ADOPTED REGULATION OF THE

STATE ENVIRONMENTAL COMMISSION

LCB File No. R041-01

September 13, 2001

EXPLANATION – Matter in ***italics*** is new; matter in brackets **[~~omitted material~~]** is material to be omitted, language underscored is text amended by the State Environmental Commission on September 18, 2001.

AUTHORITY: §§1-20, 24-33 and 35-55, NRS 459.3818; §§21-23, NRS 459.3818 and 459.3824; §34, NRS 459.3816 and 459.3818.

Section 1. Chapter 459 of NAC is hereby amended by adding thereto the provisions set forth as sections 2 to 23, inclusive, of this regulation.

Sec. 2. ***"Explosives manufacturing operation" means a tier A process that involves the manufacture of explosives for sale, regardless of the type of substances used in the explosives manufacturing operation. The term includes explosive storage sites that are incidental to the manufacture of explosives for sale.***

Sec. 3. ***"Local building official" means the governmental entity charged with the administration and enforcement of local building codes.***

Sec. 4. ***"New process" means a process that has been, or will be, installed at a facility and will be in operation for the first time at that location. The term includes, without limitation, a new explosives manufacturing operation.***

Sec. 5. ***Unless an explosives manufacturing operation is exempt pursuant to NRS 459.3814 from NRS 459.380 to 459.3874, inclusive, and except as otherwise specifically provided in NAC 459.952 to 459.95528, inclusive, and sections 2 to 23, inclusive, of this regulation, an explosives manufacturing operation shall be deemed to be a tier A process***

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regardless of the type of substances used in the explosives manufacturing operation and is subject to all the rules and requirements in the tier A program set forth in NAC 459.952 to 459.95528, inclusive, and sections 2 to 23, inclusive, of this regulation.

Sec. 6. ***1. Before an owner or operator of a facility may commence the construction of a new process subject to the tier A program or the tier B program, level 2 or 3, the owner or operator must obtain a permit to construct the new process from the division pursuant to sections 6 to 22 [~~23~~], inclusive, of this regulation.***

2. Before applying for a permit to construct a new process, the owner or operator of the process must meet with the division to discuss:

(a) The scope of the project and the applicable codes and standards relating to the design and construction of the project;

(b) The requirements for the submission of documents; and

(c) The schedule for the construction of the project.

Sec. 7. ***1. To obtain a permit to construct a new process subject to the tier A program or the tier B program, level 2 or 3, an owner or operator of a new process must submit to the division a complete application for a permit to construct and two copies of the complete application. The division shall determine which elements of the application, if any, will be reviewed at the site where the new process will be located.***

2. An application for a permit to construct a new process must be made on a form prescribed by the division and include:

(a) Registration for the process that includes:

(1) The information required by NAC 459.95452, 459.95454, 459.95456 and 459.95464;

(2) The name, address and telephone number of the person submitting the plans;

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(3) An overview of the project that includes a description of:

(I) The process;

(II) The hours of operation during which the process will be operated;

(III) The estimated number of personnel, for each shift, who will be working on the process, including, without limitation, personnel in operations, personnel in maintenance, office staff, contract personnel and any other personnel;

(IV) The modes, frequency and hours of transportation of the incoming and outgoing raw materials and products;

(V) The scope of the construction; and

(VI) The schedule for the project; and

(4) Information concerning the inspectors of the construction required pursuant to section 14 of this regulation;

(b) A coordinated emergency response [~~program~~] plan document developed pursuant to NAC 459.9544 and 459.95442;

(c) Information[~~on the safety~~] concerning process and safety process hazard analysis required pursuant to section 10 of this regulation;

(d) Documents, specifications and calculations required pursuant to sections 11, 12 and 13 of this regulation; and

(e) A copy of the conditional use permit issued pursuant to NRS 278.147.

3. Documents, specifications and calculations submitted pursuant to sections 11, 12 and 13 of this regulation must:

(a) Be stamped or sealed in accordance with chapter 625 of NRS, and any regulations adopted pursuant thereto, by the engineer who has ~~[responsibility for~~] responsible charge of the document, specification or calculation; and

(b) Include a table of contents or cover sheet that complies with the requirements of chapter 625 of NRS, and any regulations adopted pursuant thereto.

Sec. 8. *1. An applicant for a permit to construct a new process may request that information, specifically identified by the applicant, within the application for the permit to construct be held as a trade secret. The division shall hold such identified information as a trade secret if the division concurs with the claim that the information be held as a trade secret satisfies the criteria of subsection 4 of NRS 459.3846 or 40 C.F.R. § 2.301, as appropriate.*

2. Information held by the division as a trade secret pursuant to this section:

(a) Must not be disclosed to the public by the division or any employee of the division;

(b) Must not be reproduced;

(c) Must not be disclosed to any consultant by the division unless the consultant has executed proper agreements to protect such information; and

(d) Must forthwith be returned in its entirety to the applicant upon the completion of the review of the application.

Sec. 9. *1. Upon receipt of an application for a permit to construct a new process, the division shall review the application to determine if the application includes all the information required by section 7 of this regulation. Not later than 30 days after the date on which an application is received, the division shall provide to the applicant its initial determination as to the completeness of the application.*

2. If the division determines that an application for a permit to construct does not include all the information required by section 7 of this regulation, the division shall notify the applicant of its determination and include in the notice a description or list of the deficiencies.

3. If the division determines that an application for a permit to construct is not complete, the division may:

(a) Return all the submitted information to the applicant and require the applicant to resubmit the application when completed; or

(b) Delay the review of the incomplete application until the applicant submits the required information and the application is determined to be complete.

Sec. 10. *1. In addition to any other information required to be included pursuant to sections 6 to 22 [~~23~~], inclusive, of this regulation, an application for a permit to construct must include:*

(a) Information relating to the hazards of any tier A or tier B substance as described in paragraph (a) of subsection 2 of NAC 459.95412.

(b) A description of the process chemistry, as required in NAC 459.95412, including, without limitation, a description of the potential side reactions, regardless of whether the reactions would create hazardous consequences.

(c) If not readily apparent from the piping and instrument diagrams, documentation concerning the control logic that explains the function of process controllers, switches and interlocks [~~to be used~~]. Such [~~an explanation~~] documentation must be as concise as possible to allow the division to review and use the information efficiently.

(d) A material and energy balance as required in NAC 459.95412.

(e) A description of the safety system as required in NAC 459.95412.

(f) A complete process hazard analysis performed pursuant to NAC 459.95414.

2. The process hazard analysis and information concerning process safety included in an application for a permit to construct a new process must indicate the current revision number and date on which that revision was [~~finalized~~] implemented.

Sec. 11. *1. In addition to any other information required to be included pursuant to sections 6 to 22 [~~23~~], inclusive, of this regulation, an application for a permit to construct a new process must include:*

(a) A site plan, drawn to scale, that identifies the location within the facility of the new process on a map. A site plan must include and indicate, without limitation:

(1) The city and county roads in the area of the facility of the new process.

(2) The area encompassing the endpoint of the worst-case release scenarios developed pursuant to NAC 459.95366, the first responding fire station and the hazardous materials response station.

(3) A graphical delineation of the endpoints of each worst-case release scenario and alternative release scenario developed pursuant to NAC 459.95366 and 459.95368.

(4) All major roads and transportation corridors.

(5) Routes for incoming and outgoing raw materials and products.

(6) The location of the first responding fire station and the hazardous materials response station.

(7) The location of schools, hospitals and other public receptors within the plan area.

(b) Plot plans of the project area, shown on separate drawings and drawn to scale, that show:

(1) The safety systems, including, without limitation, the locations of:

(I) Water and tankages for other [~~substances for~~] materials associated with the fire suppression systems.

(II) The system pumps and the routing of the distribution piping.

(III) Hydrants, monitors and other similar fire suppression equipment.

(IV) The detectors of toxic and combustible gases and flames.

(V) Personal protective equipment.

(VI) Major process equipment.

(2) The location of the electrical hazardous areas. The plot plan must:

(I) Provide the necessary elevations and include detailed drawings to distinguish between electrically unclassified and electrically classified areas, as those terms are defined in Article 500 of the N.F.P.A. 70, the National Electric Code, adopted by reference pursuant to NAC 459.95528; and

(II) Denote the nationally recognized code or standard upon which the drawing is based to determine the extent of the electrically classified areas.

(c) Process flow diagrams, shown on as many drawings as necessary, developed pursuant to NAC 459.95412. The process flow diagrams must correspond to the material and energy balance submitted pursuant to section 10 of this regulation.

(d) Piping and instruments diagrams, shown on as many drawings as necessary, developed pursuant to NAC 459.95412. The piping and instrument diagrams must:

(1) Be submitted on paper that is 11 inches by 17 inches.

(2) Be on an easily legible scale.

(3) Cover the new process. The division may request that the diagrams include any associated systems, including, without limitation, air, water, nitrogen and process drain

systems, if the division determines that the inclusion of the additional information is necessary to assist with the review of the process hazard analysis.

(4) Indicate all piping, equipment, instruments and controls.

(5) Correspond to:

(I) The process flow diagrams;

(II) The documentation concerning the control logic and the process hazard analysis submitted pursuant to section 10 of this regulation; and

(III) The specifications submitted pursuant to section 12 of this regulation.

(e) Drawings indicating the concrete foundations and structures related to the new process that are not subject to the review and approval of the local building official. These drawings must include and indicate:

(1) The preparation for the base and subbase, including compaction requirements;

(2) The requirements relating to forms, reinforcing bars and appurtenances;

(3) The specifications relating to concrete and grout;

(4) The requirements for testing and inspection; and

(5) The applicable codes, standards or industry recommended practices governing the design and construction to be used.

(f) Drawings for the structural steel support for the equipment and piping related to the new process that are not subject to the review and approval of the local building official. These drawings must include and indicate:

(1) Specifications for the steel and bolting;

(2) Requirements for welding, testing and inspection; and

(3) The applicable codes, standards or industry recommended practices governing the design and construction to be used.

2. A drawing included pursuant to this section in an application for a permit to construct must indicate the current revision number and date of the drawing and be of sufficient quality so that a legible copy can be made of the drawing. If a drawing is drawn to scale, the [~~drawing must so indicate and include~~] scale must be indicated and a bar scale included.

3. As used in this section:

(a) "First responding fire station " means the local fire department station that typically responds to emergency calls from a facility and is usually the station that is first on the scene during an emergency.

(b) "Hazardous materials response station" means a local fire department station that is equipped and trained to provide a hazardous materials response to a facility in accordance with 29 C.F.R. § 1910.120(q).

Sec. 12. *Specifications included in an application for a permit to construct a new process:*

1. Must indicate the current revision number and date on which the specifications were [~~calculated~~] developed;

2. Must define:

(a) The applicable codes, standards or industry recommended practices to be followed for the design, construction and inspection of the new process;

(b) The design conditions, including, without limitation, maximum allowable working pressures, the design temperatures and the seismic criteria, where applicable;

(c) The [~~materials required for~~] required materials of construction;

(d) The qualification requirements for the installation methods to be used and for the personnel performing the construction and inspection activities; and

(e) The requirements for inspection and testing; and

3. ~~[Must include, if applicable]~~, Specifications must be provided for process piping, fittings and valves.

Sec. 13. *1. In addition to any other information required to be included, an application for a permit to construct a new process must include calculations for:*

(a) Concrete foundations for drawings submitted pursuant to section 11 of this regulation, including a soils report to support the design calculations;

(b) Structural steel drawings submitted pursuant to section 11 of this regulation; and

(c) Any pressure relief devices to be included in the new process.

2. Calculations included in an application for a permit to construct a new process must indicate the current revision number ~~[of the calculations and the]~~ and date of the current calculation.

3. Each set of calculations must include a cite to the applicable code, standard or industry recommended practice governing the design and construction that was used in making the calculation.

