

**REVISED PROPOSED REGULATION OF THE
STATE ENVIRONMENTAL COMMISSION**

LCB File No. R121-98

December 14, 1998

EXPLANATION – Matter in *italics* is new; matter in brackets [] is material to be omitted.

AUTHORITY: §§2-41, NRS 459.3818 and 459.3833; §42, NRS 459.3818; §§43-46, NRS 459.3818 and 459.3833; §47, NRS 459.3818; §48-97, NRS 459.3818 and 459.3833; §§98-103, NRS 459.3818; §§104-116, NRS 459.3818 and 459.3833; §§117 and 118, NRS 459.3818; §§119, 120 and 121, NRS 459.3818 and 459.3833.

Section 1. Chapter 459 of NAC is hereby amended by adding thereto the provisions set forth as sections 2 to 114, inclusive, of this regulation.

Sec. 2. *“Accidental release” means:*

1. An unintentional discharge from a facility of any amount of a tier A or tier B substance into the air, water or land; or

2. A fire or an explosion at a facility involving a tier A or tier B substance.

Sec. 3. *“Active mitigation” means equipment, devices or technologies that work with human, mechanical or other sources of energy, and function to contain or minimize the consequences of an accidental release.*

Sec. 4. *“Administrative controls” means written procedural mechanisms that are used to control a hazard.*

Sec. 5. *“Assessment report” means the document submitted to the division pursuant to sections 88 to 97, inclusive, of this regulation.*

Sec. 6. *“C.A.P.P.” means the chemical accident prevention program for the State of Nevada and encompasses the provisions of NRS 459.380 to 459.3874, inclusive, NAC 459.952 to 459.9542, inclusive, and sections 2 to 114, inclusive, of this regulation.*

Sec. 7. *“C.A.S.” means the Chemical Abstracts Service.*

Sec. 8. *“Catastrophic release” means a major uncontrolled emission, fire or explosion, involving one or more regulated substances that presents imminent and substantial endangerment to public health and the environment.*

Sec. 9. *“Emergency response program” is a plan that is developed pursuant to sections 85 and 86 of this regulation to respond to emergencies, including, without limitation, an accidental release of a tier A or tier B substance.*

Sec. 10. *“Endpoint” means the toxic concentration, ambient overpressure, radiant heat level or lowest flammable gas concentration achieved at the outer geographical boundary of the off-site consequence analysis.*

Sec. 11. *“Environmental receptor” means:*

- 1. A national or state park, forest or monument;*
- 2. An officially designated wildlife sanctuary, preserve, refuge or area; or*
- 3. A federal wilderness area,*

which can be identified on a local map prepared by the United States Geological Survey and which could be exposed to toxic concentrations, radiant heat or overpressure greater than or equal to the endpoints set forth in section 57 of this regulation as a result of an accidental release.

Sec. 12. *“Facility” means:*

- 1. A stationary source as defined in section 34 of this regulation; or*

2. *A regulated facility as defined in NRS 459.381.*

Sec. 13. *“Field gas” means gas that is extracted from a production well before the gas enters a natural gas processing plant.*

Sec. 14. *“Hazard assessment” means an evaluation of the potential on-site and off-site consequences of an accidental release and the accident history of a facility that an owner or operator develops pursuant to sections 57 to 64, inclusive, of this regulation.*

Sec. 15. *“Hazard review” means the review that is conducted pursuant to section 67 of this regulation.*

Sec. 16. *“Hot work” means work involving electric or gas welding, cutting, brazing, or similar flame-producing or spark-producing operations.*

Sec. 17. *“Injury” means an effect on a human being that:*

1. *Results from:*

(a) *Direct exposure to toxic concentrations, radiant heat or overpressures from an accidental release; or*

(b) *The direct consequences of a vapor cloud explosion from an accidental release, such as flying glass, debris or other projectiles; and*

2. *Requires medical treatment or hospitalization.*

Sec. 18. *“Major change” means the introduction of:*

1. *A new process, new process equipment or a new tier A or tier B substance; or*

2. *An alteration of process chemistry that results in a change to safe operating limits or introduces a new hazard.*

Sec. 19. *“Medical treatment” means treatment, other than first aid, that is administered by a physician or other personnel pursuant to standing orders from a physician.*

Sec. 20. *“Mitigation or mitigation system” means activities, technologies or equipment specifically designed or deployed to capture or control a substance upon loss of containment in order to minimize exposure of the public or the environment.*

Sec. 21. *“N.A.I.C.S.” means the North American Industry Classification System.*

Sec. 22. *“Natural gas processing plant” means a processing site that:*

1. Is engaged in:

(a) The extraction of natural gas liquids from field gas;

(b) The fractionation of mixed natural gas liquids to natural gas products; or

(c) Both extraction and fractionation; and

2. Is classified as N.A.I.C.S. code 211112, which is adopted by reference pursuant to section 114 of this regulation.

Sec. 23. *“N.F.P.A.” means the National Fire Protection Association.*

Sec. 24. *“Off-site” means an area:*

1. Beyond the property boundary of the facility; and

2. Within the property boundary to which the public has routine and unrestricted access during or outside business hours.

Sec. 25. *“Owner or operator” means the person who is responsible for the implementation of C.A.P.P.*

Sec. 26. *“Passive mitigation” means equipment, devices or technologies that work without human, mechanical or other sources of energy, and function to contain or minimize the consequences of an accidental release.*

Sec. 27. *“Prevention program” means procedures and practices that are developed and implemented pursuant to sections 66 to 72, inclusive, or sections 73 to 84, inclusive, of this regulation to:*

- 1. Prevent the 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. 28. *“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. 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. 29. *“Process hazard analysis” means the analysis performed pursuant to section 74 of this regulation.*

Sec. 30. *“Produced water” means water that is:*

- 1. Extracted from the earth from an oil or natural gas production well; or*
- 2. Separated from oil or natural gas after extraction.*

Sec. 31. *“P.T.A.H.” means the plan to abate hazards that is submitted pursuant to section 89 of this regulation.*

Sec. 32. *“Public” means one or more natural persons other than employees or contractors of a facility.*

Sec. 33. *“Public receptor” means an off-site:*

- 1. Residence;*
- 2. Institution such as a school or hospital;*
- 3. Industrial, commercial or office building; or*
- 4. Park or recreational area,*

that is inhabited or occupied by the public without restriction by the facility, in which the public could be exposed as a result of an accidental release to toxic concentrations, radiant heat or overpressure.

Sec. 34. *1. “Stationary source” means buildings, structures, equipment, installations or substances that participate in activities:*

- (a) Which belong to the same industrial group;*
- (b) Which are located on one or more contiguous properties;*
- (c) Which are under the control of the same person; and*
- (d) From which an accidental release may occur.*

Properties are not contiguous for purposes of this subsection solely because of a railroad or gas pipeline right-of-way.

2. The term includes, without limitation, transportation containers that are:

- (a) No longer under active shipping papers; and*
- (b) Connected to equipment described in subsection 1 for temporary storage, loading or unloading.*

3. *The term does not include transportation of, or storage incident to transportation of, a tier A or tier B substance or other extremely hazardous substance pursuant to the provisions of C.A.P.P., if such transportation is regulated pursuant to 49 C.F.R. Part 192, 193 or 195.*

Sec. 35. *“Substance” means a chemical that is listed in the table in section 45 of this regulation.*

Sec. 36. *“Threshold quantity” means the quantity specified in the table in section 45 of this regulation for tier A or tier B substances.*

Sec. 37. *“Tier A substance” means a substance for which an accident prevention program is required pursuant to paragraph (a) of subsection 1 of NRS 459.3813.*

Sec. 38. *“Tier B substance” means a substance for which an accident prevention program is required pursuant to NRS 459.3833.*

Sec. 39. *“Vessel” means a reactor, tank, drum, barrel, cylinder, vat, kettle, boiler, pipe, hose or other container.*

Sec. 40. *“Worst-case release” means 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 section 57 of this regulation.*

Sec. 41. *The owner or operator shall, pursuant to sections 42 to 45, inclusive, of this regulation, determine for each process within the boundary of his facility whether the process is subject to the tier A program or tier B program, or both.*

Sec. 42. *1. Except as otherwise provided in section 102 of this regulation, 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 section 45 of this regulation under the column labeled "Tier A Threshold Quantity"; or

(b) Less than the amount listed in the table in section 45 of this regulation 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 section 45 of this regulation for the substance under the column labeled "Two Release Quantity."

2. If the table in section 45 of this regulation under the column labeled "Tier A Threshold Quantity" is blank, the tier A program does not apply to that substance.

Sec. 43. *1. A process is subject to the tier B program if:*

(a) The process is not exempted pursuant to subsection 1 of NRS 459.3814; and

(b) A substance is present in a quantity equal to or greater than the amount listed in the table in section 45 of this regulation under the column labeled "Tier B Threshold Quantity." If the table in section 45 of this regulation under the column labeled "Tier B Threshold Quantity" is blank, the tier B program does not apply to that substance.

2. The following substances need not be considered when determining whether more than a threshold quantity is present at a facility:

(a) A tier B toxic substance, if the concentration of the substance in a mixture is less than 1 percent by weight of the mixture. Except for oleum, toluene 2, 4-diisocyanate, toluene 2, 6-diisocyanate, and toluene diisocyanate (unspecified isomer), if the concentration of the toxic substance in the mixture is 1 percent or greater by weight of the mixture and the owner or operator demonstrates in writing that the partial pressure of the regulated substance in the mixture under

handling or storage conditions in any portion of the process is less than 10 millimeters of mercury, the amount of the substance in the mixture in that portion of the process need not be considered when determining whether more than a threshold quantity is present at the stationary source. A toxic substance is designated “T” in the table in section 45 of this regulation under the column labeled “Tox (T), Flam (F) or Expl (E).”

