their assigned responsibilities for all ER exercises.	N.J.A.C. 7:31-5.2(b)2i	2,000	4,000	10,000	NM	
461.		(No change.)					

	<u>Categories of Offense</u>	Cite	First Offense	Second Offense	Subsequent Offenses	Type of Violation	Grace Period
462.	Failure to make a written assessment of the ER plan, of the adequacy of notification to outside agencies and the public, and of the adequacy or need for ER equipment after each ER plan implementation or each ER exercise.	N.J.A.C. 7:31-5.2(b)3	1,000	2,000	5,000	NM	(days)
463	473.	(No change.)					
474.	Failure to report to the Department's emergency communications center an EHS accident that had potential offsite impact [or that extended beyond an industrial complex property boundary].	N.J.A.C. 7:31- 5.2(b)4iii(1)	4,000	8,000	20,000	NM	
475.	Failure to report to the Department's emergency communications center an EHS accident that resulted in actual or potential injuries or fatalities at the [stationary source] facility .	N.J.A.C. 7:31- 5.2(b)4iii(2)	4,000	8,000	20,000	NM	
476	479.	(No change.)					
480.	Failure to submit the first RMP on or before the date on which a regulated substance is first present at or above a threshold quantity [in a process] at the facility.	40 CFR 68.150(b)(3), N.J.A.C. 7:31-7.1(a)	[5,000] If found by the Depart ment: 10,000 per year out of complia nce plus amount of past fees due as calculate d per N.J.A.C. 7:31- 1.11A. If self-	[10,000] If found by the Depart ment: 25,000 per year out of complia nce plus amount of past fees due as calculate d per N.J.A.C. 7:31- 1.11A. If self-	[25,000] If found by the Departme nt: 50,000 per year out of complianc e plus amount of past fees due as calculated per N.J.A.C. 7:31- 1.11A.	NM	
481	496.	(No change.)	reported : 10,000	reported : 25,000	If self- reported: 50,000		

	Categories of Offense	Cite	First Offense	Second Offense	Subsequent Offenses	Type of Violation	Grace Period
497.	Failure to include in the registration for each covered process the name and CAS number of each regulated substance held <u>at or</u> above the threshold quantity [in the process] <u>at the facility</u> , the maximum quantity of each regulated substance or mixture in the process (in pounds) to two significant digits, the five- or six-digit NAICS code that most closely corresponds to the process, and the Program level of the process.	40 CFR 68.160(b)(7), N.J.A.C. 7:31-7.1(a)	500	1,000	2,500	NM	(days)
498	505.	(No change.)					
506.	Failure to submit in the RMP [for Program 2 and 3 processes] information on 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. or Failure to submit information for additional worst-case scenarios for toxics or flammables required by 40 CFR 68.25(a)(2)(iii) incorporated at N.J.A.C. 7:31-2.1(a). or Failure to submit information on one alternative release scenario for each regulated toxic substance held above the threshold quantity and one alternative release scenario to represent all regulated flammable substances held above the threshold quantity.	40 CFR 68.165(a)(2), N.J.A.C. 7:31-7.1(a)	2,000	4,000	10,000	NM	
507	521.	(No change.)					
[522.	Failure to indicate in the RMP to which Program 2 processes the prevention program information in 40 CFR 68.170(b) through (k) incorporated at N.J.A.C. 7:31-7.1(a) applies, for prevention program information provided only once which applies to more than one covered process.	40 CFR 68.170(a), N.J.A.C. 7:31-7.1(a)	1,000	2,000	5,000	M	30
523.	Failure to provide in the RMP the five- or six-digit NAICS code that most closely corresponds to each Program 2 process.	40 CFR 68.170(b), N.J.A.C. 7:31-7.1(a)	500	1,000	2,500	M	30