4. If the calculations are computer-generated, the calculations must include:

(a) A complete description of the mathematical model used in the design; and

(b) An identification of the design program used, input data required, limitations on the application of the program, and the final results.

5. Upon the request of the division, an applicant for a permit to construct shall provide supporting information for the calculations provided in the application, including, without limitation, data [~~concerning~~] generated by vendors.

Sec. 14. *1. [~~If the construction of a new process will include the construction of process pipes or the use of concrete or structural steel~~], The applicant for the permit to construct must include in the application information concerning the inspectors for the construction of process pipe, concrete foundations and structural steel, if these activities are to be permitted pursuant to section 15 of this regulation.*

2. The information concerning the inspectors must identify:

(a) Each inspector to be employed by the applicant [~~for the permit to construct~~];

(b) The scope of the inspection services to be provided by each inspector, including, without limitation, the types of observations and tests to be used; and

(c) The qualifications of each inspector that will enable the inspector to perform the inspection. If the inspector is required to be certified or hold other specific credentials to perform his duties, the applicant must include a copy of the required certifications or credentials.

Sec. 15. *1. The division shall issue a permit to construct a new process if the division:*

(a) Approves the analysis of off-site consequences developed pursuant to NAC 459.95362 to 459.95372, inclusive;

(b) Determines that the inspectors for the construction to be used by the applicant for the permit to construct:

(1) Will, without limitation, provide inspection as required by the applicable specifications, codes and standards, and will ensure that the construction and installation of the new process is performed pursuant to those specifications, codes and standards; and

(2) Are qualified by experience and, if applicable, hold the proper certifications and credentials to perform their duties as inspectors;

(c) Determines that:

(1) The emergency response program developed pursuant to NAC 459.9544 and 459.95442 is complete;

(2) Full-time emergency response capability is available; and

(3) Hazardous materials response capability:

(I) Is available pursuant to the requirements of 29 C.F.R. § 1910.120;

(II) Is available 24 hours a day; and

(III) Will be provided by an organization that is not a volunteer fire department;

(d) Determines that the process hazard analysis complies with NAC 459.95414;

(e) Approves the site plan developed pursuant to section 11 of this regulation;

(f) Determines that:

(1) The plans identifying the locations of the electrical hazardous area developed pursuant to section 11 of this regulation are in compliance with the applicable codes and standards, except that the division may accept a local building official's approval of the drawing if the criteria set forth in section 11 of this regulation are met;

(2) The piping and instrument diagrams are consistent with the process flow diagrams and specifications;

(3) The drawings of the concrete foundation are consistent with the applicable calculations submitted;

(4) The drawings relating to the structural steel to be used in the construction are consistent with the applicable calculations submitted;

(5) The specifications submitted comply with the applicable codes and standards, and the selected materials and design parameters are determined to be compatible with the process; and

(6) The calculations submitted comply with the applicable codes, standards and industry recommended practices;

(g) Finds, upon its review of the portions of the new process, that those portions are in conformance with any requirement set forth in the conditional use permit issued pursuant to NRS 278.147 that require compliance with any part of NRS 459.380 to 459.3874, inclusive, or any regulation adopted pursuant thereto; and

(h) Completes the public review and comment process and any modifications required by section 17 of this regulation have been put into place.

2. For the division to approve a site plan:

(a) The worst-case release scenarios developed pursuant to NAC 459.95366 must be mitigated in a manner acceptable to the division to minimize the impact on public receptors located outside the industrial zoning district in which the new process will be located. At a minimum, some level of passive or active mitigation must be employed.

(b) The alternate release scenarios developed pursuant to NAC 459.95368 must be mitigated in a manner acceptable to the division to minimize the impact on public receptors located outside the industrial zoning district in which the new process will be located. At a

minimum, some level of mitigation must be employed, including, without limitation, the use of toxic or combustible gas sensors, as appropriate, that must be physically located to enable the detection of a release and a response thereto in a timely manner to minimize the impact of the release.

(c) The locations of the emergency responders as shown on the site plan must be consistent with the locations of the emergency responders identified in the emergency response program.

3. Any modification in the construction of a new process allowed pursuant to subsection 1 that causes the alteration of any document, drawing or specification must be reflected in the pre-startup safety review conducted pursuant to NAC 459.95425.

Sec. 16. ***1. If the division determines that a new process is being constructed in the interest of mitigating the effects of acutely hazardous conditions on public safety, the environment or the health of personnel, and timely implementation of the new process is critical to ensure the preservation of those objectives, the division may allow the owner or operator to commence construction on the new process before the permit to construct is issued.***

2. The owner or operator of a new process may commence construction before a permit to construct is issued if:

(a) The owner or operator submits with its application for a permit to construct a letter detailing the reasons for the request to begin construction before the issuance of the permit to construct; and

(b) The division determines the application to be complete and has not identified any significant unmitigated hazard.

3. The division may:

(a) Impose such conditions as it determines necessary in authorizing an owner or operator to commence construction before a permit to construct is issued; and

(b) Revoke the authorization if it determines that the owner or operator has not complied with the conditions imposed.

Sec. 17. *1. Upon determining that an application for a permit to construct a new process is complete, the division shall issue a notice of its receipt of the application. The notice must:*

(a) Be sent to the applicant and the local governing body in the area in which the new process is to be located, and be published in a newspaper of general circulation for the area in which the process is to be located; and

(b) Summarize the review to be conducted by the division on the application for the permit to construct and state that the following information will be available for public review:

(1) The registration submitted pursuant to section 7 of this regulation;

(2) The coordinated emergency response ~~[program]~~ plan document;

(3) The site plan; and

(4) A copy of the conditional use permit.

2. The public comment period shall last for 30 days, commencing with the date that the notice is published in the newspaper.

3. Not later than 15 days after the date on which the period for public comment concerning an application for a permit to construct closes, the division may, after considering the documents that are part of the application, require further modifications if such modifications are determined necessary to satisfy the requirements of section 16 of this regulation.

Sec. 18. ***1. During any construction activity done on a new process in accordance with section 16 of this regulation, the owner or operator of the new process shall:***

(a) Maintain on-site:

(1) All documents, drawings and specifications related to the construction and operation of the new process;

(2) All records relating to inspections and testing related to the construction; and

(3) All records relating to the construction procedure and qualifications of persons performing the construction; and

(b) Make available such information to the division or an authorized representative of the division upon request by the division or its representative.

2. Upon the issuance of a permit to construct [~~to an owner or operator who has commenced construction before the issuance of the permit~~], the owner or operator shall provide the division with a revised schedule for the construction that includes the approximate timing as to when:

(a) Concrete foundations will be poured;

(b) The erection of the structural steel components will be commenced;

(c) The fabrication of the process piping will be commenced;

(d) The hydrotesting for the process piping will be commenced; and

(e) Any other activities identified by the division or an authorized representative of the division will be performed or commenced.

Sec. 19. ***Before an owner or operator of a facility:***

1. Commences the operation of a new process subject to the provisions of the tier A program or the tier B program, level 2 or 3; or

2. Brings any substances classified as a tier A or tier B substance onto the site of the new process,

FLUSH *the owner or operator must obtain a permit to operate from the division pursuant to section 20 of this regulation.*

Sec. 20. *1. The division shall issue a permit to operate to the owner or operator of a new process that is subject to the tier A program or the tier B program, level 2 or 3, only if:*

(a) The division has issued a permit to construct the new process;

(b) The owner or operator has received all appropriate permits from the local building official for the drawings and calculations for the construction of concrete foundations and structural steel;

(c) The owner or operator submits to the division an assessment report containing the information required by NAC 459.95452 to 459.95466, inclusive, and all measures relating to the P.T.A.H. have been resolved;

(d) The division determines that the requirements set forth in NAC 459.95412 to 459.95442, inclusive, have been satisfied; and

(e) The owner or operator has paid the balance due for any outstanding fees.

2. The division shall consider the submission of an assessment report pursuant to subsection 1 to be an application for a permit to operate. The assessment report must be submitted by an owner or operator [~~at least 60 days~~] before the owner or operator commences operation of the new process or brings tier A substances, tier B substances or explosives on the site of the new process.

Sec. 21. ***1. An owner or operator of a new process shall remit fees to the division for activities conducted by the division relating to the application for a permit to construct the new process and the application for a permit to operate the new process.***

2. Upon the determination by the division that an application for a permit to construct a new process is complete, the owner or operator shall remit $5,000 to the division. The division shall issue invoices to the owner or operator for any costs in excess of $5,000, except that:

(a) If the new process has 5 or less piping and instrument diagrams, not including drawing legend sheets and utility piping and instrument diagrams, invoices may not be issued for more than a cumulative amount of $40,000;

(b) If the new process has at least 6 but not more than 20 piping and instrument diagrams, not including drawing legend sheets and utility piping and instrument diagrams, invoices may not be issued for more than a cumulative amount of $50,000;

(c) If the new process has more than 20 piping and instrument diagrams, not including drawing legend sheets and utility piping and instrument diagrams, invoices may not be issued or more than a cumulative amount of $50,000, plus $500 for each piping and instrument diagram in excess of 20 diagrams.

3. The division shall accrue charges for activities relating to the permitting of the new process conducted by:

(a) Personnel of the division in the amount of $55 per hour; and

(b) Contractors in an amount equal to the cost to the division, plus 5 percent.

4. The division shall not require the owner or operator to pay more than the maximum cumulative amount for the respective new process as set forth in subsection 2, except that fees related to:

(a) The review of the concrete foundations or structural steel design; and

(b) Reviewing corrections,

FLUSH *must not be considered when determining the maximum fee owed by the owner or operator.*

5. After issuing a permit to construct to an owner or operator, the division shall refund any excess fee paid to the division by the owner or operator pursuant to this section.

[~~Sec.~~ 22.] Sec 23. *1. Except as otherwise provided in section [~~23~~] 22 of this regulation, an owner or operator of a facility that has an explosives manufacturing operation shall pay to the division [~~the~~] an annual fee before July 31 of each year, as prescribed in this section.*

2. If the explosives manufacturing operation includes only the combining of ammonium nitrate and fuel oil mixture, the owner or operator of the facility of which the operation is a part shall pay to the division an annual fee of $5,600.

3. If the explosives manufacturing operation includes any other type of explosives manufacturing, the owner or operator of the facility of which the operation is a part shall pay to the division an annual fee of $13,500.

4. If a tier A or tier B substance is also on site, the owner or operator of the facility shall pay the graduated fee established pursuant to subsection 4 of NAC 459.95334, but shall be exempt from the annual base fee established pursuant to subsection 3 of NAC 459.95334.

[~~Sec.~~ 23.] Sec 22. *1. Notwithstanding any provision of NAC 459.95334 or section [~~22~~] 23 of this regulation to the contrary, an owner or operator of a new process is exempt from the payment of annual fees related to the new process for the fiscal year in which the process or operation commences operation and for the following fiscal year.*

2. As used in this section, "fiscal year" means the fiscal year on which the state budget is based.

Sec. 24. NAC 459.952 is hereby amended to read as follows:

459.952 As used in NAC 459.952 to 459.95528, inclusive, ***and sections 2 to 23, inclusive, of this regulation,*** unless the context otherwise requires, the words and terms defined in NAC 459.95211 to 459.95314, inclusive, ***and sections 2, 3 and 4 of this regulation,*** have the meanings ascribed to them in those sections.