(b) Except as otherwise provided in paragraphs (c) and (d), a tier B flammable substance, if the concentration of the substance in a mixture is less than 1 percent by weight of the mixture or the concentration of the tier B flammable substance in the mixture is 1 percent or greater by weight of the mixture and the owner or operator demonstrates in writing that the mixture does not have a flammability hazard rating of 4 as described in §704 of the Standard System for the Identification of the Hazards of Materials for Emergency Response of the N.F.P.A., which is adopted by reference pursuant to section 114 of this regulation. If the concentration of the tier B flammable substance in the mixture is 1 percent or greater by weight of the mixture and the owner or operator does not demonstrate that the mixture does not have a flammability hazard rating of 4, the entire weight of the mixture must be treated as the tier B flammable substance to determine whether a threshold quantity is present at the facility. Boiling and flash point must be defined and determined pursuant to §30 of the 1996 version of the Flammable and Combustible Liquids Code of the N.F.P.A., which is adopted by reference pursuant to section 114 of this regulation. A flammable substance is designated “F” in the table in section 45 of this regulation under the column labeled “Tox (T), Flam (F) or Expl (E).”

(c) Gasoline, if it is distributed or stored for use as fuel for an internal combustion engine.

(d) A naturally occurring hydrocarbon mixture before such a mixture has entered into a natural gas processing plant or a petroleum refining process unit. A naturally occurring hydrocarbon mixture includes any combination of condensate, crude oil, field gas and produced water.

(e) A tier B substance that is contained in an article.

(f) A tier B substance when it is being used:

(1) As a structural component of the facility;

(2) With products for routine janitorial maintenance;

(3) By employees in foods, drugs, cosmetics or other personal items;

(4) In process water or non-contact cooling water drawn from the environment or municipal sources; or

(5) In air as compressed air or as part of combustion.

(g) A tier B substance that is manufactured, processed or used in a laboratory at a facility under the supervision of a technically qualified individual as defined in 40 C.F.R. § 720.3(ee).

This exemption does not apply to:

(1) Specialty chemical production;

(2) Manufacture, processing or use of a tier B substance in pilot plant scale operations; or

(3) Activities conducted outside of the laboratory.

(h) Ammonia, when it is held by farmers and used as an agricultural nutrient.

3. As used in this section:

(a) "Article" means a manufactured item, as defined in 29 C.F.R. § 1910.1200(c), that:

(1) Is formed to a specific shape or design during manufacture;

(2) *Has end use functions dependent in whole or in part upon the shape or design during end use; and*

(3) *Does not release or otherwise result in exposure to a tier A or tier B substance under normal conditions of processing and use.*

(b) *“Condensate” means hydrocarbon liquid separated from natural gas that condenses because of changes in temperature or pressure, or both, and remains liquid at standard conditions.*

(c) *“Crude oil” means a naturally occurring, unrefined petroleum liquid.*

(d) *“Petroleum refining process” means a process that:*

(1) *Is used in an establishment which is primarily engaged in petroleum refining as defined in N.A.I.C.S. code 32411, which is adopted by reference pursuant to section 114 of this regulation; and*

(2) *Is used to:*

(I) *Produce:*

(i) *A transportation fuel such as gasoline, diesel fuel or jet fuel;*

(ii) *A heating fuel such as kerosene, fuel gas distillate or fuel oil; or*

(iii) *A lubricant;*

(II) *Separate petroleum; or*

(III) *Separate, crack, react or reform an intermediate petroleum stream.*

Sec. 44. 1. *If an owner or operator determines pursuant to section 43 of this regulation that a process is subject to the tier B program, he shall determine the program level for the process pursuant to subsections 2, 3 and 4.*

2. *A process is subject to program level 1 if:*

(a) During the 5 years immediately preceding the submission of an assessment report the process has not had an accidental release of a tier B substance pursuant to which exposure to:

- (1) The substance;*
- (2) A reaction product of the substance;*
- (3) Overpressure generated by an explosion involving the substance; or*
- (4) Radiant heat generated by a fire involving the substance,*

resulted in the death of or injury to a person who was located on-site or off-site or in a restoration activity to an environmental receptor;

(b) The distance to a toxic or flammable endpoint for a worst-case release assessment conducted pursuant to section 58 of this regulation is less than the distance to any public receptor;

(c) Emergency response procedures have been coordinated between the facility and local emergency planning and response organizations; and

(d) The process is not subject to the tier A program.

3. A process is subject to program level 2 if the process is subject to the tier B program and is not subject to program level 1 or 3.

4. A process is subject to program level 3 if the process is not subject to program level 1 and:

(a) The process is listed in N.A.I.C.S. code 32211, 32411, 32511, 325181, 325188, 325192, 325199, 325211, 325311 or 32532, which are adopted by reference pursuant to section 114 of this regulation; or

(b) The process is subject to the process safety management standard set forth in 29 C.F.R. § 1910.119.

5. *If a process that involves a tier B substance is no longer required to satisfy the requirements of a particular program level, the owner or operator shall ensure that the process satisfies the requirements of the new program level.*

Sec. 45. *1. Substances that are designated in the table in this section as having a tier A threshold quantity include, without limitation, the substances that are listed in NRS 459.3816.*

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

Sec. 46. *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 sections 50 to 55, inclusive, of this regulation;

2. Pay fees pursuant to NAC 459.9542; and

3. Develop a management system pursuant to section 111 of this regulation.

Sec. 47. *In addition to the requirements set forth in section 46 of this regulation, 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 section 99 of this regulation;

2. Conduct a hazard assessment pursuant to sections 56 to 64, inclusive, of this regulation;

3. Implement a prevention program pursuant to sections 65 and 73 to 84, inclusive, of this regulation;

4. *Implement an emergency response program pursuant to sections 85 and 86 of this regulation;*
5. *Submit assessment reports pursuant to sections 88 to 97, inclusive, of this regulation;*
and
6. *Submit an annual compliance report pursuant to sections 100 and 101 of this regulation.*

Sec. 48. *In addition to the requirements set forth in section 46 of this regulation, the owner or operator of a facility with a process that is subject to the tier B program, but not also subject to the tier A program, shall:*

1. *Determine the program level for the process pursuant to section 44 of this regulation;*
2. *Conduct a hazard assessment pursuant to sections 56 to 64, inclusive, of this regulation;*
3. *Implement a prevention program for each process subject to program level 2 pursuant to sections 65 to 72, inclusive, of this regulation;*
4. *Implement a prevention program for each process subject to program level 3 pursuant to sections 65 and 73 to 84, inclusive, of this regulation;*
5. *Implement an emergency response program pursuant to sections 85 and 86 of this regulation; and*
6. *Submit an assessment report pursuant to sections 88 to 97, inclusive, of this regulation.*

Sec. 49. *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 section*

46 of this regulation and comply with the requirements for a tier A process set forth in section 47 of this regulation, except that:

1. The timing for initial registration must be in accordance with paragraph (b) of subsection 3 of section 50 of this regulation; and

2. The timing for submission of the assessment report must be in accordance with section 88 of this regulation.

Sec. 50. *1. The owner or operator shall:*

(a) Complete annually a single registration form covering all processes, both tier A and tier B; 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 of the current year.

3. Upon 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 sections 50 to 55, inclusive, of this regulation within 10 days of 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 sections 50 to 55, inclusive, of this regulation within 10 days after bringing the substance on-site on or before June 21, 1999; or

(2) Pursuant to sections 87 to 96, inclusive, of this regulation at the start of the process if the process is started after June 21, 1999.

4. If a facility is subject to the provisions of paragraph (b) of subsection 1 of section 42 of this regulation, the owner or operator shall submit the registration pursuant to sections 50 to

55, inclusive, of this regulation not later than 90 days after the provisions of paragraph (b) of subsection 1 of section 42 of this regulation take effect.

5. If the state environmental commission adds a new substance to the table of substances set forth in section 45 of this regulation 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 sections 50 to 55, inclusive, of this regulation.

6. Registration consists of:

(a) Information about the facility as set forth in section 51 of this regulation;

(b) A summary of the off-site consequence analysis as set forth in section 52 of this regulation;

(c) A summary of the 5-year accident history of the facility as set forth in section 53 of this regulation;

(d) A description of the emergency response plan for the facility as set forth in section 54 of this regulation; and

(e) Certification as set forth in section 55 of this regulation.

7. Annual submission of registration pursuant to sections 50 to 55, inclusive, of this regulation satisfies the requirements of subsection 1 of NRS 459.3828 and NRS 459.383.

Sec. 51. *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 or position with overall responsibility for the implementation of C.A.P.P.;*
6. *The name, title, telephone number and a 24-hour telephone number 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 of the current year;*
 - (c) *The N.A.I.S.C. 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 the United States Environmental Protection Agency has assigned 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. 52. *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 flammable substance is required pursuant to section 58 of this regulation, 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;*

(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. 53. *The 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 that is developed pursuant to section 64 of this regulation; and

2. A description of:

(a) Any unanticipated or unusual event at the facility that resulted in the release of a 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 of the substance.

Sec. 54. *The description of the emergency response plan for the facility on the annual registration form must indicate:*

1. Whether there is a written emergency response;

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

3. *Whether the plan includes procedures for informing the public and local agencies responsible for responding to accidental releases;*
 4. *Whether the plan includes information on emergency health care;*
 5. *The date of the most recent review or update of the emergency response plan;*
 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 is coordinated;*
- and*
8. *Other federal or state requirements for the emergency plan to which the facility is subject.*

Sec. 55. *1. If a registration form submitted pursuant to sections 50 to 54, inclusive, of this regulation only reflects processes that are subject to the tier B program level 1, the owner or operator shall include with the registration a certification in substantially the following form:*

Based on the criteria set forth in subsection 2 of section 44 of this regulation, the distance to the specified endpoint for the worst-case accidental release scenario for the following process(es) is less than the distance to the nearest public receptor: [list process(es)].

Within the past 5 years, the process(es) has (have) had no accidental release that caused on-site or off-site impacts.

No additional measures are necessary to prevent off-site impacts caused by accidental releases.

In the event of a fire, explosion or release of a tier A or tier B substance from the process(es), entry within the distance to the specified endpoints may pose a danger to public emergency responders. Therefore, public emergency responders should not enter this area except as arranged with the emergency contact indicated in the assessment report.