	<u>Categories of Offense</u>	<u>Cite</u>	First Offense	Second Offense	Subsequent Offenses	Type of Violation	
524.	Failure to provide in the RMP the name(s) of the chemical(s) covered for each Program 2 process.	40 CFR 68.170(c), N.J.A.C. 7:31-7.1(a)	1,000	2,000	5,000	M	(days) 30
525.	Failure to provide in the RMP for each Program 2 process 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.	40 CFR 68.170(d), N.J.A.C. 7:31-7.1(a)	1,000	2,000	5,000	M	30
526.	Failure to provide in the RMP the date of completion of the most recent hazard review or update for each Program 2 process.	40 CFR 68.170(e), N.J.A.C. 7:31-7.1(a)	1,000	2,000	5,000	M	30
527.	Failure to provide in the RMP the expected date of completion of any changes resulting from the hazard review for each Program 2 process.	40 CFR 68.170(e)(1), N.J.A.C. 7:31-7.1(a)	1,000	2,000	5,000	M	30
528.	Failure to provide in the RMP the major hazards identified for each Program 2 process.	40 CFR 68.170(e)(2), N.J.A.C. 7:31-7.1(a)	1,000	2,000	5,000	M	30
529.	Failure to provide in the RMP the process controls in use for each Program 2 process.	40 CFR 68.170(e)(3), N.J.A.C. 7:31-7.1(a)	1,000	2,000	5,000	M	30
530.	Failure to provide in the RMP the mitigation systems in use for each Program 2 process.	40 CFR 68.170(e)(4), N.J.A.C. 7:31-7.1(a)	1,000	2,000	5,000	M	30
531.	Failure to provide in the RMP the monitoring and detection systems in use for each Program 2 process.	40 CFR 68.170(e)(5), N.J.A.C. 7:31-7.1(a)	1,000	2,000	5,000	M	30
532.	Failure to provide in the RMP the changes since the last hazard review for each Program 2 process.	40 CFR 68.170(e)(6), N.J.A.C. 7:31-7.1(a)	1,000	2,000	5,000	M	30
533.	Failure to provide in the RMP the date of the most recent review or revision of operating procedures for each Program 2 process.	40 CFR 68.170(f), N.J.A.C. 7:31-7.1(a)	1,000	2,000	5,000	M	30

	<u>Categories of Offense</u>	<u>Cite</u>	First Offense	Second Offense	Subsequent Offenses	Type of Violation	Grace Period
534.	Failure to provide in the RMP the date of the most recent review or revision of training programs for each Program 2 process.	40 CFR 68.170(g), N.J.A.C. 7:31-7.1(a)	1,000	2,000	5,000	M	(days) 30
535.	Failure to provide in the RMP the type of training provided-(classroom, classroom plus on the job, on the job) for each Program 2 process.	40 CFR 68.170(g)(1), N.J.A.C. 7:31-7.1(a)	1,000	2,000	5,000	M	30
536.	Failure to provide in the RMP the type of competency testing used for each Program 2 process.	40 CFR 68.170(g)(2), N.J.A.C. 7:31-7.1(a)	1,000	2,000	5,000	M	30
537.	Failure to provide in the RMP the date of the most recent review or revision of maintenance procedures, the date of the most recent equipment inspection or test, or the equipment inspected or tested for each Program 2 process.	40 CFR 68.170(h), N.J.A.C. 7:31-7.1(a)	1,000	2,000	5,000	M	30
538.	Failure to provide in the RMP the date of the most recent compliance audit or the expected date of completion of any changes resulting from the compliance audit for each Program 2 process.	40 CFR 68.170(i), N.J.A.C. 7:31-7.1(a)	1,000	2,000	5,000	M	30
539.	Failure to provide in the RMP the date of the most recent incident investigation and the expected date of completion of any changes resulting from the investigation for each Program 2 process.	40 CFR 68.170(j), N.J.A.C. 7:31-7.1(a)	1,000	2,000	5,000	M	30
540.	Failure to provide in the RMP the date of the most recent change that triggered a review or revision of the safety information, the hazard review, operating or maintenance procedures, or training for each Program 2 process.	40 CFR 68.170(k), N.J.A.C. 7:31-7.1(a)	1,000	2,000	5,000	M	30]
<u>522</u>	<u>540.</u>	(Reserved.)					
541	572.	(No change.)					
573.	Failure to submit in the RMP a single certification that, to the best of the signer's knowledge, information, and belief formed after reasonable inquiry, the information submitted is true, accurate, and complete.	40 CFR 68.185(b), N.J.A.C. 7:31-7.1(a)	2,000	4,000	10,000	[NM] <u>M</u>	<u>30</u>

