LCB File No. R137-04

PROPOSED REGULATION OF THE STATE ENVIRONMENTAL COMMISSION

Petition 2004-25

Regulation Of Highly Hazardous Substances And Explosives

CHAPTER 459
HAZARDOUS MATERIALS

PROPOSED AMENDMENTS
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Regulatory Additions – New Sections

Section 1. Chapter 459 of the NAC is hereby amended by adding thereto sections 2 through 6.

Sec. 2.
"Explosives" defined. (NRS 459.3818) "Explosives" means a chemical listed pursuant to subsection 2 and 3 of NAC 459.9533.

Sec 3.
"Highly hazardous substance" defined. (NRS 459.3818) "Highly hazardous substance" means a chemical listed pursuant to section 1 of NAC 459.9533. This term is intended to include the list of chemicals, CAS number where provided, and Mixture Descriptions where defined but specifically excludes the threshold quantity, two release quantity and toxic endpoint.

Sec. 4. (NRS 459.3833)
1. Upon receiving delegation of federal authority pursuant to Subpart E of 40CFR63, the Division, in addition to the responsibilities under NRS 459.380 to 459.3874, inclusive, and regulations adopted pursuant thereto, must administer and enforce the provisions of 40 CFR 68, which is adopted by reference pursuant to NAC 459.95528, only in processes that are subject to this part and are not exempted pursuant NRS 459.3814. Inspection in these processes must be conducted pursuant to NAC 459.9552 and enforcement must be conducted pursuant to NRS 459.3834 and NRS 459.387 to 459.3874, inclusive.
2. Except as provided in subsection 1, the provisions of 40 CFR 68 are hereby adopted by reference.

Sec. 5. (NRS 459.3822)
1. The Division must protect the confidentiality of any information that is obtained pursuant to C.A.P.P., including any information obtained through an observation made by the Division through a visit to the facility, pursuant to the conditions provided in NRS 459.3822 and this section.
2. The owner or operator of the facility from which the information was obtained or which was visited shall request such protection in writing, indicating which information is to be protected and stating how the conditions in NRS 459.3822 are satisfied.
3. Requests for protection of confidential information made pursuant to this section shall not constitute an extension of any deadlines for reporting as required pursuant to C.A.P.P., nor shall the pending status of such a request prohibit access to the information or facility by the Division.
4. The owner or operator of the facility for which protection of confidentiality is obtained pursuant to the request made in subsection 2 shall, in addition to providing the confidential information, provide a redacted version of any submitted information intended for public review, which substitutes the term "CBI" or provides generic information for information deemed confidential. The redacted version of submitted information need only be provided if requested by the Division.

Sec 6. (NRS 459.38195)

1. The Division may investigate an accident occurring in connection with a process that involves one or more highly hazardous substances or explosives at a facility which results in an uncontrolled emission, fire or explosion and which presented an imminent and substantial danger to the health of the employees of the facility, the public health or the environment, to determine the cause of the accident if the owner or operator of the facility:

(a) Is unwilling to commence and has not commenced an investigation in a timely manner; or

(b) Is not capable of and has not retained expertise capable of conducting an investigation.

2. The Division's decision to conduct an investigation pursuant to subsection 1 does not relieve the owner or operator of the obligation under NAC 459.95429.

3. If the conditions of subsection 1 are satisfied, the Division must afford the owner or operator of the facility an opportunity to expeditiously initiate an investigation prior to the Division initiating their own efforts and accruing cost. This section does not preclude the Division from commencing the investigation, as time is of the essence in gathering data.

4. Upon deciding to investigate an accident, the Division must:

(a) Provide written notice to the owner or operator:

(1) Defining the scope of the investigation;

(2) Citing the Division's authority and the reasons pursuant to subsection 1 for conducting the investigation;

(3) Providing an explanation of how the Division's costs will be recovered; and

(4) Affording them one final opportunity to commence the investigation within 24 hours.

5. The Division shall accrue costs for the investigation and invoice the owner or operator of the facility to receive compensation. The Division must invoice at the following rates:

(a) For personnel of the Division, the amount of $68 per hour; and

(b) For contractors, an amount equal to the cost to the Division, plus 5 percent.