The undersigned certifies that, to the best of my knowledge, information and belief, formed after reasonable inquiry, the information submitted is true, accurate and complete.

[Signature, title, date signed]

2. If a registration form submitted pursuant to sections 50 to 54, inclusive, of this regulation does not reflect only processes that are subject to tier B program level 1, the certification must substantially conform to one of the following forms:

(a) I certify under penalty of law that the information provided in this document is true, accurate and complete. I am aware that there are significant civil and criminal penalties for submitting false, inaccurate or incomplete information.

[Signature, title, date signed]

(b) I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attached documents and that, based on my inquiry of the natural persons immediately responsible for obtaining the information, I believe that the submitted information is true, accurate and complete. I am aware that there are significant civil and criminal penalties for submitting false information.

[Signature, title, date signed]

3. The certification must be signed by the sole proprietor of the facility, the highest ranking corporate officer of the facility, a partner at the facility, the manager of the facility or a person designated by one of those persons to sign the certification.

Sec. 56. *1. If all facility processes are subject to the tier A program or tier B program level 2 or 3, the owner or operator shall conduct a hazard assessment pursuant to sections 57 to 64, inclusive, of this regulation.*

2. If a process is subject to tier B program level 1, the owner or operator shall conduct a hazard assessment pursuant to sections 57, 58 and 60 to 64, inclusive, of this regulation.

Sec. 57. *1. An owner or operator shall use the following endpoints when preparing an analysis of off-site consequences:*

- (a) For toxic substances, the toxic endpoints provided in section 45 of this regulation;*
- (b) For flammables and explosives:*

(1) In a scenario that studies the potential effects of an explosion, an overpressure of 1 psi;

(2) In a scenario that studies radiant heat and exposure time, a radiant heat of 5 kw/m² for 40 seconds; or

(3) In a scenario that studies the lower flammability limit, the lower flammability limit provided by the N.F.P.A. or other generally recognized sources; or

(c) If an endpoint is not defined in section 45 of this regulation or a substance is not designated as toxic, flammable or explosive in section 45 of this regulation, the owner or operator shall define an appropriate endpoint. The owner or operator shall define a toxic endpoint in a manner that is comparable to the health impacts defined by ERPG-2 of the Emergency Response Planning Guidelines Series, which is adopted by reference pursuant to section 114 of this regulation, and shall define a flammable or explosive endpoint as set forth in paragraph (b).

2. The owner or operator shall use a wind speed of 1.5 meters per second and an atmospheric stability class of F when preparing the worst-case release analysis, except that, if the owner or operator demonstrates that local meteorological data show a higher minimum wind speed or less stable atmosphere at all times during the previous 3 years, these minimums may be used. For an analysis of an alternative scenario, the owner or operator shall use the typical meteorological conditions.

3. Except as otherwise provided in this subsection, the owner or operator shall use the highest daily maximum temperature during the previous 3 years and the average humidity for the site based on temperature and humidity data gathered on-site or at a local meteorological

station for a worst-case release analysis involving a tier A or tier B toxic substance. A facility using the R.M.P. Off-Site Consequence Analysis Guidance, which is adopted by reference pursuant to section 114 of this regulation, may use 25 °C and 50 percent humidity as values for these variables. For an analysis of an alternative scenario, the owner or operator may use typical temperature and humidity data gathered on-site or at a local meteorological station.

4. The owner or operator shall analyze:

(a) A worst-case release of a tier A or tier B toxic substance assuming a ground level (0 feet) release.

(b) An alternative scenario involving a tier A or tier B toxic substance using the release height that is determined by the release scenario.

5. The owner or operator shall use urban or rural topography for a worst-case release scenario or an alternative scenario, as appropriate. An urban topography has many obstacles, such as buildings and trees, in the immediate area. A rural topography has no buildings in the immediate area and the terrain is generally flat and unobstructed.

6. The owner or operator shall ensure that any table or model used for a dispersion analysis of a tier A or tier B toxic substance appropriately accounts for gas density.

7. For a worst-case release analysis, the owner or operator shall assume that a liquid other than a gas which is liquefied by refrigeration only is released at the highest daily maximum temperature based on data for the previous 3 years appropriate for the facility, or at process temperature, whichever is higher. For an alternative scenario, the owner or operator may assume that the substance is released at a process or ambient temperature which is appropriate for the scenario.

8. *As used in this section, “typical meteorological conditions” means the temperature, wind speed, cloud cover and atmospheric stability class that prevail at the site based on data gathered at or near the site or from a local meteorological station.*

Sec. 58. *1. The owner or operator shall include the data gathered from the worst-case release scenario analysis on the registration form required pursuant to section 50 of this regulation 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 section 114 of this regulation, 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 and tier B program level 2 and 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 section 57 of this regulation;

(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 section 57 of this regulation; 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, the owner or operator shall assume that the release quantity is the greater of:

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

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

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 section 45 of this regulation. If a substance is not described as toxic, flammable or explosive in the table, 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 section 114 of this regulation.

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 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. 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 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 section 114 of this regulation, 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 section 57 of this regulation 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 section 114 of this regulation, 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 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. 59. 1. *The owner or operator shall identify and analyze at least one alternative release scenario for each toxic substance that is used in a process and at least one alternative release scenario to represent all flammable or explosive substances that are used in processes.*

2. *The facility may use the R.M.P. Off-Site Consequence Analysis Guidance, which is adopted by reference pursuant to section 114 of this regulation, to calculate any of the values required in this section.*

3. *For each scenario required pursuant to subsection 1, the owner or operator shall select a scenario that:*

(a) Is more likely to occur than the worst-case release scenario developed pursuant to section 58 of this regulation; and

(b) Will reach an endpoint off-site. If no alternate release scenario will reach an endpoint off-site, then the owner or operator shall select the alternate release scenario with the most significant on-site impact.

4. *The owner or operator shall consider, without limitation and where applicable, scenarios in which:*

(a) A transfer hose releases because of splits or sudden uncoupling of the hose;

(b) Process piping releases because of a failure at a flange, joint, weld, valve and valve seal, drain or bleed;

(c) A process vessel or pump releases because of a crack or a failure of a seal, drain, bleed or plug;

(d) A vessel overfills and spills, or overpressurizes and vents through a relief valve or rupture disk; and

(e) A shipping container is mishandled and thereby breaks or is punctured leading to a spill.

5. *The owner or operator:*

(a) Shall use the appropriate parameters set forth in section 57 of this regulation to determine the distance to the endpoints;

(b) May use:

(1) The methodology provided in the R.M.P. Off-Site Consequence Analysis Guidance, which is adopted by reference pursuant to section 114 of this regulation; or

(2) A commercially or publicly available technique for air dispersion modeling, if the technique accounts for the specified modeling conditions and is recognized in the industry as a current practice; and

(c) 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.

6. The owner or operator may consider active and passive mitigation systems for an alternative release scenario if the mitigation systems are capable of withstanding the event that triggered the release and still function as intended.

7. When selecting the alternative release scenarios, the owner or operator shall consider, without limitation:

(a) The 5-year accident history provided pursuant to section 64 of this regulation; and

(b) The analyses performed pursuant to section 67 or 74 of this regulation.

Sec. 60. *1. The owner or operator shall estimate and include on the registration form and in the assessment report the population within a circle that has its center at the point of the release and a radius that is the equivalent of the distance to the endpoint determined pursuant to section 57 of this regulation. The owner or operator shall also note on the registration form*

and in the assessment report the presence of institutions, such as schools, hospitals, prisons, parks and recreational areas, and major commercial, office and industrial buildings within the circle.

2. The owner or operator may use the R.M.P. Off-Site Consequence Analysis Guidance, which is adopted by reference pursuant to section 114 of this regulation, to calculate the values required in this section.

3. The owner or operator may use the most recent census data or any other updated information to estimate the population potentially affected.

*4. The owner or operator shall estimate the population to two significant digits. **Sec.***

61. *1. The owner or operator shall include on the registration form and in the assessment report the environmental receptors within a circle with its center at the point of the release and a radius that is the equivalent of the distance to the endpoint determined pursuant to section 57 of this regulation.*

2. The facility may use the R.M.P. Off-site Consequence Analysis Guidance, which is adopted by reference pursuant to section 114 of this regulation, to calculate the values required in this section.

3. The owner or operator may rely on information provided on local maps prepared by the United States Geological Survey or on any source containing United States Geological Survey data to identify environmental receptors.

Sec. 62. *1. The owner or operator shall review and update the off-site consequence analyses developed pursuant to sections 57 to 61, inclusive, of this regulation at least once every 5 years.*

2. If there is a change at a facility in a process that involves a substance or the quantity of a substance that is stored or handled at the facility, or if any other change at the facility might reasonably be expected to increase or decrease the distance to the endpoint by a factor of two or more, the owner or operator shall prepare a revised analysis not later than 6 months after the change and prepare and submit a revised assessment report pursuant to section 97 of this regulation.

Sec. 63. *The owner or operator shall maintain at his facility:*

1. For worst-case release scenarios:

(a) A description of the vessel or pipeline and substance that the owner or operator selected as worst-case;

(b) A list of the assumptions and parameters that the owner or operator used, including, without limitation:

(1) A description of any administrative controls and passive mitigation that the owner or operator assumed to limit the quantity of the substance which would be released;

(2) The anticipated effect of the controls and mitigation on the release quantity and rate; and

(3) The reasons why the owner or operator selected these assumptions and parameters.

2. For alternative release scenarios:

(a) A description of the scenarios that the owner or operator identified;

(b) A list of the assumptions and parameters that the owner or operator used, including, without limitation:

(1) A description of any administrative controls and active or passive mitigation that the owner or operator assumed to limit the quantity of the substance which would be released;

(2) The anticipated effect of the controls and mitigation on the release quantity and rate;
and

(3) The reasons why the owner or operator selected these assumptions and parameters.

3. For worst-case scenarios and alternative release scenarios:

(a) Documentation of:

(1) The estimated quantity released, release rate and duration of release;

(2) The methodology that the owner or operator used to determine the distance to the endpoints; and

(3) The data that the owner or operator used to estimate the population and environmental receptors which potentially will be affected; and

(b) Verification that the active and passive mitigation systems are designed to remain functional under the conditions of the release scenarios.