	Categories of Offense	Cite	First Offense	Second Offense	Subsequent Offenses	Type of Violation	Grace Period (days)
574	579.	(No change.)					(days)
580.	Failure to revise and update the RMP submitted under 40 CFR 68.150 incorporated with changes specified at N.J.A.C. 7:31-7.1(c)1 and 2 within six months of a change that requires a revised PHA [or hazard review].	40 CFR 68.190(b)(5), N.J.A.C. 7:31-7.1(c)5	1,000	2,000	5,000	NM	
581	583.	(No change.)					
584.	Failure to correct the RMP for any accidental release meeting the five-year accident history reporting criteria of 40 CFR 68.42 and occurring after April 9, 2004 by submitting the data required under 40 CFR 68.168, [68.170(j),] and 68.175(l) with respect to that accident within six months of the release or by the time the RMP is updated under 40 CFR 68.190, whichever is earlier.	40 CFR 68.195(a), N.J.A.C. 7:31-7.1(a)	1,000	2,000	5,000	NM	
585	590	(No change.)					
[591.	Failure to submit to the Department in a specified format supplemental TCPA program information identifying each covered process containing an RHS Mixture and the number of process vessels in which the RHS Mixture is present at or above its threshold quantity for RHS Mixtures containing one or more EHSs listed in Parts A, B, or C of N.J.A.C. 7:31-6.3(a) Table I.	N.J.A.C. 7:31-7.2(a)2v	1,000	2,000	5,000	M	30]
Recoo	lify existing 592 593. as 591. – 592.	(No change in text.)					

	Categories of Offense	Cite	First Offense	Second Offense	Subsequent Offenses	Type of Violation	
[594.] 593.	Failure to identify and register each regulated individual RHS and RHS mixture and provide in the RMP registration section pursuant to 40 CFR 68.160(b)(7) incorporated at N.J.A.C. 7:31-7.1(a) the heat of reaction range for RHS mixtures in calories/gram [of RHS mixture] as listed at Table II of N.J.A.C. 7:31-6.3(c). or Failure to identify and register the RHS mixture having the highest heat of reaction range as shown on Table II in the RMP registration section pursuant to 40 CFR 68.160(b)(7) incorporated at N.J.A.C. 7:31-7.1(a) when more than one RHS mixture is present in the process vessel at different times.	N.J.A.C. 7:31-7.2(a)3iii	1,000	2,000	5,000	NM	(days)
[595.] 594.	Failure to identify and register [only] the EHS listed on Part A, B, or C as a toxic or flammable substance, as applicable, <u>and</u> <u>the RHS</u> mixture in the RMP registration section pursuant to 40 CFR 68.160(b)(7) incorporated at N.J.A.C. 7:31-7.1(a), for RHS Mixtures containing one or more EHS(s) listed in Parts A, B, or C of Table I [in a process] <u>at the facility at or</u> above their threshold.	N.J.A.C. 7:31-7.2(a)3iv	1,000	2,000	5,000	NM	
[596.] 595.	Failure to submit [an update] <u>a correction</u> to the Department within 60 days of an increase in maximum inventory of a covered process in addition to the updates required by N.J.A.C. 7:31-7.1(c)3 through 5.	N.J.A.C. 7:31-7.2(b)	2,000	4,000	10,000	NM	
<u>596.</u>	Failure to submit to the Department a Risk Management Plan correction within one month of a change in the qualified person or position.	N.J.A.C. 7:31-7.2(c)	<u>500</u>	<u>1,000</u>	<u>2,500</u>	<u>M</u>	
597.	Failure to adopt the existing, or obtain a new, approved [Program 2 or Program 3] TCPA risk management program for the covered process before operating EHS equipment following the transfer of the covered process to a new owner or operator or change in ownership or the name of an owner or operator.	N.J.A.C. 7:31-7.4(a)	4,000	8,000	20,000	NM	