6. The investigation must be deemed complete when to the satisfaction of the Division:

(a) The direct and contributing causes or potential causes of the accident have been identified;

(b) The root causes or potential root causes of the accident have been identified;

(c) The remedial steps to prevent recurrence of the accident have been identified; and

(d) The remedial steps have been implemented.

7. As used in this section:

(a) "Commencing an investigation in a timely manner" means starting the investigation process with a formally defined investigation team within 48 hours of the accident.

(b) "Is not capable of conducting an investigation" means that the owner or operator does not have the expertise capable of conducting an investigation within the body of employees and contractors.

(c) "Expertise capable of conducting an investigation" means having technical or operational knowledge plus knowledge of investigation techniques to enable a determination of the direct, contributing and root causes of an accident.

(d) "Direct cause of the accident" means the condition or event that resulted in the accident.

(e) "Root cause of the accident" means the condition or event that, if corrected, would prevent recurrence of the accident.

Sec 7. (NRS 459.3818, 459.3824, 459.3829)
Fees established pursuant to subsections 4 and 5 of NAC 459.95334, subsections 2 and 3 of NAC 459.953345, paragraph a of subsection 3 of NAC 459.953475, and paragraph a of subsection 5 of Section 6 of this regulation shall be increased by 5 percent on July 1, 2007 and by 10.25 percent on July 1, 2009.

Sec. Last. Effective Dates
1. Except as noted in subsections 2, and 3 of this section, all sections of this regulation become effective upon passage and filing with the secretary of state.
2. Section 4 becomes effective upon receipt of delegated authority to implement the provisions of 40 CFR 68 from the Federal Government.
3. Sections (amendments to NAC 459.9544, 459.95442, and NAC 459.95516) become effective on June 1, 2005.

REGULATION OF HIGHLY HAZARDOUS SUBSTANCES AND EXPLOSIVES

General Provisions

NAC 459.952 Definitions. (NRS 459.3818, ~~[459.3833]~~) As used in NAC 459.952 to 459.95528, inclusive, ***and sections 2 to 7, inclusive, of this regulation,*** unless the context otherwise requires, the words and terms defined in NAC 459.95211 to ~~[459.95314]~~ ***459.95312***, inclusive, ***and sections 2 to3, inclusive, of this regulation*** have the meanings ascribed to them in those sections.

NAC 459.95211 "Accidental release" defined. (NRS 459.3818, ~~[459.3833]~~) "Accidental release" means:
1. An unintentional discharge from a process of any amount of a ~~[tier A or tier B]~~ ***highly hazardous*** substance into the air, water or land, including, without limitation, any unintentional discharges within a building that encloses a process; or
2. A fire or an explosion at a facility involving a ~~[tier A substance, tier B]~~ ***highly hazardous*** substance or explosive.
3.Emissions of highly hazardous substances from piping component threaded connections, valve and equipment packing, and malfunctioning pollution control devices are not accidental releases pursuant to subsection 1 unless such emission would qualify as a catastrophic release.

NAC 459.95213 "Active mitigation" defined. (NRS 459.3818, ~~[459.3833]~~) "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.

NAC 459.95215 "Administrative controls" defined. (NRS 459.3818, ~~[459.3833]~~)
"Administrative controls" means written procedural mechanisms that are used to control a hazard.

~~[NAC 459.95217 "Assessment report" defined. (NRS 459.3818, 459.3833) "Assessment report" means the document submitted to the division pursuant to NAC 459.95448 to 459.95468, inclusive.]~~

~~[NAC 459.9522 "Assessment team" defined. "Assessment team" means a person or persons designated by the regulated facility pursuant to NRS 459.384 and approved by the division pursuant to NRS 459.3844 to perform an assessment of risk through the analysis of hazards for the regulated facility.]~~

NAC 459.95225 "C.A.P.P." defined. (NRS 459.3818, ~~[459.3833]~~) "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, and NAC 459.952 to 459.95528, inclusive ***and sections 2 to 7, inclusive of this regulation***.

NAC 459.9523 "C.A.S." defined. (NRS 459.3818, ~~[459.3833]~~) "C.A.S." means the Chemical Abstracts Service.