Sec. 64. *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. 65. 1. *The owner or operator of a facility with a process that is subject to tier B program level 1 but not subject to the tier A program is not required to implement a prevention program for that process.*

2. *The owner or operator of a facility with a process that is subject to the tier A program or tier B program level 3 is required to implement a prevention program pursuant to sections 73 to 84, inclusive, of this regulation for that process.*

3. *The owner or operator of a facility with a process that is subject to tier B program level 2 but not subject to the tier A program shall implement a prevention program pursuant to:*

(a) *Sections 66 to 72, inclusive, of this regulation; or*

(b) *Sections 73 to 84, inclusive, of this regulation.*

4. *The owner or operator shall be in compliance with all applicable requirements for the prevention program at the time he submits the assessment report pursuant to section 88 of this regulation.*

Sec. 66. *Except as otherwise provided in paragraph (b) of subsection 3 of section 65 of this regulation, the owner or operator of a facility with a process that is subject to tier B program level 2 shall:*

1. *Compile and maintain the following current safety information related to the tier B program level 2 substances, processes and equipment:*

(a) *Material safety data sheets which satisfy the requirements of 29 C.F.R. § 1910.1200(g);*

(b) The maximum intended inventory of equipment in which the substances are stored or processed;

(c) The safe upper and lower temperatures, pressures, flows and compositions;

(d) The specifications of the equipment; and

(e) The codes and standards used to design, build and operate the process.

2. Ensure that the process is designed in compliance with:

(a) Federal or state regulations which address industry-specific safe design; or

(b) Industry-specific design codes and standards.

3. Update the safety information if a major change occurs which makes the information inaccurate.

Sec. 67. *Except as otherwise provided in paragraph (b) of subsection 3 of section 65 of this regulation, the owner or operator of a facility with a process that is subject to tier B program level 2:*

1. Shall conduct a hazard review associated with tier B program level 2 substances, processes and procedures which identifies:

(a) The specific hazards that are associated with the substance, process or procedure;

(b) Opportunities for equipment malfunctions or human errors that could cause an accidental release;

(c) The safeguards that are used or needed to control the hazards or prevent equipment malfunction or human error; and

(d) Any steps used or needed to detect or monitor releases;

2. *May use checklists developed by persons or organizations which are knowledgeable about the process and equipment as a guide to conducting the review;*
3. *Shall consider previous incidents as described in section 64 of this regulation for the hazard review;*
4. *Shall, for a process that is designed to meet industry standards or federal or state rules of design, inspect all equipment to determine whether the process is designed, fabricated and operated in accordance with the applicable standards or rules;*
5. *Shall document the results of the hazard review and ensure that any problem which is identified is resolved in a timely manner;*
6. *Shall schedule the resolution of any recommendation in the P.T.A.H. pursuant to section 89 of this regulation;*
7. *Shall update the review at least once every 5 years;*
8. *Shall conduct a review whenever a major change in a process occurs; and*
9. *Shall update and revalidate the review pursuant to sections 104 to 109, inclusive, of this regulation.*

Sec. 68. *1. Except as otherwise provided in paragraph (b) of subsection 3 of section 65 of this regulation, the owner or operator of a facility with a process that is subject to tier B program level 2:*

(a) Shall prepare written operating procedures which provide clear instructions or steps for safely conducting activities associated with a process and which are consistent with the safety information for that process.

(b) May use operating procedures or instructions which are:

(1) *Provided by the manufacturers of the equipment; or*

(2) *Developed by a person or organization that is knowledgeable about the process and equipment.*

2. *The procedures must include, without limitation, a description of:*

(a) *Initial startup;*

(b) *Normal operations;*

(c) *Temporary operations;*

(d) *Emergency shutdown and operations;*

(e) *Normal shutdown;*

(f) *Startup following a normal or emergency shutdown or a major change which requires a hazard review;*

(g) *Consequences of deviations and steps required to correct or avoid deviations; and*

(h) *Equipment inspections.*

3. *The owner or operator shall ensure that the operating procedures are updated, if necessary, whenever a major change occurs and before the startup of the changed process.*

Sec. 69. *1. Except as otherwise provided in subsection 2 and paragraph (b) of subsection 3 of section 65 of this regulation, the owner or operator of a facility with a process that is subject to tier B program level 2 shall ensure that each employee who operates or will operate a process has been trained or tested and determined competent in the relevant operating procedures developed pursuant to section 68 of this regulation.*

2. *The owner or operator may certify in writing that an employee who is already operating a process on June 21, 1999, has the required knowledge, skills and abilities to carry out the duties and responsibilities of operating a process set forth in the operating procedures developed pursuant to section 68 of this regulation.*

3. *The owner or operator shall provide an employee who operates a process 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. *The owner or operator may satisfy the requirements of this section by using training that is conducted:*

(a) Pursuant to federal or state regulations;

(b) Pursuant to industry-specific standards or codes; or

(c) By vendors of the equipment used in a process,

if the training satisfies the requirements of this section.

5. *The owner or operator shall ensure that an operator is trained in any updated or new procedure before the startup of a process after a major change.*

Sec. 70. *1. Except as otherwise provided in paragraph (b) of subsection 3 of section 65 of this regulation, the owner or operator of a facility with a process that is subject to tier B program level 2 shall prepare and implement procedures to maintain the ongoing mechanical integrity of the equipment used for a process.*

2. The owner or operator may use as the basis for maintenance procedures instructions that are provided:

- (a) Pursuant to federal or state regulations;*
- (b) Pursuant to industry-specific standards or codes; or*
- (c) By vendors of the equipment used in a process.*

3. The owner or operator shall train or cause to be trained each employee involved in maintaining the ongoing mechanical integrity of a process, including, without limitation, training in:

- (a) The hazards of the process;*
- (b) How to avoid or correct unsafe conditions; and*
- (c) The procedures applicable to the tasks related to the job of the employee.*

4. A maintenance contractor shall ensure that an employee who performs a maintenance procedure on equipment which is used in a process is trained to perform the procedure using the procedures developed pursuant to subsections 1 and 2.

5. The owner or operator shall:

(a) Perform or cause to be performed inspections and tests on equipment that is used in a process at a frequency consistent with:

- (1) Recommendations from the manufacturer;*
- (2) Standards or codes of the industry;*
- (3) Good engineering practice; and*
- (4) Previous experience.*

(b) Ensure that the procedures for inspection and testing adhere to recognized and generally accepted good engineering practices.

Sec. 71. *1. Except as otherwise provided in paragraph (b) of subsection 3 of section 65 of this regulation, the owner or operator of a facility with a process that is subject to tier B program level 2 shall at least once every 3 years certify that he has verified that his facility is in compliance with the provisions of sections 66 to 72, inclusive, of this regulation.*

2. Verification must be conducted by at least one person who is knowledgeable in the process.

3. The owner or operator shall:

(a) Prepare a report of the findings;

(b) Promptly determine and document an appropriate response to each finding of the report;

(c) Document that he has corrected any deficiency; and

(d) Maintain at the facility the two most recent reports of compliance, except that the owner or operator does not need to maintain a report of compliance for more than 5 years.

Sec. 72. *Except as otherwise provided in paragraph (b) of subsection 3 of section 65 of this regulation, the owner or operator of a facility with a process that is subject to tier B program level 2 shall:*

1. Investigate any incident which resulted in, or could reasonably have resulted in, a catastrophic release of a substance;

2. Initiate investigation of the incident as promptly as possible, but not later than 48 hours after the incident;

3. Prepare a summary at the conclusion of the investigation which includes at a minimum:

(a) The date of the incident;

- (b) The date the investigation of the incident began;*
- (c) A description of the incident;*
- (d) The factors which contributed to the incident; and*
- (e) Recommendations resulting from the investigation;*
- 4. Promptly address and resolve the findings and recommendations of the investigation;*
- 5. Document resolutions and corrective actions;*
- 6. Review the findings with the personnel whose job tasks are affected by the findings; and*
- 7. Retain a summary of the investigation for at least 5 years.*

Sec. 73. *1. Except as otherwise provided in paragraph (a) of subsection 3 of section 65 of this regulation, pursuant to the schedule set forth in section 74 of this regulation, 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 compile written information concerning process safety before conducting a process hazard analysis required pursuant to section 74 of this regulation.*

2. The information concerning process safety must include, without limitation, information pertaining to:

- (a) The hazards of the tier A or tier B substances, including, without limitation:*
 - (1) Toxicity information;*
 - (2) Permissible exposure limits;*
 - (3) Physical data;*
 - (4) Reactivity data;*
 - (5) Corrosivity data;*
 - (6) Thermal and chemical stability data; and*

(7) The foreseeable hazardous effects of inadvertent mixing of different materials.

Material safety data sheets that satisfy the requirements of 29 C.F.R. § 1910.1200(g) may be used to comply with this requirement to the extent they contain the information required by this paragraph.

(b) The technology of the process, including, without limitation:

(1) A block flow diagram or simplified process flow diagram;

(2) The process chemistry;

(3) The maximum intended inventory;

(4) The safe upper and lower limits for any applicable process variable, including, without limitation, temperature, pressure, flow and composition; and

(5) An evaluation of the consequences of deviations.

If the original technical information no longer exists, such information may be developed in conjunction with the process hazard analysis in sufficient detail to support the analysis.

(c) The equipment in the process, including, without limitation:

(1) The materials of construction;

(2) Piping and instrument diagrams;

(3) Electrical classification;

(4) The design of the relief system and the basis for the design;

(5) The design of the ventilation system;

(6) Design codes and standards that were employed;

(7) The material and energy balances for processes that were built after May 26, 1992;

and

(8) The safety systems, such as interlocks, detection or suppression systems.

3. The owner or operator shall evaluate processes and equipment for conformance to applicable codes, standards and good engineering practices and document that the processes and equipment comply with recognized and generally accepted good engineering practices.