	Categories of Offense	Cite	First Offense	Second Offense	Subsequent Offenses	Type of Violation	
598.	Failure to adopt an existing approved [Program 2 or Program 3] TCPA risk management program by submitting an updated registration in accordance with [Subchapter 7] N.J.A.C. 7:31-7 and signing an addendum to the consent agreement that was previously signed by the Department and the former owner or operator.	N.J.A.C. 7:31-7.4(b)	2,000	4,000	10,000	NM	(days)
599.	Failure to comply with the approved risk management program for EHSs listed in N.J.A.C. 7:31-6.3, Table I, Parts A, B [and/or] C, or D until the risk management program is revised to reflect the new requirements of N.J.A.C. 7:31. or Failure to revise the risk management program to reflect the new requirements of this chapter [by January 1, 2004] no later	N.J.A.C. 7:31-7.5(a)	2,000	4,000	10,000	NM	
	than (365 days from the effective date of these amendments).						
600.	Failure of an owner or operator having reactive hazard substance mixtures subject to this chapter with newly listed functional group number 44 on N.J.A.C. 7:31-6.3(a), Table 1, Part D, Group II, at or above threshold quantities to be in compliance with this chapter by [September 30, 2004] (365 days from the effective date of these amendments).	N.J.A.C. 7:31-7.5(b)	2,000	4,000	10,000	NM	
<u>601.</u>	Failure of an owner or operator having propane (CAS No. 74-98-6), propylene (CAS No. 115-07-1), butanes (normal butane (CAS No. 106-97-8) or isobutane (CAS No. 75-28-5), or butylenes (1-butene (CAS No. 106-98-9), 2-butene (CAS No. 107-01-7), butene (CAS No. 25167-67-3), 2-butene-cis (CAS No. 590-18-1), 2-butene-trans (CAS No. 624-64-6), and 2-methylpropene (CAS No. 115-11-7)) listed at N.J.A.C. 7:31-6.3(a), at Table I, Part C, at or above threshold quantities to be in compliance with this chapter by (365 days from the effective date of these amendments).	N.J.A.C. 7:31-7.5(e)	2,000	4,000	10,000	<u>NM</u>	

	<u>Categories of Offense</u>	Cite	First Offense	Second Offense	Subsequent Offenses	Type of Violation	Grace Period (days)
<u>602.</u>	Failure of an owner or operator having individual RHSs listed in Table 1, Part D, Group I, that are received, stored and handled in combination with one or more other chemical substances specifically formulated to inhibit the reactive hazard (such as water reactivity, pyrophoric, or self-reacting) where the RHS is at or above the threshold quantity to be in compliance with this chapter by (365 days from the effective date of these amendments).	N.J.A.C. 7:31-7.5(f)	2,000	4,000	10,000	<u>NM</u>	<u>(uays)</u>
<u>603.</u>	Failure of an owner or operator having an approved risk management program for EHSs listed in N.J.A.C. 7:31-6.3, Table I, Parts A, B, C, or D to comply with the process hazard analysis with risk assessment requirements of 40 CFR 68.67 with changes specified at N.J.A.C. 7:31-4.1(c) and 4.2.	N.J.A.C. 7:31-7.5(g)	2,000	4,000	10,000	<u>NM</u>	
[601.] 604.	Failure to maintain records supporting the implementation of 40 CFR 68 as incorporated at N.J.A.C. 7:31 for five years unless otherwise provided in N.J.A.C. 7:31-[3 and] 4 and as follows: mechanical integrity/preventive maintenance records for the lifetime of EHS equipment, design safety review reports for the lifetime of a covered process, and hot work permits until they are reviewed in the next Department audit or inspection.	40 CFR 68.200, N.J.A.C. 7:31-8.1(c)1	2,000	4,000	10,000	NM	
Recodi	ify existing 602 606. as	(No change in text.)					