NAC 459.95235 "Catastrophic release" defined. (NRS 459.3818, ~~[459.3833]~~) "Catastrophic release" means ~~[a major]~~ ***an*** uncontrolled emission, fire or explosion, involving one or more ***highly hazardous*** substances or explosives that presents imminent and substantial endangerment to the health of the employees, the public health or the environment. The term includes events that occur within a building or other structure that contains the substance or explosive.

NAC 459.9524 "Division" defined. "Division" means the division of environmental protection of the state department of conservation and natural resources.

NAC 459.95242 "Emergency response program" defined. (NRS 459.3818, ~~[459.3833]~~) "Emergency response program" ~~[is a plan]~~ ***are procedures and practices*** that ~~[is]~~ ***are*** developed ***and implemented*** pursuant to NAC 459.9544 and 459.95442 ~~[to respond to emergencies, including, without limitation, an accidental release]~~.

NAC 459.95244 "Endpoint" defined. (NRS 459.3818, ~~[459.3833]~~) "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.

NAC 459.95246 "Environmental receptor" defined. (NRS 459.3818, ~~[459.3833]~~) "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 NAC 459.95364 as a result of an accidental release.

NAC 459.95247 "Explosives manufacturing operation" defined. (NRS 459.3818) "Explosives manufacturing operation" means a ~~[tier A]~~ process that involves the manufacture of

explosives for sale, ~~[regardless of the type of substances]~~ ***even if highly hazardous substances are also*** used in the explosives manufacturing operation. The term includes ***the manufacture of devices containing explosives and*** explosive storage sites that are incidental to the manufacture of explosives for sale.

NAC 459.95248 "Facility" defined. (NRS *459.38075* ~~[459.3818, 459.3833]~~) "Facility" means ***a building, equipment and contiguous area where***:

1. ~~[A stationary source as defined in NAC 459.95293]~~ ***Highly hazardous substances are produced, used stored or handled***; or
2. ~~[A regulated facility as defined in NRS 459.381]~~ ***Explosives are manufactured for sale***.

NAC 459.9525 "Field gas" defined. (NRS 459.3818, ~~[459.3833]~~) "Field gas" means gas that is extracted from a production well before the gas enters a natural gas processing plant.

NAC 459.95252 "Hazard assessment" defined. (NRS 459.3818, ~~[459.3833]~~) "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 NAC ~~[459.95362 to 459.95378]~~ ***459.95364 to 459.95376***, inclusive.

~~[NAC 459.95254 "Hazard review" defined. (NRS 459.3818, 459.3833) "Hazard review" means the review that is conducted pursuant to NAC 459.95388.]~~

NAC 459.95256 "Hot work" defined. (NRS 459.3818, ~~[459.3833]~~) "Hot work" means work involving electric or gas welding, cutting, brazing, or similar flame-producing or spark-producing operations.

~~[NAC 459.95258 "Injury" defined. (NRS 459.3818, 459.3833) "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.]~~

NAC 459.95259 "Local building official" defined. (NRS 459.3818) "Local building official" means the governmental entity charged with the administration and enforcement of local building codes.

~~[NAC 459.95261 "Major change" defined. (NRS 459.3818, 459.3833) "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.]~~

NAC 459.95263 "Medical treatment" defined. (NRS 459.3818, ~~[~~459.3833~~]~~) "Medical treatment" means treatment, other than first aid, that is administered by a physician or other personnel pursuant to standing orders from a physician.

NAC 459.95265 "Mitigation" and "mitigation system" defined. (NRS 459.3818, ~~[~~459.3833~~]~~) "Mitigation" or "mitigation system" means activities, technologies or equipment specifically designed or deployed to***:***

1. ~~[c]~~ ***C***apture or control a substance upon loss of containment in order to minimize exposure of the ***employee,*** public or the environment***; or***

2. Minimize the impact of a fire or explosion on the employee, public or the environment.

NAC 459.95267 "N.A.I.C.S." defined. (NRS 459.3818, 459.3833) "N.A.I.C.S." means the North American Industry Classification System.

NAC 459.95269 "Natural gas processing plant" defined. (NRS 459.3818, ~~[~~459.3833~~]~~) "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 NAC 459.95528.

NAC 459.952695 "New process" defined. (NRS 459.3818) "New process" means a process that has been, or will be, installed at a facility and will be in operation for the first time at that location. The term includes, without limitation, a new explosives manufacturing operation.