Sec. 25. NAC 459.95211 is hereby amended to read as follows:

459.95211 "Accidental release" means:

1. An unintentional discharge from a ~~[facility]~~ ***process*** of any amount of a tier A or tier B substance into the air, water or land ~~[;]~~ ***, including any unintentional discharges with in a building that encloses a process;*** or

2. A fire or an explosion at a facility involving a tier A ~~[or]~~ ***substance,*** tier B substance ~~[.]~~ ***or explosive.***

Sec. 26. NAC 459.95235 is hereby amended to read as follows:

459.95235 "Catastrophic release" means a major uncontrolled emission, fire or explosion, involving one or more ~~[regulated substances,]~~ ***substances or explosives*** that presents imminent and substantial endangerment to ***the health of the employees, the*** public health ~~[and]~~ ***or*** the environment. ***The term includes events that occur within a building or other structure that contains the substance or explosive.***

Sec. 27. NAC 459.95242 is hereby amended to read as follows:

459.95242 "Emergency response program" is a plan that is developed pursuant to NAC 459.9544 and 459.95442 to respond to emergencies, including, without limitation, an accidental release **.** ~~[of a tier A or tier B substance.]~~

Sec. 28. NAC 459.95279 is hereby amended to read as follows:

459.95279 "Prevention program" means procedures and practices that are developed and implemented pursuant to NAC 459.95386 to 459.95398, inclusive, or NAC 459.95412 to 459.95435, inclusive, to:

1. Prevent ~~[the]~~ ***an*** accidental release ***;*** ~~[of a tier A or tier B substance;]~~
2. Minimize the likelihood of an accidental release; or
3. Mitigate the impacts of an accidental release.

Sec. 29. NAC 459.95281 is hereby amended to read as follows:

459.95281 "Process" means an activity that involves a tier A or tier B substance, including, without limitation, the use, storage, manufacturing, handling or on-site movement of such a substance or a combination of such activities ~~[.]~~ ***, and an explosives manufacturing operation.*** The term includes a group of vessels that is interconnected or a group of separate vessels that is located in such a manner that a tier A or tier B substance could be involved in a potential release.

Sec. 30. NAC 459.95299 is hereby amended to read as follows:

459.95299 "Tier A substance" means a substance ~~[for which an accident prevention program is required pursuant to sub-subparagraph (I) of subparagraph (2) of paragraph (a) of subsection 1 of NRS 459.3813.]~~ ***which is present in a quantity that is equal to or greater than the threshold quantity listed for that substance in NAC 459.9533 under the column labeled "Tier A Threshold Quantity."***

Sec. 31. NAC 459.9531 is hereby amended to read as follows:

459.9531 "Tier B substance" means a substance ~~[for which an accident prevention program is required pursuant to NRS 459.3833.]~~ ***which is present in a quantity that is equal to or greater than the threshold quantity listed for that substance in NAC 459.9533 under the column labeled "Tier B Threshold Quantity."***

Sec. 32. NAC 459.95314 is hereby amended to read as follows:

459.95314 "Worst-case release" means ~~[the]~~ ***:***

1. The release of the largest quantity of a tier A or tier B substance from a failure of a vessel or process line that results in the greatest distance to an endpoint ~~[defined in NAC 459.95364.;]~~ ***; or***

2. The involvement of the largest quantity of explosives, the detonation of which results in the greatest distance to an endpoint.

Sec. 33. NAC 459.95323 is hereby amended to read as follows:

459.95323 1. Except as otherwise provided in NAC 459.95486, a process is subject to the tier A program if the process is not exempted pursuant to NRS 459.3814 and a substance is present within the contiguous boundary of the facility in a quantity:

(a) Equal to or greater than the amount listed in the table in NAC 459.9533 under the column labeled "Tier A Threshold Quantity"; or

(b) Less than the amount listed in the table in NAC 459.9533 under the column labeled "Tier A Threshold Quantity" if there are two or more releases of one or more tier A substances from the facility during a 12-month period and the quantity for each release is in excess of the amount listed in the table in NAC 459.9533 for the substance under the column labeled "Two Release Quantity."

2. ~~[If]~~ ***Except as otherwise provided in this subsection, if*** the table in NAC 459.9533 under the column labeled "Tier A Threshold Quantity" is blank, the tier A program does not apply to that substance. ***The provisions of this subsection do not apply to explosives manufacturing operations.***

Sec. 34. NAC 459.9533 is hereby amended to read as follows:

459.9533 1. Substances that are designated ~~[in the table in this section]~~ as having a tier A threshold quantity include, without limitation, the substances ***and quantities*** that are listed in NRS 459.3816 ~~[.]~~ ***and the substances listed in the table in this section.***

2. Substances that are designated in the table in this section as having a tier B threshold quantity include, without limitation, the substances ***and quantities*** that are listed in 40 C.F.R. § 68.130 ~~[.]~~ ***and the substances listed in the table in this section.***

LCB Draft of Proposed Regulation R041-01, SEC amended and adopted regulation 9-18-2001; as submitted to LCB on September 21, 2001 for filing with the Secretary of State. Temporary petition 2001-05 was adopted on 2-15-01.

Chemical Name	Alternate Chemical Name	Mixture Description	CAS Number	Tier A Threshold Quantity (lbs)	Tier B Threshold Quantity (lbs)	Two Release Quantity (lbs)	Two Release Source note 1	Tox(T), Flam(F) or Expl(E)	Toxic Endpoint (mg/L)
Acetaldehyde	***Ethanal***		75-07-0	2,500	10,000	1,000	1	F	
Acetylene	Ethyne		74-86-2		10,000			F	
Acrolein	2-Propenol		107-02-8	150	5,000	1	1 & 2	T	0.0011
Acrylonitrile	2-Propenenitrile		107-13-1		20,000			T	0.076
Acrylyl chloride	2-Propenoyl chloride		814-68-6	250	5,000	100	2	T	0.00090
Alkylaluminums				5,000		50*	3		
Allyl alcohol	2-Propen-1-ol		107-18-6		15,000			T	0.036
Allyl chloride	***3-chloropropene***		107-05-1	1,000		100	3		
Allylamine	2-Propen-1-amine		107-11-9	~~[1,500]~~ ***1,000***	10,000	500	2	T	0.0032
Ammonia	Anhydrous Ammonia	Anhydrous	7664-41-7	5,000	10,000	100	1 & 2	T	0.14
Ammonia	Ammonia solution ***Ammonium hydroxide***	20wt% or greater	7664-41-7		20,000			T	0.14
Ammonia	Ammonia solution ***Ammonium hydroxide***	~~[44wt% or greater]~~ ***concentration greater than 44% ammonia by weight***	7664-41-7	10,000		100	3		
Ammonium perchlorate			7790-98-9	7,500		75*	3		

Chemical Name	Alternate Chemical Name	Mixture Description	CAS Number	Tier A Threshold Quantity (lbs)	Tier B Threshold Quantity (lbs)	Two Release Quantity (lbs)	Two Release Source note 1	Tox(T), Flam(F) or Expl(E)	Toxic Endpoint (mg/L)
Ammonium permanganate			7787-36-2	7,500		75*	3		
Arsenous trichloride			7784-34-1		15,000			T	0.010
Arsine	Arsenic Hydride		7784-42-1	100	1,000	10	3	T	0.0019
bis(Chloromethyl) Ether	Chloromethyl Ether		542-88-1	100	1,000	10	1 & 2	T	0.00025
Boron trichloride			10294-34-5	2,500	5,000	100	3	T	0.010

Chemical Name	Alternate Chemical Name	Mixture Description	CAS Number	Tier A Threshold Quantity (lbs)	Tier B Threshold Quantity (lbs)	Two Release Quantity (lbs)	Two Release Source note 1	Tox(T), Flam(F) or Expl(E)	Toxic Endpoint (mg/L)
Boron trifluoride			7637-07-2	250	5,000	25	3	T	0.028
Boron trifluoride w/Methyl Ether		1:1 ratio	353-42-4		15,000			T	0.023
Bromine			7726-95-6	1,500	10,000	500	2	T	0.0065
Bromine chloride			13863-41-7	1,500		10	3		
Bromine pentafluoride			7789-30-2	2,500		100	3		
Bromine trifluoride			7787-71-5	15,000		~~[100]~~ ***1,000***	3		
Bromotrifluorethylene			598-73-2		10,000			F	

Chemical Name	Alternate Chemical Name	Mixture Description	CAS Number	Tier A Threshold Quantity (lbs)	Tier B Threshold Quantity (lbs)	Two Release Quantity (lbs)	Two Release Source note 1	Tox(T), Flam(F) or Expl(E)	Toxic Endpoint (mg/L)
1,3-Butadiene			106-99-0		10,000			F	
Butane			106-97-8		10,000			F	
1-Butene			106-98-9		10,000			F	
2-Butene			107-01-7		10,000			F	
Butene			25167-67-3		10,000			F	
2-Butene-cis			590-18-1		10,000			F	
2-Butene-trans	~~[2-Butene, (E)]~~		624-64-6		10,000			F	
Butyl hydroperoxide (Tertiary)			75-91-2	5,000		50*	3		
Butyl perbenzoate (Tertiary)			614-45-9	7,500		75*	3		
Carbon disulfide			75-15-0		20,000			T	0.16
Carbon oxysulfide	Carbon Oxide Sulfide		463-58-1		10,000			F	

Chemical Name	Alternate Chemical Name	Mixture Description	CAS Number	Tier A Threshold Quantity (lbs)	Tier B Threshold Quantity (lbs)	Two Release Quantity (lbs)	Two Release Source note 1	Tox(T), Flam(F) or Expl(E)	Toxic Endpoint (mg/L)
Carbonyl fluoride			353-50-4	2,500		10	3		

Chemical Name	Alternate Chemical Name	Mixture Description	CAS Number	Tier A Threshold Quantity (lbs)	Tier B Threshold Quantity (lbs)	Two Release Quantity (lbs)	Two Release Source note 1	Tox(T), Flam(F) or Expl(E)	Toxic Endpoint (mg/L)
Cellulose nitrate		***concentration greater than*** 12.6% nitrogen ~~[or greater]~~	9004-70-0	2,500		25*	3		
Chlorine			7782-50-5	1,500	2,500	10	1 & 2	T	0.0087
Chlorine dioxide			10049-04-4	1,000	1,000	100	3	T	0.0028
Chlorine monoxide			7791-21-1		10,000			F	
Chlorine pentafluoride			13637-63-3	1,000		10	3		
Chlorine trifluoride			7790-91-2	1,000		100	3		
Chlorodiethylaluminum	Diethylaluminum Chloride		96-10-6	5,000		50*	3		
1-Chloro-2,4-Dinitrobenzene			97-00-7	5,000		50*	3		
Chloroform			67-66-3		20,000			T	0.49
Chloromethyl methyl ether			107-30-2	500	5,000	10	1 & 2	T	0.0018
Chloropicrin			76-06-2	500		50	3		
Chloropicrin/ Methylbromide mix				1,500		500	3		
Chloropicrin/Methylchloride				1,500		500	3		

Chemical Name	Alternate Chemical Name	Mixture Description	CAS Number	Tier A Threshold Quantity (lbs)	Tier B Threshold Quantity (lbs)	Two Release Quantity (lbs)	Two Release Source note 1	Tox(T), Flam(F) or Expl(E)	Toxic Endpoint (mg/L)
mix									
1-Chloropropylene			590-21-6		10,000			F	
2-Chloropropylene			557-98-2		10,000			F	
Crotonaldehyde	2-Butenal		4170-30-3		20,000			T	0.029

Chemical Name	Alternate Chemical Name	Mixture Description	CAS Number	Tier A Threshold Quantity (lbs)	Tier B Threshold Quantity (lbs)	Two Release Quantity (lbs)	Two Release Source note 1	Tox(T), Flam(F) or Expl(E)	Toxic Endpoint (mg/L)
Crotonaldehyde, (E)-	2-Butenal, (E)-		123-73-9		20,000			T	0.029
Cumene Hydroperoxide			80-15-9	5,000		10	1		
Cyanogen	Ethanedinitrile		460-19-5	2,500	10,000	100	1	F	
Cyanogen chloride			506-77-4	500	10,000	10	1	T	0.030
Cyanuric fluoride			675-14-9	100		10	3		
Cyclohexylamine	Cyclohexanimine		108-91-8		15,000			T	0.16
Cyclopropane			75-19-4		10,000			F	
Diacetyl peroxide		***concentration greater than*** 70% ~~[or greater]~~	110-22-5	5,000		50*	3		