605. - 609.

	<u>Categories of Offense</u>	<u>Cite</u>	First Offense	Second Offense	Subsequent Offenses	Type of Violation	
[607.] 610.	Failure to provide the Department the right to enter and inspect and/or audit any [stationary source] facility , building or equipment, or any portion thereof, at any time, in order to determine compliance with the TCPA, N.J.A.C. 7:31, any order, consent order or agreement. or Failure to provide the Department the right to test or sample any materials at the [stationary source] facility , to sketch or photograph any portion of the stationary source, building or equipment, to copy or photograph any document or records necessary to determine such compliance or non-compliance, and to interview any employees or representatives of the owner or operator. or Failure to assist the Department by hindering or delaying during the performance of any aspects of an inspection [and] or audit.	N.J.A.C. 7:31-8.2(a)	2,000	4,000	10,000	NM	(days)
[608.] 611.	(No change in text.)						
<u>612.</u>	Failure to include the certification with any risk management program document required to be submitted.	<u>N.J.A.C. 7:31-8.2(c)1</u>	2,000	4,000	<u>10,000</u>	<u>M</u>	<u>30</u>
<u>613.</u>	Failure to submit true, accurate or complete information.	N.J.A.C. 7:31-8.2(c)1	<u>2,000</u>	<u>4,000</u>	<u>10,000</u>	<u>NM</u>	
<u>614.</u>	Failure to sign the certification by the qualified person or position specified in the owner or operator's risk management plan, or person of higher authority for the owner or operator.	N.J.A.C. 7:31-8.2(c)2	<u>2,000</u>	<u>4,000</u>	10,000	<u>M</u>	<u>30</u>
<u>615.</u>	Failure to make documentation required pursuant to this chapter readily accessible for review by the Department during an audit or inspection.	N.J.A.C. 7:31-8.2(e)	<u>2,000</u>	4,000	10,000	<u>NM</u>	
Recod	ify existing 609 624. as 616 631.	(No change in text.)					
[625.	Failure to include in the EHSARA report the findings of the verification required by N.J.A.C. 7:31-9.2(b)2.	N.J.A.C. 7:31-9.5(d)1	1,000	2,000	5,000	NM	

	<u>Categories of Offense</u>	<u>Cite</u>	First Offense	Second Offense	Subsequent Offenses	Type of Violation	Grace Period
[626.	Failure to include in the EHSARA report the findings of the review required by N.J.A.C. 7:31-9.2(b)3.	N.J.A.C. 7:31-9.5(d)2	1,000	2,000	5,000	NM]	(days)
[627.	Failure to include in the EHSARA report the report of the hazard review required by N.J.A.C. 7:31-9.2(b)4.	N.J.A.C. 7:31-9.5(d)3	1,000	2,000	5,000	NM]	
[628.	Failure to include in the EHSARA report the findings of the reviews required by N.J.A.C. 7:31-9.2(b)5 through 9.	N.J.A.C. 7:31-9.5(d)4	1,000	2,000	5,000	NM]	
[629.	Failure to include in the EHSARA report the recommended risk reduction plan including the listing of all of the deficiencies identified in N.J.A.C. 7:31-9.5(d)1 through 4, the remedial actions and alternatives to correct the deficiencies or a proposed schedule for implementation.	N.J.A.C. 7:31-9.5(d)5	1,000	2,000	5,000	NM]	
[630.] 632.	(No change in text.)						
[631.] 633.	Failure to implement the risk reduction plan which includes the scheduled actions that were required to be taken to reduce the risks including those necessary to complete a risk management program meeting the requirements of [N.J.A.C. 7:31-3 for Program 2 covered processes or] N.J.A.C. 7:31-4 [for Program 3 covered processes].		4,000	8,000	20,000	NM	

(d) - (g) (No change.)