NAC 459.95271 "N.F.P.A." defined. (NRS 459.3818, ~~[~~459.3833~~]~~) "N.F.P.A." means the National Fire Protection Association.

NAC 459.95273 "Off-site" defined. (NRS 459.3818, ~~[~~459.3833~~]~~) "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.

NAC 459.95275 "Owner or operator" defined. (NRS 459.3818, ~~[~~459.3833~~]~~) "Owner or operator" means ***any natural person, any form of business or social organization and any other legal entity including, but not limited to, a corporation, partnership, association, trust or unincorporated organization, who owns, leases, operates, controls or supervises a facility that contains a process subject to C.A.P.P.*** ~~[the person who is responsible for the implementation of C.A.P.P.]~~

NAC 459.95277 "Passive mitigation" defined. (NRS 459.3818, ~~[~~459.3833~~]~~) "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.

NAC 459.95279 "Prevention program" defined. (NRS 459.3818, ~~[459.3833]~~) "Prevention program" means procedures and practices that are developed and implemented pursuant to ~~[NAC 459.95386 to 459.95398, inclusive, or]~~ 459.95412 to 459.95435 ~~[, inclusive, to:~~

~~1. Prevent an accidental release;~~

~~2. Minimize the likelihood of an accidental release; or~~

~~3. Mitigate the impacts of an accidental release]~~.

NAC 459.95281 "Process" defined. (NRS *459.3809* ~~[459.3818, 459.3833]~~) "Process" means*:*

1. Any activity that involves a highly hazardous substance or explosive, including, without limitation, the use, storage, manufacture, handling or on-site movement, or any combination thereof of the substance or explosive.

2. A group of vessels that are used in connection with such an activity, including vessels that are:

(a) Interconnected; or

(b) Separate, but located in such a manner that a highly hazardous substance or explosive could potentially be released, including, without limitation, the release, fire or explosion in one vessel that could cause a release, fire or explosion in another vessel.

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

NAC 459.95283 "Process hazard analysis" defined. (NRS 459.3818, ~~[459.3833]~~) "Process hazard analysis" means the analysis performed pursuant to NAC 459.95414.

NAC 459.95285 "Produced water" defined. (NRS 459.3818, ~~[459.3833]~~) "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.

~~[NAC 459.95287 "P.T.A.H." defined. (NRS 459.3818, 459.3833) "P.T.A.H." means the plan to abate hazards that is submitted pursuant to subsection 3 of NRS 459.3852 and NAC 459.95452.]~~

NAC 459.95289 "Public" defined. (NRS 459.3818, ~~[459.3833]~~) "Public" means one or more natural persons other than employees or contractors of a facility.

NAC 459.95291 "Public receptor" defined. (NRS 459.3818, ~~[459.3833]~~) "Public receptor" means an offsite:

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.

~~[NAC 459.95293 "Stationary source" defined. (NRS 459.3818, 459.3833)~~
~~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.]~~

~~[NAC 459.95295 "Substance" defined. (NRS 459.3818, 459.3833) "Substance" means a chemical that is listed in the table in NAC 459.9533.]~~

NAC 459.95297 "Threshold quantity" defined. (NRS 459.3818, ~~[459.3833]~~) "Threshold quantity" means the quantity ***of highly hazardous substance*** specified in the table in ***subsection 1 of*** NAC 459.9533 ~~[for tier A or tier B substances]~~.

~~[NAC 459.95299 "Tier A substance" defined. (NRS 459.3818, 459.3833) "Tier A substance" means a substance which is present in a quantity that is equal to or greater than the threshold quantity listed for that substance in NAC 459.9533 under the column labeled "Tier A Threshold Quantity."]~~

~~[NAC 459.9531 "Tier B substance" defined. (NRS 459.3818, 459.3833) "Tier B substance" means a substance which is present in a quantity that is equal to or greater than the threshold quantity listed for that substance in NAC 459.9533 under the column labeled "Tier B Threshold Quantity."]~~

NAC 459.95312 "Vessel" defined. (NRS 459.3818, ~~[459.3833]~~) "Vessel" means a reactor, tank, drum, barrel, cylinder, vat, kettle, boiler, pipe, hose or other container.