Chemical Name	Alternate Chemical Name	Mixture Description	CAS Number	Tier A Threshold Quantity (lbs)	Tier B Threshold Quantity (lbs)	Two Release Quantity (lbs)	Two Release Source note 1	Tox(T), Flam(F) or Expl(E)	Toxic Endpoint (mg/L)
Diazomethane			334-88-3	500		10	3		
Dibenzoyl peroxide			94-36-0	7,500		75*	3		
Diborane			19287-45-7	100	2,500	10	3	T	0.0011
Dibutyl peroxide (tertiary)			110-05-4	5,000		50*	3		
Dichloro acetylene			7572-29-4	250		10	3		
Dichlorosilane			4109-96-0	2,500	10,000	100	3	F	
Diethylzinc			557-20-0	10,000		100*	3		
Difluoroethane			75-37-6		10,000			F	
Diisopropyl peroxydicarbonate			105-64-6	7,500		75*	3		
Dilauroyl peroxide			105-74-8	7,500		75*	3		
Dimethyl sulfide			75-18-3	100		10	3		

Chemical Name	Alternate Chemical Name	Mixture Description	CAS Number	Tier A Threshold Quantity (lbs)	Tier B Threshold Quantity (lbs)	Two Release Quantity (lbs)	Two Release Source note 1	Tox(T), Flam(F) or Expl(E)	Toxic Endpoint (mg/L)
Dimethylamine (anhydrous)			124-40-3	2,500	10,000	1,000	1	F	

Chemical Name	Alternate Chemical Name	Mixture Description	CAS Number	Tier A Threshold Quantity (lbs)	Tier B Threshold Quantity (lbs)	Two Release Quantity (lbs)	Two Release Source note 1	Tox(T), Flam(F) or Expl(E)	Toxic Endpoint (mg/L)
Dimethyldichlorosilane			75-78-5	1,000	5,000	500	2	T	0.026
1,1-Dimethylhydrazine			57-14-7	1,000	15,000	10	1 & 2	T	0.012
2,2-Dimethylpropane			463-82-1		10,000			F	
2,4-Dinitroanaline			***97-02-9***	***5,000***		***50****	***3***		
Epichlorohydrin			106-89-8		20,000			T	0.076
Ethane			74-84-0		10,000			F	
Ethyl acetylene	1-Butyne		107-00-6		10,000			F	
Ethyl chloride			75-00-3		10,000			F	
Ethyl ether			60-29-7		10,000			F	
Ethyl mercaptan	Ethanethiol		75-08-1		10,000			F	
Ethyl nitrite			109-95-5	5,000	10,000	50*	3	F	
Ethylamine	Ethanamine		75-04-7	7,500	10,000	100	1	F	
Ethylene	Ethene		74-85-1		10,000			F	
Ethylene fluorohydrin			371-62-0	100		10	2		
Ethylene oxide	Oxirane		75-21-8	5,000	10,000	10	1 & 2	T	0.090
Ethylenediamine			107-15-3		20,000			T	0.49
Ethyleneimine	Aziridine		151-56-4	1,000	10,000	1	1 & 2	T	0.018

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Chemical Name	Alternate Chemical Name	Mixture Description	CAS Number	Tier A Threshold Quantity (lbs)	Tier B Threshold Quantity (lbs)	Two Release Quantity (lbs)	Two Release Source note 1	Tox(T), Flam(F) or Expl(E)	Toxic Endpoint (mg/L)
Fluorine			7782-41-4	~~[1,000]~~ ***100***	1,000	10	1 & 2	T	0.0039
Formaldehyde		~~[90%]~~ ***concentration of 37%*** or greater ***by weight***	50-00-0	1,000	15,000	100	1 & 2	T	0.012

Chemical Name	Alternate Chemical Name	Mixture Description	CAS Number	Tier A Threshold Quantity (lbs)	Tier B Threshold Quantity (lbs)	Two Release Quantity (lbs)	Two Release Source note 1	Tox(T), Flam(F) or Expl(E)	Toxic Endpoint (mg/L)
Furan			110-00-9	500	5,000	100	1 & 2	T	0.0012
Hexafluoroacetone			684-16-2	5,000		10	3		
Hydrazine			302-01-2		15,000			T	0.011
Hydrochloric acid		37% or greater	7647-01-0		15,000	1,000	3	T	0.030
Hydrofluoric acid		50% or greater	7664-39-3		1,000	100	1	T	0.016
Hydrogen			1333-74-0		10,000			F	
Hydrogen bromide			10035-10-6	5,000		10	3		
Hydrogen chloride		Anhydrous	7647-01-0	5,000	5,000	100	3	T	0.030
Hydrogen cyanide	Hydrocyanic acid	Anhydrous	74-90-8	1,000	2,500	10	1 & 2	T	0.011

Chemical Name	Alternate Chemical Name	Mixture Description	CAS Number	Tier A Threshold Quantity (lbs)	Tier B Threshold Quantity (lbs)	Two Release Quantity (lbs)	Two Release Source note 1	Tox(T), Flam(F) or Expl(E)	Toxic Endpoint (mg/L)
Hydrogen fluoride		Anhydrous	7664-39-3	1,000		100	1 & 2		
Hydrogen peroxide		~~[50 wt%]~~ ***concentration of 52%*** or greater ***by weight***	7722-84-1	7,500		1,000	2		
Hydrogen selenide			7783-07-5	150	500	10	2	T	0.00066
Hydrogen sulfide			7783-06-4	1,500	10,000	100	1 & 2	T	0.042
Hydroxylamine			7803-49-8	2,500		25*	3		
Iron, pentacarbonyl			13463-40-6	250	2,500	100	2	T	0.00044
Isobutane	***1,1-dimethyl ethane***		75-28-5		10,000			F	
Isobutyronitrile			78-82-0		20,000			T	0.14
Isopentane			78-78-4		10,000			F	

Chemical Name	Alternate Chemical Name	Mixture Description	CAS Number	Tier A Threshold Quantity (lbs)	Tier B Threshold Quantity (lbs)	Two Release Quantity (lbs)	Two Release Source note 1	Tox(T), Flam(F) or Expl(E)	Toxic Endpoint (mg/L)
Isoprene			78-79-5		10,000			F	
Isopropyl chloride	***2 - chloropropane***		75-29-6		10,000			F	

Chemical Name	Alternate Chemical Name	Mixture Description	CAS Number	Tier A Threshold Quantity (lbs)	Tier B Threshold Quantity (lbs)	Two Release Quantity (lbs)	Two Release Source note 1	Tox(T), Flam(F) or Expl(E)	Toxic Endpoint (mg/L)
Isopropyl chloroformate			108-23-6		15,000			T	0.10
Isopropyl formate			625-55-8	500		100	3		
Isopropylamine			75-31-0	5,000	10,000	1,000	3	F	
Ketene			463-51-4	100		10	3		
Methacrylaldehyde			78-85-3	1,000		500	3		
Methacryloyl chloride			920-46-7	150		100	2		
Methacryloyloxyethyl isocyanate			30674-80-7	100		10	3		
Methane			74-82-8		10,000			F	
Methyl acrylonitrile	Methacrylonitrile		126-98-7	250	10,000	25	3	T	0.0027
Methyl bromide			74-83-9	2,500		500	3		
3-Methyl-1-butene	***Isopentene***		563-45-1		10,000			F	
2-Methyl-1-butene			563-46-2		10,000			F	
Methyl chloride			74-87-3	15,000	10,000	100	1	T	0.82
Methyl chloroformate			79-22-1	500	5,000	100	3	T	0.0019
Methyl disulfide			624-92-0	100		10	3		
Methyl ether			115-10-6		10,000			F	

Chemical Name	Alternate Chemical Name	Mixture Description	CAS Number	Tier A Threshold Quantity (lbs)	Tier B Threshold Quantity (lbs)	Two Release Quantity (lbs)	Two Release Source note 1	Tox(T), Flam(F) or Expl(E)	Toxic Endpoint (mg/L)
Methyl ethyl ketone peroxide	***Ethyl methyl ketone peroxide***	***concentration greater than*** 60% ~~[or greater]~~	1338-23-4	5,000		10	1		
Methyl fluoroacetate			453-18-9	100		10	3		
Methyl fluorosulfate			421-20-5	100		10	3		
Methyl formate			107-31-3		10,000			F	
Methyl hydrazine			60-34-4	100	15,000	10	1 & 2	T	0.0094
Methyl iodide			74-88-4	7,500		100	1		
Methyl isocyanate			624-83-9	250	10,000	10	1 & 2	T	0.0012
Methyl mercaptan			74-93-1	5,000	10,000	100	1 & 2	T	0.049
Methyl thiocyanate			556-64-9		20,000			T	0.085
Methyl vinyl ketone			78-94-4	100		10	2		
Methylamine	Methanamine	Anhydrous	74-89-5	1,000	10,000	100	1	F	
2-Methylpropene			115-11-7		10,000			F	
Methyltrichlorosilane			75-79-6	500	5,000	50	3	T	0.018
Nickel carbonyl			13463-39-3	150	1,000	10	1 & 2	T	0.00067

Chemical Name	Alternate Chemical Name	Mixture Description	CAS Number	Tier A Threshold Quantity (lbs)	Tier B Threshold Quantity (lbs)	Two Release Quantity (lbs)	Two Release Source note 1	Tox(T), Flam(F) or Expl(E)	Toxic Endpoint (mg/L)
Nitric acid		80% or greater	7697-37-2		15,000			T	0.026
Nitric acid		~~[94.5 wt% or greater]~~ ***concentration of 94.5% or greater by weight***	7697-37-2	500		50	3		
Nitric oxide	Nitrogen oxide		10102-43-9	250	10,000	10	1 & 2	T	0.031
Nitroaniline	para Nitroaniline		100-01-6	5,000		50*	3		

Chemical Name	Alternate Chemical Name	Mixture Description	CAS Number	Tier A Threshold Quantity (lbs)	Tier B Threshold Quantity (lbs)	Two Release Quantity (lbs)	Two Release Source note 1	Tox(T), Flam(F) or Expl(E)	Toxic Endpoint (mg/L)
Nitrogen dioxide			10102-44-0	250		10	1 & 2		
Nitrogen oxides		NO; NO_2; N_2O_4; N_2O_3	10102-44-0	250		10	3		
Nitrogen tetroxide			10544-72-6	250		10	1		
Nitrogen trifluoride			7783-54-2	5,000		1,000	3		
Nitrogen trioxide			10544-73-7	250		10	3		
Nitromethane			75-52-5	2,500		25*	3		
Oleum	Fuming sulfuric acid	65 wt% or greater of SO_3	8014-95-7	1,000	10,000	500	3	T	0.010

Chemical Name	Alternate Chemical Name	Mixture Description	CAS Number	Tier A Threshold Quantity (lbs)	Tier B Threshold Quantity (lbs)	Two Release Quantity (lbs)	Two Release Source note 1	Tox(T), Flam(F) or Expl(E)	Toxic Endpoint (mg/L)
		SO_3							
Osmium tetroxide			20816-12-0	100		10	3		
Oxygen difluoride	Fluorine monoxide		7783-41-7	100		10	3		
Ozone			10028-15-6	100		10	3		
Pentaborane			19624-22-7	100		10	3		
1,3-Pentadinene			504-60-9		10,000			F	
Pentane			109-66-0		10,000			F	
1-Pentene			109-67-1		10,000			F	
2-Pentene, (E)-			646-04-8		10,000			F	
2-Pentene, (Z)-			627-20-3		10,000			F	
Peracetic acid	Peroxyacetic acid	***concentration greater than 60% acetic acid***	79-21-0	~~[5,000]~~ ***1,000***	10,000	500	2	T	0.0045
Perchloric acid		~~[60% or greater]~~ ***concentration greater than 60% by weight***	7601-90-3	5,000		50*	3		