4. For existing processes and equipment designed and constructed in accordance with codes, standards or practices that are no longer in general use, the owner or operator shall determine and document that the equipment is designed, maintained, inspected, tested and operating in a safe manner.

Sec. 74. *1. Except as otherwise provided in paragraph (a) of subsection 3 of section 65 of this regulation, 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 determine and document the priority for conducting process hazard analyses based on the following considerations:

- (a) The extent of the process hazards;*
- (b) The number of potentially affected employees;*
- (c) The age of the process; and*
- (d) The operating history of the process.*

3. The owner or operator shall conduct the initial process hazard analysis for processes that are subject to:

- (a) The tier A program as scheduled by the division, but not later than June 21, 1999; and*
- (b) Tier B program level 2 or 3 as soon as possible, but not later than June 21, 1999.*

4. *An owner or operator may submit 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 submit an initial process hazards analysis.*

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

6. *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.*

7. *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 section 64 of this regulation;

(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.

8. If not evaluated as part of the process hazard analysis pursuant to subsections 1 to 7, 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.

9. 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;

(2) That satisfies for the process in question the requirements of sections 98 and 99 of this regulation and NAC 459.9536.

(b) Tier B program level 2 or 3 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.

10. 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 section 89 of this regulation.

11. At least once every 5 years after the completion of the initial process hazard analysis, a team that satisfies the requirements of subsection 9 shall update and revalidate the process hazard analysis to ensure that the process hazard analysis is consistent with the current process.

12. A process hazard analysis must be updated and revalidated pursuant to the procedures set forth in sections 104 to 109, inclusive, of this regulation.

13. Notwithstanding the provisions of NAC 459.953, an owner or operator shall retain a process hazards analysis and an update or revalidation for each process subject to this section,

as well as any documented resolution of recommendations described in subsection 10, for the life of the process.

Sec. 75. *1. Except as otherwise provided in paragraph (a) of subsection 3 of section 65 of this regulation, 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 develop and implement written operating procedures for that process which:*

(a) Are consistent with the process safety information developed pursuant to section 73 of this regulation; and

(b) Provide clear instructions for safely conducting such a process.

2. The operating procedures must include:

(a) Steps for each operating phase, including, without limitation, steps for:

(1) The initial startup;

(2) Normal operations;

(3) Temporary operations;

(4) An emergency shutdown, including, without limitation, a description of the conditions under which an emergency shutdown is required and the assignment of responsibility for a shutdown to a qualified operator;

(5) Emergency operations;

(6) A normal shutdown; and

(7) Startup following a turnaround or an emergency shutdown.

(b) Operating limits, including, without limitation:

(1) The consequences of a deviation; and

(2) The steps required to correct or avoid a deviation.

(c) Safety and health considerations, including, without limitation:

(1) The properties of, and hazards presented by, the chemicals used in the process;

(2) The precautions that are necessary to prevent exposure, including, without limitation, engineering controls, administrative controls and personal protective equipment;

(3) Control measures to be taken if physical contact or airborne exposure occurs;

(4) Quality control for raw materials;

(5) Control of hazardous chemical inventory levels; and

(6) Any special or unique hazards.

(d) A description of the safety systems and their functions.

3. The owner or operator shall:

(a) Ensure that the operating procedures are readily accessible to employees who work in or maintain an applicable process;

(b) Review the operating procedures as often as necessary to ensure that they reflect current operating practice, including, without limitation, any change to a process that may result from a change in process chemicals, technology or equipment;

(c) Certify annually that the operating procedures are current and accurate; and

(d) Develop and implement safe work practices for employees and contractors to provide for the control of:

(1) Hazards during a lockout or tagout;

(2) Hazards during a confined space entry;

(3) Hazards while opening the equipment or piping associated with a process;

(4) Entrance into the facility by maintenance, contractor, laboratory or other support personnel; and

(5) Any other hazards that may be encountered.

Sec. 76. *Except as otherwise provided in paragraph (a) of subsection 3 of section 65 of this regulation, 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 section 75 of this regulation. 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 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.

Sec. 77. *1. Except as otherwise provided in paragraph (a) of subsection 3 of section 65 of this regulation, the owner or operator of a facility with a process subject to the tier A program or tier B program level 2 or 3 shall:*

(a) Establish and implement written procedures to ensure the ongoing integrity of the equipment listed in subsection 2;

(b) Provide each employee who is involved in maintaining the ongoing integrity of the equipment listed in subsection 2 with:

(1) An overview of the process that uses the equipment and the potential hazards of the process; and

(2) Training in the procedures that are applicable to the job tasks of the employee to ensure that the employee can perform the job tasks in a safe manner;

(c) Perform inspections and tests on process equipment listed in subsection 2;

(d) Ensure that the procedures for inspection and testing follow recognized and generally accepted good engineering practices;

(e) Ensure that the inspections and tests of the equipment are performed:

(1) In the frequency required by good engineering practices and consistent with any applicable recommendations from the manufacturer of the equipment; or

(2) More frequently if determined to be necessary by previous experience in operating the equipment;

(f) Document each inspection and test that has been performed on the equipment, including, without limitation, documentation of:

(1) The date of the inspection or test;

(2) The name of the person who performed the inspection or test;

(3) The serial number or other identifier of the equipment on which the inspection or test was performed;

(4) A description of the inspection or test performed; and

(5) The results of the inspection or test;

(g) Correct any deficiencies in the equipment that are outside the acceptable limits which are described by the process safety information developed pursuant to section 73 of this regulation before using the equipment again;

(h) In the construction of new processes and equipment, ensure that the equipment, as fabricated, is suitable for the process for which it will be used;

(i) Perform appropriate checks and inspections to ensure that equipment is installed properly and consistent with design specifications and instructions from the manufacturer; and

(j) Ensure that maintenance materials, spare parts and equipment are suitable for the process for which they will be used.

2. This section applies to:

(a) Pressure vessels and storage tanks;

(b) Piping systems, including, without limitation, piping components such as valves;

(c) Relief and vent systems and devices;

(d) Emergency shutdown systems;

(e) Controls, including, without limitation, monitoring devices and sensors, alarms and interlocks; and

(f) Rotating equipment.

Sec. 78. *1. Except as otherwise provided in paragraph (a) of subsection 3 of section 65 of this regulation, 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:*

(a) Establish and implement written procedures to manage changes, other than a replacement in kind, to:

(1) Chemicals, technology, equipment and procedures that are used in a process; and

(2) A process that is subject to the tier A program or tier B program level 2 or 3;

(b) Ensure that the procedures established pursuant to paragraph (a) require that the following considerations are addressed before one of the changes listed in paragraph (a) occurs:

(1) The technical basis for the proposed change;

(2) The impact of change on safety and health;

(3) Whether any modifications to operating procedures will be necessary;

(4) The time necessary to make the proposed change; and

(5) The requirements for authorization for the elements of the proposed change;

(c) Inform and train for the change any employee who is involved in the operation of the process that is affected by the change and any maintenance or contract employee whose job tasks will be affected by the change before the startup of the process or of the affected part of the process; and

(d) Update:

(1) The process safety information required pursuant to section 73 of this regulation; and

(2) The operating procedures or practices required pursuant to section 75 of this regulation.

2. As used in this section, “replacement in kind” means a replacement of equipment, instruments, procedures, raw material and processing conditions that satisfy the design specifications.

Sec. 79. *1. Except as otherwise provided in paragraph (a) of subsection 3 of section 65 of this regulation, 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 perform a pre-startup safety review for new facilities and for modified facilities when the modification is significant enough to require a change in the process safety information.*

2. A pre-startup safety review must confirm that before a substance is introduced into a process which is subject to the tier A program or tier B program level 2 or 3:

(a) Construction and equipment is in accordance with design specifications;

(b) Safety, operating, maintenance and emergency procedures are in place and are adequate;

(c) For new or modified facilities, a process hazard analysis has been performed and recommendations have been resolved or implemented before startup;

(d) Modified facilities meet the requirements concerning the management of changes set forth in section 78 of this regulation; and

(e) Training of each employee involved in operating the process has been completed.

Sec. 80. *1. Except as otherwise provided in paragraph (a) of subsection 3 of section 65 of this regulation, 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:*

(a) Certify at least once every 3 years that an evaluation has been performed of whether adequate procedures and practices as required pursuant to sections 73 to 84, inclusive, of this regulation have been developed and implemented;

(b) Create a report of the findings of the evaluation made pursuant to paragraph (a);

(c) Promptly determine and document an appropriate response to any deficiency that is discovered during the evaluation;

(d) Document that any deficiency discovered during the evaluation has been corrected; and

(e) Retain the two most recent reports.

2. The evaluation must be conducted by at least one person who is knowledgeable in the process.

Sec. 81. *Except as otherwise provided in paragraph (a) of subsection 3 of section 65 of this regulation, 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:*

1. Investigate any incident that resulted in, or could reasonably have resulted in, a catastrophic release of a substance;

2. Initiate the investigation of the incident as promptly as possible, but not later than 48 hours after the incident;

3. Establish a team to investigate the incident that consists of:

(a) At least one person who is knowledgeable in the process involved, including, without limitation, a contract employee if his work was involved in the incident; and

(b) Any other person who possesses appropriate knowledge and experience to investigate and analyze the incident thoroughly;

4. Prepare an incident report at the conclusion of the investigation which must include, at a minimum:

(a) The date of the incident;

(b) The date the investigation of the incident began;

(c) A description of the incident;

(d) The factors that contributed to the incident; and

(e) Recommendations resulting from the investigation;

5. Establish a system to address and resolve the findings and recommendations of the incident report promptly;

6. Document any solutions and corrective actions taken;

7. Ensure that the incident report is reviewed with all affected personnel whose job tasks are relevant to the findings of the incident report, including, without limitation, contract employees where applicable; and

8. Retain the incident report for 5 years.

Sec. 82. *Except as otherwise provided in paragraph (a) of subsection 3 of section 65 of this regulation, 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:*

1. Develop a written plan of action regarding the implementation of the employee participation required by this section;

2. Consult with employees and their representatives about:

(a) Conducting and developing process hazards analyses; and

(b) Developing and implementing the other requirements of sections 73 to 84, inclusive, of this regulation; and

3. Provide to employees and their representatives access to process hazard analyses and other information which is developed pursuant to sections 73 to 84, inclusive, of this regulation.