Chemical Name	Alternate Chemical Name	Mixture Description	CAS Number	Tier A Threshold Quantity (lbs)	Tier B Threshold Quantity (lbs)	Two Release Quantity (lbs)	Two Release Source note 1	Tox(T), Flam(F) or Expl(E)	Toxic Endpoint (mg/L)
Perchloromethyl mercaptan			594-42-3	150	10,000	100	1 & 2	T	0.0076
Perchloryl fluoride			7616-94-6	5,000		100	3		
Phosgene	Carbonyl chloride		75-44-5	100	500	10	1 & 2	T	0.00081
Phosphine	Hydrogen phosphide		7803-51-2	100	5,000	10	3	T	0.0035
Phosphorus oxychloride	Phosphoryl chloride		10025-87-3	1,000	5,000	500	3	T	0.0030
Phosphorus trichloride			7719-12-2	1,000	15,000	500	3	T	0.028
Piperidine			110-89-4		15,000			T	0.022
Propadiene	1,2 Propadiene		463-49-0		10,000			F	
Propane			74-98-6		10,000			F	
Propargyl bromide	***3-Bromopropyne***		106-96-7	~~[7,500]~~ ***100***		10	2		
Propionitrile			107-12-0		10,000			T	0.0037
Propyl chloroformate			109-61-5		15,000			T	0.010
Propyl nitrate			627-13-4	~~[2,500]~~ ***100***		25*	3		
Propylene	1 Propene		115-07-1		10,000			F	
Propylene oxide			75-56-9		10,000			T	0.59

Chemical Name	Alternate Chemical Name	Mixture Description	CAS Number	Tier A Threshold Quantity (lbs)	Tier B Threshold Quantity (lbs)	Two Release Quantity (lbs)	Two Release Source note 1	Tox(T), Flam(F) or Expl(E)	Toxic Endpoint (mg/L)
Propyleneimine			75-55-8		10,000			T	0.12
Propyne	1-Propyne		74-99-7		10,000			F	
Sarin			107-44-8	100		10	2		

Chemical Name	Alternate Chemical Name	Mixture Description	CAS Number	Tier A Threshold Quantity (lbs)	Tier B Threshold Quantity (lbs)	Two Release Quantity (lbs)	Two Release Source note 1	Tox(T), Flam(F) or Expl(E)	Toxic Endpoint (mg/L)
Selenium hexafluoride			7783-79-1	1,000		1	1		
Silane			7803-62-5		10,000			F	
Stibine	Antimony hydride		7803-52-3	500		10	3		
Sulfur dioxide		Anhydrous	7446-09-5	1,000	5,000	100	3	T	0.0078
Sulfur pentafluoride			5714-22-7	250		10	3		
Sulfur tetrafluoride			7783-60-0	250	2,500	10	3	T	0.0092
Sulfur trioxide	Sulfuric Anhydride		7446-11-9	1,000	10,000	100	2	T	0.010
Tellurium hexafluoride			7783-80-4	250		10	3		
Tetrafluoroethylene			116-14-3	5,000	10,000	1,000	3	F	
Tetrafluorohydrazine			10036-47-2	5,000		500	3		

Chemical Name	Alternate Chemical Name	Mixture Description	CAS Number	Tier A Threshold Quantity (lbs)	Tier B Threshold Quantity (lbs)	Two Release Quantity (lbs)	Two Release Source note 1	Tox(T), Flam(F) or Expl(E)	Toxic Endpoint (mg/L)
Tetramethyl Lead			75-74-1	~~[7,500]~~ ***1,000***	10,000	100	~~[1]~~ ***2***	T	0.0040
Tetramethylsilane			75-76-3		10,000			F	
Tetranitromethane			509-14-8		10,000			T	0.0040
Thionyl chloride			7719-09-7	250		100	3		
Titanium tetrachloride			7550-45-0	2,500	2,500	1,000	1 & 2	T	0.020
Toluene 2,4-diisocyanate			584-84-9		10,000			T	0.0070
Toluene 2,6-diisocyanate			91-08-7		10,000			T	0.0070
Toluene diisocyanate			26471-62-5		10,000			T	0.0070

Chemical Name	Alternate Chemical Name	Mixture Description	CAS Number	Tier A Threshold Quantity (lbs)	Tier B Threshold Quantity (lbs)	Two Release Quantity (lbs)	Two Release Source note 1	Tox(T), Flam(F) or Expl(E)	Toxic Endpoint (mg/L)
Trichloro(chloromethyl) silane			1558-25-4	100		10	3		
Trichloro(dichlorophenyl) silane			27137-85-5	2,500		500	2		
Trichlorosilane			10025-78-2	5,000	10,000	500	3	F	

Chemical Name	Alternate Chemical Name	Mixture Description	CAS Number	Tier A Threshold Quantity (lbs)	Tier B Threshold Quantity (lbs)	Two Release Quantity (lbs)	Two Release Source note 1	Tox(T), Flam(F) or Expl(E)	Toxic Endpoint (mg/L)
Trifluorochloroethylene			79-38-9	10,000	10,000	500	3	F	
Trimethoxysilane			2487-90-3	1,500		500	3		
Trimethylamine			75-50-3		10,000			F	
Trimethylchlorosilane			75-77-4		10,000			T	0.050
Vinyl acetate monomer			108-05-4		15,000			T	0.26
Vinyl acetylene			689-97-4		10,000			F	
Vinyl chloride			75-01-4		10,000			F	
Vinyl ethyl ether			109-92-2		10,000			F	
Vinyl fluoride			75-02-5		10,000			F	
Vinyl methyl ether			107-25-5		10,000			F	
Vinylidene chloride			75-35-4		10,000			F	
Vinylidene fluoride			75-38-7		10,000			F	

Table Notes:

For Two Release Source Column: 1 = RQ as listed in 40 C.F.R. Part 302; 2 = RQ as listed in 40 C.F.R. Part 355; 3 = Two Release Quantity as determined in "Technical Basis Document for C.A.P.P. Two Release Quantities and Toxic Endpoints."

* These substances must be involved in a fire or explosion to qualify as a release pursuant to paragraph (b) of subsection 1 of NAC 459.95323.

Sec. 35. NAC 459.95332 is hereby amended to read as follows:

459.95332 The owner or operator of a facility that has a process which is subject to the tier A program or tier B program shall:

1. Register annually with the division pursuant to NAC 459.95348 to 459.95358, inclusive;

2. Pay ***the annual*** fees pursuant to NAC 459.95334 ~~[; and~~

~~3.]~~ ***if the facility contains one or more processes [~~that are not~~] and does not have explosives manufacturing operations;***

3. Pay the annual fees pursuant to section] ~~[22]~~ 23 of this regulation if the facility contains one or more explosives manufacturing operations; and

4. Develop a management system pursuant to NAC 459.95516.

Sec. 36. NAC 459.95336 is hereby amended to read as follows:

459.95336 In addition to the requirements set forth in NAC 459.95332, the owner or operator of a facility with a process that is subject to the tier A program shall:

1. Submit assessment plans ~~[, prioritization schedules]~~ and information about the assessment team pursuant to NAC 459.95476;

2. Conduct a hazard assessment pursuant to NAC 459.95362 to 459.95378, inclusive;

3. Implement a prevention program pursuant to NAC 459.95382 and 459.95412 to 459.95435, inclusive;

4. Implement an emergency response program pursuant NAC 459.9544 and 459.95442;

5. Submit assessment reports pursuant to NAC 459.95448 to 459.95468, inclusive; and

6. Submit an annual compliance report pursuant to NAC 459.9548 and 459.95482.

Sec. 37. NAC 459.95342 is hereby amended to read as follows:

459.95342 The owner or operator of a facility with a process that is subject to both the tier A program and tier B program shall comply with the general requirements set forth in NAC 459.95332 and ~~[comply with]~~ the requirements for a tier A process set forth in NAC 459.95336 **.** ~~[, except that:~~

~~1. The timing for initial registration must be in accordance with paragraph (b) of subsection 3 of NAC 459.95348; and~~

~~2. The timing for submission of the assessment report must be in accordance with NAC 459.9545.]~~

Sec. 38. NAC 459.95348 is hereby amended to read as follows:

459.95348 1. The owner or operator shall:

(a) Complete annually a single registration form covering all processes ~~[, both]~~ ***subject to the*** tier A ~~[and]~~ ***or*** tier B ~~[;]~~ ***program;*** and

(b) Submit the registration to the division on or before June 21 of each year.

2. The registration must show the maximum quantity of all tier A and tier B substances on-site between June 1 of the previous year and May ~~[30]~~ ***31*** of the current year.

3. ~~[Upon]~~ ***Before*** starting a new process, the owner or operator shall submit ~~[an initial registration:~~

~~(a) If the process is subject to tier A and not tier B, pursuant to NAC 459.95348 to 459.95358, inclusive, within 10 days after bringing the tier A substance on-site.~~

~~(b) If the process is subject to tier B, regardless of whether the process is subject to tier A:~~

~~(1) Pursuant to NAC 459.95348 to 459.95358, inclusive, within 10 days after bringing the substance on-site or before June 21, 1999; or~~

~~(2) Pursuant to NAC 459.95448 to 459.95466, inclusive, at the start of the process if the process is started after June 21, 1999.]~~ ***:***

(a) Except as otherwise provided in subsection 4, for a new process subject to the tier A or the tier B program, level 2 or 3, an application for a permit to construct pursuant to sections 6 to [~~23~~] 22, inclusive, of this regulation in lieu of an initial registration; or

(b) For a new process subject to the tier B program level 1, a registration for the new process at least 90 days before introducing a tier B substance into the facility.

4. If a facility is subject to the provisions of paragraph (b) of subsection 1 of NAC 459.95323, the owner or operator shall submit the registration pursuant to NAC 459.95348 to 459.95358, inclusive, not later than 90 days after the provisions of paragraph (b) of subsection 1 of NAC 459.95323 take effect.

5. If the state environmental commission adds a new substance to the table of substances set forth in NAC 459.9533 and a facility has a process that uses the new substance, the owner or operator shall, not later than 90 days after the effective date of the regulation which contains the addition, submit to the division registration for the process pursuant to NAC 459.95348 to 459.95358, inclusive.

6. Registration consists of:

(a) Information about the facility as set forth in NAC 459.9535;

(b) A summary of the off-site consequence analysis as set forth in NAC 459.95352;

(c) A summary of the 5-year accident history of the facility as set forth in NAC 459.95354;

(d) A description of the emergency response ~~[plan]~~ ***program*** for the facility as set forth in NAC 459.95356; and

(e) Certification as set forth in NAC 459.95358.

7. Annual submission of registration pursuant to NAC 459.95348 to 459.95358, inclusive, satisfies the requirements of subsection 1 of NRS 459.3828 and NRS 459.383.

Sec. 39. NAC 459.9535 is hereby amended to read as follows:

459.9535 Information about the facility on the annual registration form must include:

1. The name, street, city, county, state, zip code, latitude and longitude of the facility, the method for obtaining the latitude and longitude, and a description of the location that the latitude and longitude represent **.** ~~[;]~~

2. The Dun & Bradstreet number for the facility **.** ~~[;]~~

3. The name and Dun & Bradstreet number of any parent corporation **.** ~~[;]~~

4. The name, telephone number and mailing address of the owner or operator **.** ~~[;]~~

5. The name and title of the person with overall responsibility for the implementation of C.A.P.P **.** ~~[;]~~

6. The name, title, telephone number during normal business hours and telephone number that is available 24 hours per day of an emergency contact **.** ~~[;]~~

7. For each process:

(a) The name and C.A.S. number of each substance **.** ~~[;]~~

(b) The maximum quantity of each substance on-site between June 1 of the previous year and May ~~[30]~~ ***31*** of the current year **.** ~~[;]~~ ***For a new process, the owner or operator shall include in***

its annual registration form information about the maximum inventory they expect to have on site through the following May 31.

(c) The ~~[N.A.I.S.C.]~~ ***N.A.I.C.S.*** code that is applicable to the process **.** ~~[;]~~

(d) The program tier to which the process is subject **.** ~~[; and]~~

(e) The tier B program level, if applicable, of the process **.** ~~[;]~~

8. The identifier ~~[that]~~ ***assigned by*** the United States Environmental Protection Agency ~~[has assigned]~~ ***, if any,*** to the facility **.** ~~[;]~~

9. The number of full-time employees at the facility **.** ~~[;]~~

10. Whether the facility is subject to 29 C.F.R. § 1910.119 **.** ~~[;]~~

11. Whether the facility is subject to 40 C.F.R. Part 355 **.** ~~[;]~~

12. Whether the facility has an operating permit pursuant to 40 C.F.R. Part 70 and, if applicable, the permit number **.** ~~[; and]~~

13. The date of the last safety inspection of the facility by a federal, state or local governmental agency and the identity of the inspecting entity.

Sec. 40. NAC 459.95352 is hereby amended to read as follows:

459.95352 The summary of the off-site consequence analysis on the annual registration form must include:

1. A summary of:

(a) One worst-case release scenario for each tier B program level 1 process; and

(b) For each process that is subject to either the tier A program or tier B program level 2 or 3, one worst-case release scenario for all toxic substances held above the threshold quantity and one worst-case release scenario for all flammable and explosive substances held above the threshold

quantity. If an additional worst-case scenario for a toxic ~~[or]~~ ***substance,*** flammable substance ***or explosive*** is required pursuant to NAC 459.95366, the owner or operator shall submit the same information for the additional scenario that he sends to satisfy the requirements of this paragraph.

2. The following data for each release scenario:

(a) The chemical name of the substances;

(b) A description of the scenario, including, without limitation, whether the scenario involves an explosion, fire, toxic gas release, or liquid spill and vaporization;

(c) The quantity in pounds of the substance that is released ~~[;]~~ ***or involved in the explosion;***

(d) The rate at which the substance is released;

(e) The duration of the release;

(f) The distance to the endpoint;

(g) Public and environmental receptors that are located within the distance to the endpoint;

(h) Any passive mitigation that is considered;

(i) If the substance is toxic:

(1) The percentage weight of the substance in a mixture;

(2) The physical state of the substance;

(3) The wind speed and atmospheric stability class used in the scenario; and

(4) The topography of the geographical area used in the scenario; and

(j) The basis of the results of the scenario, including, without limitation, the name of any model that is used.

Sec. 41. NAC 459.95354 is hereby amended to read as follows:

459.95354 ~~[The]~~ ***An accident history reported on an annual registration must include:***

1. ***A*** summary of the ~~[5-year]~~ accident history of the facility ~~[on the annual registration form must include:~~

~~1. The data for the 5-year accident history]~~ ***for the previous 5 years*** that is developed pursuant to NAC 459.95378; and

2. ~~[A]~~ ***For the period starting on June 1st of the previous year and ending on May 31st of the current year, a*** description of:

(a) Any unanticipated or unusual event at the facility that resulted in the release ***, including any accidental releases,*** of any ~~[quantity of a tier A or tier B]~~ substance; and

(b) The efforts undertaken by the facility to assess the reasons and develop a remedy for the release ***or accidental release*** of the substance.

Sec. 42. NAC 459.95356 is hereby amended to read as follows:

459.95356 The description of the emergency response ~~[plan]~~ ***program*** for the facility on the annual registration form must indicate:

1. Whether there is a written emergency response ~~[plan;]~~ ***program;***

2. Whether the ~~[plan]~~ ***program*** includes specific actions to be taken in response to an accidental release ***;*** ~~[of a tier A or tier B substance;]~~

3. Whether the ~~[plan]~~ ***program*** includes procedures for informing the public and local agencies responsible for responding to accidental releases;

4. Whether the ~~[plan]~~ ***program*** includes information on emergency health care;

5. The date of the most recent review or update of the emergency response ~~[plan;]~~ ***program;***

6. The date of the most recent emergency response training for employees;

7. The name and telephone number of the local agency with which the ~~[plan]~~ ***program*** is coordinated; and

8. Other federal or state requirements for the emergency ~~[plan]~~ ***program*** to which the facility is subject.

Sec. 43. NAC 459.95366 is hereby amended to read as follows:

459.95366 1. The owner or operator shall include the data gathered from the worst-case release scenario analysis on the registration form required pursuant to NAC 459.95348 and in the assessment report.

2. The facility may use the guidelines set forth in the R.M.P. Off-Site Consequence Analysis Guidance, which is adopted by reference pursuant to NAC 459.95528, to calculate any of the values required in this section.

3. The owner or operator shall prepare one worst-case release scenario for each tier B program level 1 process.

4. For each process that is subject to the tier A program or tier B program level 2 or 3, the owner or operator shall prepare:

(a) One worst-case release scenario that is estimated to create the greatest distance in any direction to an endpoint resulting from an accidental release of a tier A or tier B toxic substance under worst-case conditions as described in NAC 459.95364;

(b) One worst-case release scenario that is estimated to create the greatest distance in any direction to an endpoint resulting from an accidental ignition or detonation of a flammable or explosive substance under worst-case release conditions as described in NAC 459.95364; and

(c) Additional worst-case release scenarios for a facility if:

(1) A worst-case release from another process at the facility potentially affects different public receptors than those affected by the worst-case release scenario prepared pursuant to paragraphs (a) and (b); or

(2) A tier B toxic or flammable substance is present in excess of the threshold quantity and was not considered as part of the worst-case release scenarios prepared pursuant to paragraphs (a) and (b).

5. When preparing a worst-case release scenario ~~[,]~~ ***:***

(a) For a tier A or tier B substance, the owner or operator shall assume that the release quantity is the greater of:

~~[(a)]~~ ***(1)*** For substances in a vessel, the greatest amount held in a single vessel, taking into account administrative controls that limit the maximum quantity.

~~[(b)]~~ ***(2)*** For substances in pipes, the greatest amount in a pipe, taking into account administrative controls that limit the maximum quantity.

(b) For an explosive, the owner or operator shall select the inventory that produces the greatest distance to an endpoint.

6. The owner or operator shall model each tier A or tier B substance as a toxic, flammable or explosive as described in the table in NAC 459.9533. If a substance is not described as toxic, flammable or explosive in the table in NAC 459.9533, the owner or operator shall select the scenario providing the most significant impact on employees and the public.

7. For toxic substances that are normally gases at ambient temperature and handled as a gas or as a liquid under pressure, the owner or operator shall:

(a) Assume that the quantity in the vessel or pipe, as determined pursuant to subsection 5, is released as a gas over a period of 10 minutes;

(b) Assume that the release rate, in pounds per minute, is the total quantity divided by 10, unless passive mitigation systems are in place; and

(c) Calculate the impact of passive mitigation measures on the release rate using the R.M.P. Off-Site Consequence Analysis Guidance, which is adopted by reference pursuant to NAC 459.95528.

8. For gases handled as refrigerated liquids at ambient pressure, the owner or operator:

(a) Shall assume that the substance is released as a gas in 10 minutes, if the released substance is not contained by passive mitigation systems or if the contained pool would have a depth of 1 cm (0.39 inch) or less; and

(b) May assume that the quantity of the substance in the vessel or pipe, as determined pursuant to subsection 5, is spilled instantaneously to form a liquid pool, if the released substance is contained by passive mitigation systems in a pool with a depth greater than 1 cm (0.39 inch). The owner or operator shall calculate the volatilization rate at the boiling point of the substance and at the conditions set forth in subsections 9, 10 and 11.

9. For toxic substances that are normally liquids at ambient temperature, the owner or operator shall assume that the quantity in the vessel or pipe, as determined pursuant to subsection 5, is spilled instantaneously to form a liquid pool. The owner or operator shall determine the surface area of the pool by assuming that the liquid spreads to 1 cm (0.39 inch) deep, unless passive mitigation systems are in place that serve to contain the spill and limit the surface area. If passive mitigation is in place, the owner or operator shall use the surface area of the contained

liquid to calculate the volatilization rate. If the release would occur onto a surface that is not paved or smooth, the owner or operator may take into account the actual surface characteristics.

10. When determining the volatilization rate for purposes of subsection 9, the owner or operator shall account for:

(a) The highest daily maximum temperature occurring during the past 3 years;

(b) The temperature of the substance in the vessel; and

(c) If the liquid spilled is a mixture or solution, the concentration of the substance.

11. For purposes of subsection 9, the owner or operator shall determine the rate of release to air from the volatilization rate of the liquid pool determined pursuant to subsection 10. The owner or operator may use the methodology set forth in the R.M.P. Off-Site Consequence Analysis Guidance, which is adopted by reference pursuant to NAC 459.95528, or another publicly available technique that accounts for the modeling conditions and is recognized in the industry as a current practice. The owner or operator may use a proprietary model that accounts for the modeling conditions if the owner or operator allows the division access to the model and describes to local emergency planners, upon request, the features of the model and any differences from publicly available models.

12. The owner or operator shall assume that the quantity of the flammable substance determined pursuant to subsection 5 vaporizes resulting in a vapor cloud explosion. The owner or operator shall use a yield factor of 10 percent of the available energy released in the explosion to determine the distance to the explosion endpoint if the model used is based on TNT-equivalent methods.

13. For explosive substances, the owner or operator shall employ methods for calculating overpressure based upon generally accepted practices.

14. The owner or operator shall use the parameters defined in NAC 459.95364 to determine the distance to the endpoints. The owner or operator may use the methodology provided in the R.M.P. Off-Site Consequence Analysis Guidance, which is adopted by reference pursuant to NAC 459.95528, or any commercially or publicly available technique for air dispersion modeling if the technique accounts for the modeling conditions and is recognized in the industry as a current practice. The owner or operator may use a proprietary model that accounts for the modeling conditions if the owner or operator allows the division access to the model and describes to local emergency planners upon request the features of the model and any differences in the model from publicly available models.

15. The owner or operator may consider passive mitigation systems for the worst-case release scenario analysis if the mitigation system is capable of withstanding the event that triggered the release and still function as intended.

16. Notwithstanding the provisions of subsection 5, the owner or operator shall select as the worst-case scenario for a flammable substance ***,*** ~~[or]~~ the worst-case scenario for a tier A or tier B toxic substance ***or the worst-case scenario for an explosive,*** a scenario based on proximity to the boundary of the facility and smaller quantities of the substance handled at a higher process temperature or pressure if such a scenario would result in a greater distance to an endpoint beyond the facility boundary than the scenario provided pursuant to subsection 5.

Sec. 44. NAC 459.95378 is hereby amended to read as follows:

459.95378 1. The owner or operator shall include in the 5-year accident history all accidental releases ~~[from processes]~~ that resulted in:

(a) A death, injury or significant property damage on-site; or

(b) A known death, injury, evacuation, sheltering, property damage or environmental damage off-site.

2. For each accidental release that the owner or operator includes in the 5-year accident history pursuant to subsection 1, the owner or operator shall report:

(a) The date, time and approximate duration of the release;

(b) The name of each chemical that was released;

(c) The estimated quantity of each chemical that was released in pounds;

(d) For a mixture of toxic substances, the percentage concentration by weight of the released substance in the mixture;

(e) The applicable N.A.I.C.S. code for the process;

(f) The type of release event and its source;

(g) The weather conditions, if known;

(h) Any on-site impacts;

(i) Any known off-site impacts;

(j) The initiating event and other contributing factors, if known;

(k) Whether off-site responders were notified, if known; and

(l) The changes in the operations or processes at the facility that resulted from investigation of the release.