Sec. 83. *Except as otherwise provided in paragraph (a) of subsection 3 of section 65 of this regulation, 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:*

1. Issue a hot work permit for hot work conducted on or near a process;

2. Document in the permit:

(a) That the fire prevention and protection requirements in 29 C.F.R. § 1910.252(a) are implemented before beginning hot work;

(b) The dates which are authorized for hot work; and

(c) The object on which hot work is to be performed; and

3. Keep the permit on file until completion of the hot work.

Sec. 84. *1. Except as otherwise provided in paragraph (a) of subsection 3 of section 65 of this regulation, 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:*

(a) When selecting a contractor, obtain and evaluate information regarding the safety performance and programs of the contractor;

(b) Inform the contractor of known potential fire, explosion or toxic release hazards related to the work of the contractor and to the process on which he working;

(c) Explain to the contractor the applicable provisions of sections 85 and 86 of this regulation;

(d) Develop and implement safe work practices consistent with section 75 of this regulation;
and

(e) Periodically evaluate the performance of the contractor in satisfying the requirements of subsection 2.

2. The contractor shall:

(a) Ensure that each of his employees who will work on the process is trained in the work practices necessary to perform his job safely;

(b) Ensure that each of his employees who will work on the process is instructed in:

(1) The known potential fire, explosion or toxic release hazards related to his job and the process on which he is working; and

(2) The applicable provisions of the emergency action plan;

(c) Document that each of his employees who will work on the process has received and understood the training required pursuant to this subsection;

(d) Prepare a record that contains:

(1) The identity of the employee;

(2) The date of training; and

(3) The means used to verify that the employee understood the training;

(e) Ensure that each of his employees who works on the process follows the safety rules of the facility, including, without limitation, the safe work practices required pursuant to section 75 of this regulation; and

(f) Advise the owner or operator of any unique hazards presented by or found during the work of an employee.

3. This section:

(a) Applies to contractors who perform maintenance or repair, turnaround, major renovation, or specialty work on or adjacent to a process.

(b) Does not apply to contractors who provide incidental services that do not influence process safety, including, without limitation, janitorial work, food and drink services, laundry, delivery or other supply services.

Sec. 85. *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 section 86 of this regulation.*

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 section 86 of this regulation if:

(a) 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 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 section 86 of this regulation at the time he submits the assessment report pursuant to section 88 of this regulation.*

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

Sec. 86. *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) An emergency action plan that contains the elements set forth in 29 C.F.R. § 1910.38(a);

(2) 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; and

(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 to reflect changes at the facility and ensure that employees are informed of changes.

(b) Coordinate the emergency response plan 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.

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

2. A written plan 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. 87. *An owner or operator satisfies the requirement of preparing and submitting to the division a written report of the assessment of a risk through analysis of the hazard pursuant to NRS 459.3846 if he prepares and submits to the division an assessment report pursuant to sections 88 to 97, inclusive, of this regulation.*

Sec. 88. *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 sections 89 to 96, inclusive, of this regulation, pursuant to a schedule that is determined by the division considering the summary of the off-site consequence analysis provided with the registration.

2. The owner or operator of a facility in which all processes are subject to both the tier A program and tier B program shall submit for each process an assessment report that contains the elements set forth in sections 89 to 96, inclusive, of this regulation. The assessment report must be submitted in a method and format 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 section 45 of this regulation, a date which the division specifies not to exceed 3 years after the date on which the substance is added.

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.

4. An owner or operator shall make subsequent submissions of an assessment report pursuant to section 97 of this regulation.

5. *Notwithstanding the provisions of sections 89 to 97, inclusive, of this regulation, 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) NRS 459.3846, if the process is subject to the tier A program; or

(b) 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 section 90 of this regulation;

(b) The off-site consequence analysis data that is described in paragraph (c) of subsection 1 of section 91 of this regulation;

(c) The accident history data that is described in section 92 of this regulation;

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

(1) Subsections 1 and 3, paragraph (a) of subsection 4 and subsections 5 to 13, inclusive, of section 93 of this regulation; and

(2) Subsections 1 and 3, paragraph (a) of subsection 4 and subsections 5 to 18, inclusive, of section 94 of this regulation; and

(e) The emergency response program data that is described in section 95 of this regulation.

Sec. 89. *1. Except as otherwise provided in subsection 5, an owner or operator shall provide, in the assessment report, an executive summary that includes, without limitation, a brief description of:*

(a) The policies for accidental release prevention and the policies for emergency response at the facility;

(b) The substances that are handled at the facility;

(c) Each worst-case release scenario and alternative release scenario, including, without limitation, administrative controls and mitigation measures taken to limit the distances to the endpoint for each scenario;

(d) The accidental release prevention program and chemical-specific steps for prevention;

(e) The 5-year accident history;

(f) The emergency response program;

(g) Any planned changes to improve safety; and

(h) A P.T.A.H., if the facility has a process that is subject to the tier A program and tier B program level 2 or 3.

2. Recommendations that are made pursuant to a hazard review or process hazard analysis to minimize the likelihood of a release, fire or explosion, or to mitigate the effects of a release, fire or explosion involving a tier A or tier B substance, which has the potential for acute health impacts on employees or the public must be described in the P.T.A.H. as set forth in subsection 4.

3. Each prevention program element and emergency response element must be evaluated for compliance with sections 65 to 86, inclusive, of this regulation. Recommendations made to enhance these elements, or to correct deficiencies, must be described in the P.T.A.H. as set forth in subsection 4.

4. For each recommendation made pursuant to subsections 2 and 3, the owner or operator shall provide:

- (a) A description of the hazard;*
- (b) The cause of the hazard;*
- (c) Consequences of the hazard;*
- (d) A description of the recommendation; and*
- (e) The implementation date for the recommendation.*

Sec. 90. *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 and 24-hour telephone number 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 United States Environmental Protection Agency has assigned 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. 91. 1. *An owner or operator shall evaluate off-site consequences pursuant to sections 56 to 63, inclusive, of this regulation and submit in the assessment report:*

(a) One worst-case release scenario for each process that is subject to 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 section 45 of this regulation, 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 section 45 of this regulation, 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 section 45 of this regulation 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;*
 - (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 section 58 of this regulation, he shall provide the information required pursuant to this section.*

Sec. 92. *An owner or operator shall submit in the assessment report the 5-year accident history created pursuant to section 64 of this regulation.*

Sec. 93. *For each process that is subject to tier B program level 2 for which a separate hazard analysis review was conducted, the owner or operator shall provide in the assessment report:*

- 1. The applicable N.A.I.C.S. code for the process;*
- 2. The name of any chemical that was addressed in the analysis;*
- 3. The date of the most recent review or revision of the safety information and a list of federal or state regulations or industry-specific design codes and standards used to demonstrate compliance with the safety information requirement;*
- 4. The date of completion of the most recent hazard review or update, including, without limitation:*
 - (a) The expected date of completion of changes resulting from the hazard review;*
 - (b) A list of the major hazards identified;*
 - (c) A list of the process controls in use;*
 - (d) A list of the mitigation systems in use;*
 - (e) A list of the monitoring and detection systems in use; and*
 - (f) Changes since the last hazard review;*
- 5. The date of the most recent review or revision of the operating procedures;*
- 6. The date of the most recent review or revision of the training programs;*
- 7. Whether the training occurred in a classroom, in a classroom and while on the job, or only while on the job;*

8. *The type of any competency testing that was used;*
9. *The date of the most recent review or revision of the maintenance procedures;*
10. *The date of the most recent inspection or test of the equipment and a list of the equipment that was inspected or tested;*
11. *The date of the most recent compliance audit and the expected date of completion of changes resulting from the compliance audit;*
12. *The date of the most recent incident investigation and the expected date of completion of changes resulting from the investigation; and*
13. *The date of the most recent change that triggered a review or revision of safety information, the hazard review, operating or maintenance procedures, or training.*

Sec. 94. *For each process that is subject to the tier A program and tier B program level 3 for which a separate process hazard analysis was conducted, the owner or operator shall provide:*

1. *The applicable N.A.I.C.S. code for the process;*
2. *The name of any chemical that was addressed in the analysis;*
3. *The date on which the safety information was last reviewed or revised;*
4. *The date of completion of the most recent process hazard analysis or update and the technique used, including, without limitation:*
 - (a) *The expected date of completion of changes resulting from the process hazard analysis;*
 - (b) *A summary of major hazards that were identified;*
 - (c) *A summary of process controls that are in use;*
 - (d) *A summary of mitigation systems that are in use;*

- (e) A summary of monitoring and detection systems that are in use; and*
- (f) A summary of changes that have been made since the last process hazard analysis;*
- 5. The date of the most recent review or revision of the operating procedures;*
- 6. The date of the most recent review or revision of the training programs;*
- 7. Whether the training occurred in a classroom, in a classroom and while on the job, or only while on the job;*
- 8. The type of competency testing that was used;*
- 9. The date of the most recent review or revision of the maintenance procedures;*
- 10. The date of the most recent inspection or test of the equipment and a list of the equipment that was inspected or tested;*
- 11. The date of the most recent change that triggered management of change procedures and the date of the most recent review or revision of management of change procedures;*
- 12. The date of the most recent pre-startup review;*
- 13. The date of the most recent compliance audit, required pursuant to section 80 of this regulation, and the expected date of completion of changes resulting from the compliance audit;*
- 14. The date of the most recent incident investigation and the expected date of completion of changes resulting from the investigation;*
- 15. The date of the most recent review or revision of the employee participation plans;*
- 16. The date of the most recent review or revision of the hot work permit procedures;*
- 17. The date of the most recent review or revision of the contractor safety procedures; and*
- 18. The date of the most recent evaluation of contractor safety performance.*

Sec. 95. *An owner or operator shall:*

1. Provide in the assessment report:

(a) Whether he has created a written emergency response plan;

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

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

(d) Whether the plan includes information concerning emergency health care;

(e) The date of the most recent review or update of the emergency response plan; 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 is coordinated; and

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

Sec. 96. *1. For a program that is subject to tier B program level 1, the owner or operator shall include in the assessment report a certification in substantially the following form:*

Based on the criteria set forth in subsection 2 of section 44 of this regulation, the distance to the specified endpoint for the worst-case accidental release scenario for the following process(es) is (are) less than the distance to the nearest public receptor: [list process(es)].