3. The owner or operator shall provide any numerical estimates to at least two significant digits.

Sec. 45. NAC 459.95414 is hereby amended to read as follows:

459.95414 1. Except as otherwise provided in paragraph (a) of subsection 3 of NAC 459.95382, the owner or operator shall perform an initial process hazard analysis on a process that is subject to the tier A program or tier B program level 2 or 3.

2. The owner or operator shall conduct the initial process hazard analysis ~~[by June 21, 1999, or]~~ before submission of the assessment report pursuant to NAC 459.9545 **.** ~~[, whichever is later.]~~

3. An owner or operator may use a process hazard analysis that was previously completed to comply with NRS 459.380 to 459.3874, inclusive, or 29 C.F.R. § 1910.119(e) to satisfy the requirement to perform an initial process hazard analysis ~~[.]~~ ***provided that the analysis reflects the current process.***

4. The owner or operator shall obtain the approval of the division concerning the methodology of the process hazard analysis before conducting the analysis.

5. The owner or operator shall select one or more of the following methodologies as required by the complexity of the process:

(a) A "what if" analysis;

(b) A checklist;

(c) A "what if" analysis combined with a checklist;

(d) A hazard and operability study;

(e) A failure mode and effects analysis;

(f) A fault tree analysis; or

(g) An appropriate equivalent methodology.

6. When preparing a process hazard analysis, an owner or operator shall consider:

(a) The hazards of the process;

(b) Any previous incident that had a likely potential for catastrophic consequences, including, without limitation, near misses or accidental releases as described in NAC 459.95378;

(c) The engineering and administrative controls that are applicable to the hazards and their interrelationships, including, without limitation, the appropriate application of detection methodologies such as process monitoring, control instrumentation with alarms or detection hardware;

(d) The consequences of a failure of engineering and administrative controls;

(e) The siting of the facility;

(f) The human factors; and

(g) A qualitative evaluation of a range of the possible safety and health effects of a failure of controls.

7. If not evaluated as part of the process hazard analysis pursuant to subsections 1 to 6, inclusive, a separate, dedicated hazard analysis, utilizing a checklist or other appropriate method, must be conducted to evaluate:

(a) Human factors;

(b) Facility siting; and

(c) External forces.

8. The owner or operator of a facility with a process that is subject to:

(a) The tier A program shall conduct the process hazard analysis with a team:

(1) With expertise in engineering and process operations; and

(2) That satisfies for the process in question the requirements of NAC 459.95472, 459.95474 and 459.95476.

(b) ~~[Tier]~~ ***The tier*** B program level 2 or 3, but not the tier A program, shall conduct the process hazard analysis with a team:

(1) With expertise in engineering and process operations; and

(2) That includes at least:

(I) One member who has experience and knowledge specific to the process being evaluated; and

(II) One member who is knowledgeable in the methodology for the specific process hazard analysis being used.

9. The owner or operator shall:

(a) Promptly evaluate the findings and recommendations of the assessment team;

(b) Determine and document a course of action based on the evaluation;

(c) Develop a written schedule of when the actions are to be completed;

(d) Complete the actions as soon as possible;

(e) Communicate the actions to operating, maintenance and other employees whose work assignments are in the process and who may be affected by the recommendations or actions; and

(f) Schedule the resolution of all recommendations in the P.T.A.H. pursuant to NAC 459.95452.

10. At least once every 5 years after the completion of the initial process hazard analysis, a team that satisfies the requirements of subsection 8 shall update and revalidate the process hazard analysis to ensure that the process hazard analysis is consistent with the current process.

11. A process hazard analysis must be updated and revalidated pursuant to the procedures set forth in NAC 459.9549 to 459.955, inclusive.

12. An owner or operator shall retain a process hazard analysis and an update or revalidation for each process subject to this section, as well as any documented resolution of recommendations described in subsection 9, for the life of the process.

Sec. 46. NAC 459.95418 is hereby amended to read as follows:

459.95418 Except as otherwise provided in paragraph (a) of subsection 3 of NAC 459.95382, the owner or operator of a facility with a process that is subject to the tier A program or tier B program level 2 or 3:

1. Shall, except as otherwise provided in subsection 2, ensure that each employee who is operating a process or will operate a process is trained in an overview of the process and in the operating procedures created pursuant to NAC 459.95416. Such training must include, without limitation, training in:

(a) The layout of the plant;

(b) The location of equipment and instruments;

(c) The specific safety and health hazards;

(d) Emergency operations, including, without limitation, procedures for an emergency shutdown; and

(e) Safe work practices that are applicable to the job tasks of the employee.

2. May, in lieu of providing the training required pursuant to subsection 1, certify in writing that an employee who was operating a process on May 26, 1992, possesses the required knowledge, skills and abilities to ~~[safely]~~ carry out the duties and responsibilities ***safely*** as specified in the operating procedures.

3. Shall provide an employee with refresher training at least once every 3 years, and more often if it is determined after consultation with the employees who operate the process to be necessary, to ensure that the employee understands and adheres to the current operating procedures of the process.

4. May provide employees with any combination of classroom and field training, including, without limitation, on-the-job training. Training must, at a minimum, follow a predefined syllabus or checklist to ensure that each employee receives training which is essential to his job performance. On-the-job training, if it is the only method employed, does not satisfy the requirements of this subsection unless it follows a predefined syllabus or checklist.

5. Shall ascertain that each employee who operates a process has received and understood the training required pursuant to this section.

6. Shall prepare records that include, without limitation:

(a) The identity of the employee;

(b) The date of training;

(c) The substance of the training provided on that date; and

(d) The means used to verify that the employee understood the training ~~[.]~~ ***, including any test records from such verification.***

Sec. 47. NAC 459.9544 is hereby amended to read as follows:

459.9544 1. Except as otherwise provided in subsection 2, the owner or operator of a facility with a process that is subject to the tier A program or tier B program level 2 or 3 shall comply with the requirements of NAC 459.95442.

2. The owner or operator of a facility in which the employees will not respond to an accidental release of a tier A or tier B substance is not required to comply with the provisions of NAC 459.95442 if:

(a) For facilities subject to 29 C.F.R. § 1910, the facility has implemented an emergency action plan that contains the elements set forth in 29 C.F.R. § 1910.38(a);

(b) Appropriate mechanisms are in place to notify emergency responders when there is a need for a response;

(c) For facilities with a substance that is subject to 40 C.F.R. Part 355 and has quantities in excess of the threshold planning quantity, the facility is included in the comprehensive emergency response plan developed pursuant to 42 U.S.C. § 11003; and

(d) ~~[For facilities to which paragraph (c) does not apply, the]~~ ***The*** facility has coordinated response actions with the local fire department.

3. The owner or operator shall ensure that his facility is in compliance with the applicable provisions of this section or NAC 459.95442 at the time he submits the assessment report pursuant to NAC 459.9545.

4. As used in this section, "threshold planning quantity" has the meaning ascribed to it in 40 C.F.R. Part 355.

Sec. 48. NAC 459.95442 is hereby amended to read as follows:

459.95442 1. An owner or operator shall:

(a) Establish and implement an emergency response program to protect employees, public health and the environment, which program must include:

(1) For facilities subject to 29 C.F.R. § 1910, an emergency action plan that contains the elements set forth in 29 C.F.R. § 1910.38(a);

(2) For facilities subject to 29 C.F.R. § 1910, a hazardous materials response program that contains the elements outlined in 29 C.F.R. § 1910.120(q);

(3) Procedures for informing the public and local emergency response agencies about an accidental release;

(4) Documentation of proper first-aid and emergency medical treatment necessary to treat accidental human exposures;

(5) Procedures and measures for emergency response after an accidental release ***;*** ~~[of a tier A or tier B substance;]~~

(6) Procedures for the use, inspection, testing and maintenance of emergency response equipment;

(7) Training for all employees in relevant procedures for emergency response; and

(8) Procedures to review and update, as appropriate, the emergency response ~~[plan]~~ ***program*** to reflect changes at the facility and ensure that employees are informed of changes.

(b) Coordinate the emergency response ~~[plan]~~ ***program*** with the community emergency response plan developed pursuant to 42 U.S.C. § 11003. Upon request of the local emergency planning committee or emergency response officials, the owner or operator shall promptly provide to the local emergency response officials any information that is necessary for developing and implementing the community emergency response ~~[plan.]~~ ***program.***

(c) Review and coordinate the emergency response ~~[plan]~~ ***program*** developed pursuant to paragraphs (a) ~~[or]~~ ***and*** (b) with local emergency responders.

2. A written ~~[plan]~~ ***program*** satisfies the requirements of this section if it:

(a) Complies with other federal contingency plan regulations and the requirements set forth in subsection 1; or

(b) Complies with the requirements set forth in subsection 1 and is consistent with the approach of the National Response Team's Integrated Contingency Plan Guidance set forth in 61 Fed. Reg. 28,642-28,664 and 31,103-31,104 (1996).

Sec. 49. NAC 459.9545 is hereby amended to read as follows:

459.9545 1. The owner or operator of a facility in which ~~[all processes are subject to the tier A program and no process is subject to the tier B program shall submit for each process to a location that the division specifies an assessment report which contains the elements set forth in NAC 459.95452 to 459.95466, inclusive, pursuant to a schedule that is determined by the division considering the summary of the off-site consequence analysis provided with the registration.]~~ ***a new process is subject to:***

(a) The tier A program;

(b) The tier B program level 3; or

(c) The tier B program level 2,

FLUSH ***shall submit an assessment report for the new process in a method and format and to a location specified by the division pursuant to section 20 of this regulation.***

2. The owner or operator of a facility in which ~~[all processes are subject to both the tier A program and]~~ ***a process is subject to the*** tier B program ***, level 1,*** shall submit ~~[for each process]~~

an assessment report ~~[that contains the elements set forth in NAC 459.95452 to 459.95466, inclusive. The assessment report must be submitted in a method]~~ ***for the process in a method*** and format ***and*** to a location ~~[that the division specifies before the latest of:~~

~~(a) June 21, 1999;~~

~~(b) The date on which a substance is first present above a threshold quantity in a process; or~~

~~(c) For a substance that is newly added to NAC 459.9533, a date which the division specifies, not to exceed 3 years after the date on which the substance is added.]~~ ***specified by the division before the owner or operator may:***

(a) Bring a tier B substance on-site at the facility; ~~[or]~~ and

(b) Commence operation of the process.

3. The owner or operator of a facility ~~[in which the processes are subject to a combination of the tier A program and tier B program shall submit the assessment reports as follows:~~

~~(a) For a process that is subject to the tier A program but not the tier B program, the owner or operator shall submit the assessment report pursuant to subsection 1.~~

~~(b) For a process that is subject to the tier B program, or both the tier A program and tier B program, the owner or operator shall submit the assessment report pursuant to subsection 2.]~~ ***who is required to submit an assessment report for a process but who is not subject to subsection 1 or 2 shall submit the assessment report in a manner and format, and to a location, pursuant to the schedule established by the division. The division shall schedule a date for the submission of an assessment report pursuant to this subsection that:***

(a) Does not exceed 3 years if the submission of the assessment report is required because of the addition of a substance to the table set forth in NAC 459.9533; or

(b) Requires the submission of the assessment report before the owner or operator of the facility may bring a tier A substance or tier B substance on-site at the facility or commence any process at the facility using a tier A or tier B substance.

4. An owner or operator shall make subsequent submissions of an assessment report pursuant to NAC 459.95468.

5. Notwithstanding the provisions of NAC 459.95452 to 459.95468, inclusive, an owner or operator may exclude information concerning a trade secret or confidential business information from the assessment report if that information meets the conditions set forth in:

(a) ***The provisions of*** NRS 459.3846, if the process is subject to the tier A program; or

(b) ***The provisions of*** 40 C.F.R. § 2.301, if the process is subject to the tier B program.