Within the past 5 years, the process(es) has (have) had no accidental release that caused on-site or off-site impacts.

No additional measures are necessary to prevent off-site impacts caused by accidental releases.

In the event of a fire, explosion or release of a tier A or tier B substance from the process(es), entry within the distance to the specified endpoints may pose a danger to public emergency responders. Therefore, public emergency responders should not enter this area except as arranged with the emergency contact indicated in the assessment report.

The undersigned certifies that, to the best of my knowledge, information and belief, formed after reasonable inquiry, the information submitted is true, accurate and complete.

[Signature, title, date signed]

2. For an assessment report submitted pursuant to sections 87 to 95, inclusive, of this regulation to which subsection 1 of this section does not apply, the certification must substantially conform to one of the following forms:

(a) I certify under penalty of law that the information provided in this document is true, accurate and complete. I am aware that there are significant civil and criminal penalties for submitting false, inaccurate or incomplete information.

[Signature, title, date signed]

(b) I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attached documents and that based on my inquiry of the natural persons immediately responsible for obtaining the information, I believe that the submitted information is true, accurate and complete. I am aware that there are significant civil and criminal penalties for submitting false information.

[Signature, title, date signed]

3. The certification must be signed by the sole proprietor of the facility, the highest ranking corporate officer of the facility, a partner at the facility, the manager of the facility or a person designated by one of those persons to sign the certification.

Sec. 97. *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 section 45 of this regulation, 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 section 45 of this regulation 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 section 45 of this regulation 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) Within 6 months after a change that requires a revised off-site consequence analysis as set forth in section 62 of this regulation; and*
- (g) 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. 98. *1. The entire assessment team shall:*

- (a) Actively participate in the work sessions for the process hazard analysis and the review of the report of the process hazard analysis;*

(b) Review and approve the content of the assessment report and P.T.A.H.; and

(c) Review the findings or recommendations that result from an audit performed pursuant to subsection 2 and may revise the findings and recommendations.

2. Individual members of the assessment team may audit select elements of the prevention program and emergency response program.

Sec. 99. *1. Pursuant to the schedule set forth in subsection 2, 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 resume 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;*
- (6) The maintenance program and procedures; and*
- (7) The emergency response program.*

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 owner or operator shall submit the information required pursuant to this section before conducting the assessment.

Sec. 100. *Within 30 days after each anniversary of the date on which the P.T.A.H. was adopted, the owner or operator shall submit a report of compliance for any process that is subject to the tier A program.*

Sec. 101. *The annual report of compliance required pursuant to section 100 of this regulation must include, without limitation:*

- 1. Each P.T.A.H. recommendation listed in the assessment report that is made for a process which is subject to the tier A program;*
- 2. The date on which implementation of the P.T.A.H. recommendations are due;*
- 3. The status of implementation of the P.T.A.H. recommendations;*

4. *Comments by the owner or operator on the status of implementation of each P.T.A.H. recommendation;*

5. *Any efforts that were undertaken by the owner or operator during the previous calendar year to assess and reduce risks related to tier A substances;*

6. *Any changes in maintenance schedules and activities and any unanticipated maintenance on critical equipment or safety controls related to tier A substances that was conducted at the facility during the previous calendar year;*

7. *Any efforts undertaken by the facility to assess and remedy the release of any quantity of a tier A substance; and*

8. *A certification as set forth in subsection 2 of section 96 of this regulation.*

Sec. 102. *1. A process that is otherwise subject to C.A.P.P. pursuant to paragraph (b) of subsection 1 of section 42 of this regulation is not subject to C.A.P.P. if:*

(a) Two or more years have elapsed since the division received the assessment report;

(b) The owner or operator has complied with all relevant requirements of C.A.P.P. in the past;

(c) The recommendations from the P.T.A.H. developed pursuant to NRS 459.3852 are verified by the division to be complete; and

(d) The state environmental commission has granted the exemption pursuant to section 103 of this regulation.

2. The division shall require continued compliance with C.A.P.P. until the P.T.A.H. is completed and the state environmental commission has granted the exemption pursuant to section 103 of this regulation.

Sec. 103. *1. In order to be granted an exemption by the state environmental commission from C.A.P.P., the owner or operator of a facility with a process that is subject to C.A.P.P. pursuant to paragraph (b) of subsection 1 of section 42 of this regulation must submit:*

(a) A written letter to the division requesting exemption from C.A.P.P.; and

(b) The most recent annual report of compliance, indicating that all measures of the P.T.A.H. have been completed.

2. Not later than 60 calendar days after the division receives the letter and report submitted to it pursuant to subsection 1, the division shall verify that all measures of the P.T.A.H. have been completed.

3. Not later than 90 calendar days after the division receives the letter and report submitted to it pursuant to subsection 1, the division shall:

(a) Document its findings concerning its investigation into whether all measures of the P.T.A.H. have been completed; and

(b) Notify the owner or operator in writing whether the division has found that all measures of the P.T.A.H. have been completed.

4. Once the owner or operator has received notice that the division has found that all measures of the P.T.A.H. have been completed, he may petition the state environmental commission to become exempt from C.A.P.P. by filing with the secretary of the state environmental commission:

(a) A letter requesting exemption from C.A.P.P.; and

(b) A copy of the findings of the division made pursuant to subsection 3.

5. *Upon receiving the letter and findings from an owner or operator pursuant to subsection 4, the secretary of the state environmental commission shall:*

(a) Schedule a review of the petition at the next meeting of the state environmental commission; and

(b) Notify the public by publication and the use of public-service announcements of the petition.

6. *At the hearing, the state environmental commission will consider the following to determine whether it will grant the petition:*

(a) Whether the causes of any releases have been adequately mitigated to prevent future releases;

(b) Whether the facility has an adequate program in place to maintain the accident prevention program established pursuant to C.A.P.P.;

(c) Whether the division believes that the exemption should be granted; and

(d) Whether the facility has had an accidental release since becoming subject to C.A.P.P.

7. *If the state environmental commission:*

(a) Grants the exemption, the exemption will become effective on the day following the hearing.

(b) Does not grant the exemption, the commission will provide the owner or operator with an explanation of why the commission denied the exemption.

8. *The owner or operator may reapply for the exemption at any time.*

Sec. 104. *1. The revalidation of a process hazard analysis that is required pursuant to section 74 of this regulation must:*

(a) Confirm pursuant to sections 106 to 109, inclusive, of this regulation that the analysis or review is valid for the current process; and

(b) Satisfy the requirements of section 74 of this regulation.

2. The owner or operator may perform a new process hazard analysis in lieu of revalidating a previous analysis, if:

(a) The process hazard analysis satisfies the requirements of section 74 of this regulation; and

(b) All the supporting information, including, without limitation, the process safety information, operating procedures, training program, mechanical integrity program and emergency response program reflect current operations.

Sec. 105. *1. The revalidation of a hazard review that is required pursuant to section 67 of this regulation must:*

(a) Confirm pursuant to sections 107 to 109, inclusive, of this regulation that the analysis or review is valid for the current process; and

(b) Satisfy the requirements of section 67 of this regulation.

2. The owner or operator may perform a new hazard review in lieu of revalidating a previous review, if:

(a) The hazard review satisfies the requirements of section 67 of this regulation; and

(b) All the supporting information, including, without limitation, the safety information, operating procedures, training program, maintenance program and emergency response program reflect current operations.

Sec. 106. *Revalidation of a facility with a process that is subject to the tier A program must be conducted by an assessment team.*

Sec. 107. *If process safety information or a change in process safety information was subject to a process hazard analysis or hazard review, the owner or operator is not required to revalidate the analysis or review if the analysis or review reflects the current process.*

Sec. 108. *1. A revalidated process hazard analysis or hazard review must reflect current operating procedures, training programs, maintenance programs and emergency response programs.*

2. If a change in operating procedures, training programs, maintenance programs and emergency response programs was subject to a process hazard analysis or hazard review, the owner or operator is not required to revalidate the analysis or review if the analysis or review reflects the current procedures and programs.

Sec. 109. *1. All incidents that had the potential for, or actually resulted in, a release, fire or explosion involving a tier A or tier B substance must be considered by the person or team conducting a revalidation of a process hazard analysis or hazard review.*

2. The revalidation of the analysis or review must include, without limitation:

(a) A review of the recommendations that were made as a result of the investigation; and

(b) Confirmation that the recommendations are being implemented in a timely manner.

3. If a deficient element of a prevention program was a contributing factor to an incident, the person or team conducting the revalidation shall make recommendations to correct the deficiency.

Sec. 110. *If a facility with a process that is subject to the tier A program or tier B program changes ownership, the new owner or operator shall comply fully with the requirements of NRS 459.380 to 459.3874, inclusive, and any regulations adopted pursuant thereto and:*

1. If the annual registration required pursuant to section 50 of this regulation is not due, satisfy the requirements for registration set forth in sections 51 and 55 of this regulation not later than 14 days after the transfer of ownership; or

2. If the annual registration required pursuant to section 50 is due, submit the annual registration.

Sec. 111. *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 develop a management system to oversee the implementation of all requirements of C.A.P.P. and:*

1. Assign a qualified person to have overall responsibility for the development, implementation and integration of the requirements of C.A.P.P.; or

2. Create a team with overall responsibility for the development, implementation and integration of the requirements of C.A.P.P. The owner or operator shall document:

(a) The names of the persons who be members of the team; and

(b) The relevant lines of authority for the team by means of an organization chart or similar document.