6. An owner or operator shall transmit information concerning a trade secret or confidential business information to a location that the division specifies as follows:

(a) An unredacted paper copy of the assessment report must clearly identify each data element that is being claimed as information concerning a trade secret or confidential business information.

(b) A redacted copy of the assessment report must be identical to the unredacted copy of the assessment report except that the owner or operator shall replace each data element, other than the chemical identity, which the owner or operator claims is information concerning a trade secret or confidential business information with the notation “CBI” or a blank field. For chemical identities claimed as CBI, the owner or operator shall substitute a generic category or class name.

(c) The owner or operator shall submit both a redacted and unredacted version of the same document at the time of submission of the assessment report substantiating each claim of information concerning a trade secret or confidential business information.

7. An owner or operator shall not claim the following data as information concerning a trade secret or confidential business information:

(a) The registration data that is described in subsection 2 of NAC 459.95454, except the information in paragraph (h) or (j) of subsection 2 of NAC 459.95454;

(b) The off-site consequence analysis data that is described in subparagraphs (2) and (6) to (10), inclusive, of paragraph (c) of subsection 1 of NAC 459.95456;

(c) The accident history data that is described in NAC 459.95458;

(d) The prevention program data that is described in:

(1) ~~[Subsections]~~ ***The provisions of subsections*** 1 and 3, paragraph (a) of subsection 4 and subsections 5 to 13, inclusive, of NAC 459.9546; and

(2) ~~[Subsections]~~ ***The provisions of subsections*** 1 and 3, paragraph (a) of subsection 4 and subsections 5 to 18, inclusive, of NAC 459.95462; and

(e) The emergency response program data that is described in NAC 459.95464.

Sec. 50. NAC 459.95454 is hereby amended to read as follows:

459.95454 1. An owner or operator shall complete a registration form that addresses all substances handled in any process at his facility and submit it with the assessment report.

2. The registration must include, without limitation:

(a) The name, street, city, county, state, zip code, latitude and longitude of the facility, and the method for obtaining the latitude and longitude;

(b) A description of the location on which the facility sits;

(c) The Dun & Bradstreet number of the facility;

(d) The name and Dun & Bradstreet number of any parent corporation;

(e) The name, telephone number and mailing address of the facility;

(f) The name and title of the person with overall responsibility for the implementation of C.A.P.P.;

(g) The name, title, telephone number during normal business hours and telephone number that is available 24 hours per day of an emergency contact;

(h) For each process:

(1) The name and C.A.S. number of each substance used in the process;

(2) The maximum quantity in pounds of each substance or mixture used in the process to two significant digits;

(3) The applicable N.A.I.C.S. code number; and

(4) The program tiers and program level to which the process is subject;

(i) The identifier ~~[that the]~~ ***assigned by*** United States Environmental Protection Agency ~~[has assigned]~~ ***, if any,*** to the facility;

(j) The number of full-time employees at the facility;

(k) Whether the facility is subject to 29 C.F.R. § 1910.119;

(l) Whether the facility is subject to 40 C.F.R. Part 355;

(m) Whether the facility has an operating permit as required pursuant to 40 C.F.R. Part 70 and, if applicable, the permit number; and

(n) The date of the last safety inspection of the facility by a federal, state or local governmental agency and the identity of the inspecting entity.

Sec. 51. NAC 459.95456 is hereby amended to read as follows:

459.95456 1. An owner or operator shall evaluate off-site consequences pursuant to NAC 459.95362 to 459.95376, inclusive, and submit in the assessment report:

(a) One worst-case release scenario for each process that is subject to the tier B program level 1;

(b) For each process that is subject to either the tier A program or tier B program level 2 or 3:

(1) One worst-case release scenario to represent all substances designated as toxic in NAC 459.9533, or determined to be toxic by the owner or operator, that are held above the threshold quantity;

(2) One worst-case release scenario to represent all substances designated as either flammable or explosive in NAC 459.9533, or determined to be flammable or explosive by the owner or operator, that are held above the threshold quantity; and

(3) One alternative release scenario:

(I) For each substance designated as toxic in NAC 459.9533 that is held above the threshold quantity; and

(II) To represent all substances designated as flammable or explosive that are held above the threshold quantity; and

(c) The following data for each release scenario:

(1) The chemical name of the substances;

(2) A description of the scenario, including, without limitation, whether the scenario involves an explosion, fire, toxic gas release, or liquid spill and vaporization;

(3) The quantity in pounds of the substance that is released ~~[;]~~ ***or involved in a fire or explosion;***

(4) The rate at which the substance is released;

(5) The duration of the release;

(6) The distance to the endpoint;

(7) Public and environmental receptors that are located within the distance to the endpoint;

(8) Any passive mitigation that is considered;

(9) Any active mitigation that has been considered for an alternative release scenario;

(10) If the substance is toxic:

(I) The percentage weight of the substance in a mixture;

(II) The physical state of the substance;

(III) The wind speed and atmospheric stability class used in the scenario; and

(IV) The topography of the geographical area used in the scenario; and

(11) The basis of the results of the scenario, including, without limitation, the name of any model that is used.

2. If the owner or operator is required to submit additional worst-case release scenarios for toxics, flammables or explosives pursuant to NAC 459.95366, he shall provide the information required pursuant to this section.

Sec. 52. NAC 459.95464 is hereby amended to read as follows:

459.95464 An owner or operator shall:

1. Provide in the assessment report:

(a) Whether he has created a written emergency response ~~[plan;]~~ ***program;***

(b) Whether the emergency response ~~[plan]~~ ***program*** includes specific actions to be taken in response to an accidental release ***;*** ~~[of a tier A or tier B substance;]~~

(c) Whether the ~~[plan]~~ ***program*** includes procedures for informing the public and local agencies responsible for responding to accidental releases;

(d) Whether the ~~[plan]~~ ***program*** includes information concerning emergency health care;

(e) The date of the most recent review or update of the emergency response ~~[plan;]~~ ***program;*** and

(f) The date of the most recent emergency response training for employees;

2. Provide the name and telephone number of the local agency with which emergency response activities or the emergency response ~~[plan]~~ ***program*** is coordinated; and

3. List any other federal or state emergency plan requirements to which the facility is subject.

Sec. 53. NAC 459.95468 is hereby amended to read as follows:

459.95468 1. The owner or operator shall review and update the assessment report as specified in subsection 2 and submit it in a method and format to a location that the division specifies.

2. The owner or operator shall review and update the assessment report:

(a) Within 5 years after the initial submission or most recent update of the report, whichever is later;

(b) ~~[After a substance is first listed pursuant to NAC 459.9533, not later than 3 years after the substance is listed or as required by the division, whichever occurs first;~~

~~(c) Not later than the date on which a substance that is listed in NAC 459.9533 is first present above the threshold quantity in a process that is not yet subject to the tier A program or tier B program;~~

~~(d) Not later than the date on which a substance that is listed in NAC 459.9533 is first present above the threshold quantity in a process that is already subject to the tier A program or tier B program;~~

~~(e)]~~ Within 6 months after a change that requires a revised process hazard analysis or hazard review;

~~[(f)]~~ ***(c)*** Within 6 months after a change that requires a revised off-site consequence analysis as set forth in NAC 459.95374; and

~~[(g)]~~ ***(d)*** Within 6 months after a change that changes the tier or program level to which a process is subject.

3. If a facility or single process changes so that it is no longer subject to C.A.P.P., the owner or operator shall submit a revised registration to the division within 6 months after the change indicating that the facility or process is no longer subject to C.A.P.P.

Sec. 54. NAC 459.95476 is hereby amended to read as follows:

459.95476 1. ~~[Pursuant to the schedule set forth in subsection 2, the]~~ ***The*** owner or operator shall submit to the division:

(a) The qualifications of each member of the assessment team in any of the following areas:

(1) Engineering related to chemical processes;

(2) Engineering related to safety;

(3) The preparation of operating procedures;

(4) The preparation or review of procedures for maintenance;

(5) The preparation or review of procedures for safety;

(6) The preparation or review of programs to train operators;

(7) The performance or review of investigations of accidents;

(8) The performance of analyses of hazards;

(9) The performance of risk assessments;

(10) The preparation or review of plans for response to emergencies;

(11) The performance of audits of programs to manage risks; or

(12) The state of the art as it relates to the technology of the processes used;

(b) The résumé for each member of the assessment team;

(c) The qualifications and experience of any additional person who may work with the assessment team;

(d) The expected date of when the assessment will begin and the schedule for performing the assessment;

(e) The estimated number of hours each assessment team member is expected to work on the assessment;

(f) The extent to which the team will use collateral items such as computers, software and outside consultants;

(g) The name, area of expertise and registration number of at least one member of the team who is a professional engineer and is licensed as such in this state;

(h) The name of at least one member of the team who has experience and knowledge specific to the operations or process being evaluated and documentation of such experience;

(i) The name of the member of the team who has been designated as the team leader and documentation that the person has experience as a project or operations manager;

(j) The name of the member of the team who has been designated as the technical leader and documentation that the person has:

(1) Completed training specific to the assessment of chemical hazards; and

(2) Participated in at least three assessments of chemical hazards;

(k) The scope and boundaries of the process and proposed methodology for the process hazard analysis; and

(l) A clear and concise description of how the assessment team will evaluate:

(1) The emergency response program;

(2) Process safety information;

(3) The process hazard analysis;

(4) Standard operating procedures;

(5) Training; and

(6) The maintenance program and procedures.

2. ~~[For a process that is subject to:~~

~~(a) The tier A program but not the tier B program, the owner or operator shall submit the information required pursuant to this section within 60 days after being notified by the division that the assessment report is due.~~

~~(b) The tier A program and tier B program, the~~] ***The*** owner or operator shall submit the information required pursuant to this section before conducting the assessment.

3. The owner or operator shall not conduct the process hazard analysis without first obtaining the approval of the division of the information submitted pursuant to this section.

Sec. 55. NAC 459.95528 is hereby amended to read as follows:

459.95528 The following provisions are hereby adopted by reference:

1. Codes 211112, 32211, 32411, 32511, 325181, 325188, 325192, 325199, 325211, 325311 and 32532 of the 1997 version of the N.A.I.C.S. A copy may be obtained from the National Technical Information Service, 5285 Port Royal Road, Springfield, Virginia 22161, at a cost of $28.50.

2. N.F.P.A. 704, the ***1996 version of the*** *Standard* ~~*[System]*~~ *for the Identification of the* ***Fire*** *Hazards of Materials for Emergency Response*. A copy may be obtained from the National Fire Protection Association, 11 Tracy Drive, Avon, Massachusetts 02322-9908, at a cost of ~~[$18.50.]~~ ***$21.***

3. N.F.P.A. 30, the 1996 version of the *Flammable and Combustible Liquids Code*. A copy may be obtained from the National Fire Protection Association, 11 Tracy Drive, Avon, Massachusetts 02322-9908, at a cost of ~~[$24.75.]~~ ***$28.***

4. ERPG-2 of the *Emergency Response Planning Guidelines Series*. A copy may be obtained from the American Industrial Hygiene Association, 2700 Prosperity Avenue, Suite 250, Fairfax, Virginia 22031, at a cost of $310.

5. *The R.M.P. Off-Site Consequence Analysis Guidance*. A copy may be obtained free of charge from the United States Environmental Protection Agency, P.O. Box 42419, Cincinnati, Ohio 45242-2419.

6. N.F.P.A. 70, the 1996 version of the National Electrical Code. A copy may be obtained from the National Fire Protection Association, 11 Tracy Drive, Avon, Massachusetts 02322-9908, at a cost of $51.50.

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