Sec. 112. *1. The division:*

(a) Shall conduct an annual inspection to determine compliance at each facility with a process that is subject to the tier A program pursuant to subsection 4 of NRS 459.387;

(b) May, in addition to the annual inspection to determine compliance, inspect a facility with a process that is subject to the tier A program for program compliance pursuant to subsection 1 of NRS 459.387;

(c) May inspect a facility with a process that is subject to the tier B program to determine whether the facility complies with program requirements, including, without limitation, compliance with:

(1) The prevention program developed pursuant to sections 65 to 84, inclusive, of this regulation;

(2) The emergency response program developed pursuant to sections 85 and 86 of this regulation; and

(3) The requirements of the hazard assessment developed pursuant to sections 56 to 64, inclusive, of this regulation; and

(d) May audit the components of the facility's assessment report submitted pursuant to sections 87 to 97, inclusive, of this regulation that contain processes subject to the tier B program to verify the accuracy of the report.

2. The division shall make the records of all inspections and audits made pursuant to this section available for public review.

Sec. 113. *The division may take enforcement action at a facility with a process that is subject to:*

1. The tier A program pursuant to NRS 459.3872 and 459.3874; and

2. The tier B program pursuant to paragraph (c) of subsection 2 of NRS 459.3833 and 459.3834.

Sec. 114. *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. *Section 704 of the Standard System for the Identification of the 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.*

3. *Section 30 of 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.*

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.*

Sec. 115. NAC 459.952 is hereby amended to read as follows:

459.952 As used in NAC 459.952 to [459.9536,] 459.9542, inclusive, *and sections 2 to 114, inclusive, of this regulation*, unless the context otherwise requires, the words and terms defined in NAC 459.9522 [, 9524 and 459.9526] *and 459.9524 and sections 2 to 40, inclusive, of this regulation* have the meanings ascribed to them in those sections.

Sec. 116. NAC 459.953 is hereby amended to read as follows:

459.953 The owner or operator of each facility registered pursuant to NRS 459.3828 shall

[:

1. Report to the division on or before July 1 of each year, beginning July 1, 1993, on:

(a) All efforts that were undertaken by the facility during the previous calendar year to assess and reduce risks related to highly hazardous substances;

(b) Any changes in maintenance schedules and activities and any unanticipated maintenance on critical equipment or safety controls related to highly hazardous substances that was conducted at the facility during the previous calendar year;

(c) All unanticipated and unusual events at the facility which resulted in the release of any quantity of a highly hazardous substance; and

(d) All efforts undertaken by the facility to assess and remedy the release of any quantity of a highly hazardous substance.

2. **Ensure]** *ensure* that all records relating to the production, use, storage or handling of **[highly hazardous]** *tier A or tier B* substances and all records relating to the information submitted to the division in accordance with NRS 459.380 to 459.3874, inclusive, are prepared and protected to prevent the destruction or alteration of information and data contained in those records. The owner or operator shall maintain these records for at least 7 years.

Sec. 117. NAC 459.9534 is hereby amended to read as follows:

459.9534 [1. The owner or operator of a regulated facility shall cause an assessment team to conduct and submit to the division an assessment of risk through the analysis of

hazards in accordance with the schedule that is established by the division for that facility pursuant to NRS 459.3838.

2. When performing an assessment of risk through the analysis of hazards, the assessment team shall use a method that has been approved by the division to determine and evaluate the hazards of the process or operation being assessed.

3. To meet some or all of the requirements for a current assessment of risk through analysis of hazards, the assessment team may submit:

(a) Any documentation that:

(1) Was prepared by or for the regulated facility on or after July 1, 1989; and

(2) Addresses the elements of the assessment of risk through the analysis of hazards as designated by NRS 459.3848 to 459.3852, inclusive.

(b) Any assessment of risk through the analysis of hazards that was completed for the facility on or after July 1, 1989.

If the assessment team submits a previously completed documentation or analysis in lieu of, or in addition to, a current assessment of risk through the analysis of hazards, the assessment team shall verify the accuracy and reliability of the submitted documentation or analysis as regards the current or planned operations at the regulated facility.

4. The] *For a process that is subject to the tier A program, the* assessment team may submit to the division a draft of the assessment [of risk through the analysis of hazards.] *report*. Such a draft must be submitted at least 120 days before the final deadline for submittal of the assessment [of risk through the analysis of hazards.] *report*. The division will provide

the leader of the assessment team with written comments on the draft within 60 days after the division receives the draft.

Sec. 118. NAC 459.9536 is hereby amended to read as follows:

459.9536 1. The members of an assessment team must have **[completed]** :

(a) Completed collectively at least one previous project in **[each of the 12 areas of experience listed in subsection 3 of NRS 459.384.]** :

(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 analysis of hazards;

(9) The performance of risk assessments;

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

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

(b) Knowledge of the state of the art in the technology of the processes that are used.

2. At least one member of the assessment team must be a licensed professional engineer **[.]** *in this state.*

3. At least one member of the assessment team must have experience and knowledge specific to the operations or process being evaluated.

4. The leader of the assessment team must have experience as a project or operations manager.

5. The technical leader of the assessment team must have:

(a) Completed training specific to ~~[the assessment of chemical hazards;]~~ *conducting or leading a process hazard analysis;* and

(b) Participated in at least three ~~[assessments of chemical hazards.]~~ *process hazard analyses.*

6. *Persons may be used interchangeably to fulfill the different roles that are described in section 98 of this regulation if the persons have been approved by the division.*

Sec. 119. NAC 459.9542 is hereby amended to read as follows:

459.9542 1. ~~[The]~~ *An* owner or operator ~~[of a regulated facility]~~ shall pay the fee required by ~~[subsection]~~ *subsections 1 and 2* of NRS 459.3824 ~~[on or before July 1, 1992, and on or]~~ before July 31 of each year . ~~[thereafter.]~~

2. The amount of this annual fee for each ~~[regulated]~~ facility will equal the sum of:

(a) A base fee ~~[in the amount of \$3,100;]~~ *that is established pursuant to subsection 3;* and

(b) A graduated fee ~~[determined by multiplying the sum of all highly hazardous units present at the facility by a factor of \$10.50.]~~

3. ~~For the purposes of this section, the number of “highly hazardous units” for each highly hazardous substance is calculated by dividing a number equal to the largest amount, in pounds, of the highly hazardous substance that was produced, used, stored or handled at the regulated facility at any one time during the previous period of July 1 through June 30, by the~~

quantity designated for that substance respectively in NRS 459.3816.] that is established pursuant to subsection 4.

3. The amount of the annual base fee that is authorized pursuant to subsection 1 of NRS 459.3824 is:

(a) If the facility has a process that is subject to the tier A program or tier B program level 3, \$3,100.

(b) If the facility has a process that is subject to tier B program level 2 and no process that is subject to the tier A program or tier B program level 3, \$2,000, except that if the facility is also regulated by the Nevada board for regulation of liquefied petroleum gas, the facility may reduce the annual base fee by:

(1) Up to \$770 for the annual fee assessed pursuant to NAC 590.240; and

(2) Up to \$500 for the inspection fee assessed pursuant to NAC 590.240.

(c) If the facility has a process that is subject to tier B program level 1 and no process that is subject to the tier A program or tier B program level 2 or 3, \$250.

4. The amount of the annual graduated fee that is authorized pursuant to subsection 2 of NRS 459.3824 is \$10.50 per unit of substance at a facility. A unit of substance is:

(a) For a facility with a process that is subject to the tier A program, the total amount of a tier A substance that is present at a facility divided by the threshold quantity for the substance that is listed in section 45 of this regulation; or

(b) For a facility with a process that is subject to the tier B program and not subject to the tier A program, the total amount of a tier B substance that is present at a facility divided by the threshold quantity for the substance that is listed in section 45 of this regulation.

Sec. 120. NAC 459.9526, 459.9528, 459.9538 and 459.954 are hereby repealed.

Sec. 121. 1. This section and sections 1 to 49, inclusive, 56 to 90, inclusive, 92 to 118, inclusive, and 120 of this regulation become effective upon filing with the secretary of state.

2. Sections 50, 51, 53, 54, 55 and 119 of this regulation become effective 90 days after this regulation is filed with the secretary of state.

3. Sections 52 and 91 of this regulation become effective on June 21, 1999.

TEXT OF REPEALED SECTIONS

459.9526 “Release” defined. “Release” means the discharge, deposit, injection, dumping, spilling, emitting, leaking, pumping, pouring, emptying, disposing or placing into the air or water or on the land of this state of any amount of a substance listed in NRS 459.3816 or in a regulation adopted pursuant to NRS 459.3816.

459.9528 Registration of regulated facilities. On or before July 1 of each year, the owner or operator of a regulated facility shall register with the division by completing and submitting the form for registration provided by the division.

459.9538 “Division” defined. As used in NAC 459.954 and 459.9542, unless the context otherwise requires, “division” means the division of environmental protection of the state department of conservation and natural resources.

459.954 Establishment of schedules for conducting assessments of risk through analyses of hazards.

1. The division shall establish the schedule for conducting assessments of risk through analysis of hazards for each regulated facility based upon a priority score. The division shall determine the score by:

(a) Determining the population within a 10-mile radius of the location of a facility where highly hazardous units are produced, used, stored or handled; or

(b) Calculating a numerical value that represents the potentially affected population within the area of influence for the regulated facility. The division shall base its calculation of the numerical value on data provided by the regulated facility regarding the area of influence and the potentially affected population within that area. For good cause, the division may reject the data provided by the regulated facility and require the regulated facility to redetermine and resubmit the data.

2. In determining the potentially affected population, the regulated facility shall, for the purposes of paragraph (b) of subsection 1, include:

(a) All persons residing within the area of influence;

(b) The maximum number of employees present within the area of influence at any time;
and

(c) The maximum number of persons present at any time at each special facility located in the area of influence, including all hospitals, schools, day care centers, convention centers and recreational facilities.

3. The regulated facility shall determine the area of influence, for the purposes of paragraph (b) of subsection 1, by applying a modelling method that:

- (a) Has been approved by the division; and
- (b) Includes an evaluation of the worst conditions which may reasonably occur.

The regulated facility shall provide the division with a detailed description of the modelling method and parameters applied by the regulated facility in determining the area of influence.