~~[NAC 459.95314 "Worst-case release" defined. (NRS 459.3818, 459.3833) "Worst-case release" means:~~
~~1. The release of the largest quantity of a tier A or tier B substance from a failure of a vessel or process line that results in the greatest distance to an endpoint; or~~

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

Applicability

NAC 459.95321 ***Responsibility for applicability*** **Determination** ~~[of program tier]~~**. (NRS 459.3818,** ~~[459.3833]~~**)** The owner or operator shall, pursuant to NAC 459.95321 to 459.9533, inclusive, determine for each process within the boundary of his facility ~~[whether]~~ ***if*** the process is subject to the ***provisions of C.A.P.P.*** ~~[tier A program or tier B program, or both.]~~

NAC 459.95323 ***Criteria for applicability determination*** ~~[Tier A program]~~**. (NRS 459.3818)**

1. Except as otherwise provided in NAC 459.95486 ***or subsection 4 of NAC 459.9533***, a process is subject to the ***provisions of C.A.P.P.*** ~~[tier A program]~~ if the process***:***

(a) ~~[i]~~ ***I***s not exempted pursuant to NRS 459.3814***; and***

(b) ~~[and a]~~ ***Contains a highly hazardous*** substance ~~[is present within the contiguous boundary of the facility]~~ in a quantity:

(1) ~~[(a)]~~ Equal to or greater than the amount listed in ~~[the table in]~~ ***subsection 1 of*** NAC 459.9533 under the column labeled "~~[TierA]~~ Threshold Quantity"; or

(2) ~~[(b)]~~ Less than the amount listed in ~~[the table in]~~ ***subsection 1 of*** NAC 459.9533 under the column labeled "~~[Tier A]~~ Threshold Quantity" if there are two or more releases of one or more ~~[tier A]~~ substances from the facility during a 12-month period and the quantity for each release is in excess of the amount listed in the table in NAC 459.9533 for the substance under the column labeled "Two Release Quantity."***; or***

(c) Is an Explosives Manufacturing Operation.

2. ~~[Except as otherwise provided in this subsection, if the table in NAC 459.9533 under the column labeled "Tier A Threshold Quantity" is blank, the tier A program does not apply to that substance. The provisions of this subsection do not apply to explosives manufacturing operations.]~~ ***The following highly hazardous substances need not be considered when determining whether more than a threshold quantity is present in a process pursuant to subsection 1:***

(a) A substance denoted as toxic, 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 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 in the process. A toxic substance is designated "T" in the table in subsection 1 of NAC 459.9533 under the column labeled "Tox (T)or Flam (F)."

(b) Except as otherwise provided in paragraphs (c) and (d), a substance denoted as flammable, if the concentration of the substance in a mixture is less than 1 percent by weight of the mixture or the concentration of the 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 N.F.P.A. 704, 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 NAC 459.95528. If the concentration of the 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 flammable substance to determine whether a threshold quantity is present at the facility. Boiling and flash point must be defined and determined pursuant to N.F.P.A. 30, the 1996 version of the Flammable and Combustible Liquids Code of the N.F.P.A., which is adopted by reference pursuant to NAC 459.95528. A flammable substance is designated "F" in the table in subsection 1 of NAC 459.9533 under the column labeled "Tox (T) or Flam (F)."

(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 substance that is contained in an article.

(f) A 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 noncontact cooling water drawn from the environment or municipal sources; or

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

(g) A 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 highly hazardous substance in pilot plant scale operations; or

(3) Activities conducted outside of the laboratory.

(h) Propane ,when used as a fuel or held for sale as a fuel at a retail facility.

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 highly hazardous 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 NAC 459.95528; 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.

(e) "Retail facility" means a facility at which more than on- half the income is obtained from direct sales to end users or at which more than one-half of the fuel sold, by volume, is sold through a cylinder exchange program.

~~[NAC 459.95324 Inclusion of explosives manufacturing operation in tier A program. (NRS 459.3818) Unless an explosives manufacturing operation is exempt pursuant to NRS 459.3814 from NRS 459.380 to 459.3874, inclusive, and except as otherwise specifically provided in NAC 459.952 to 459.95528, inclusive, an explosives manufacturing operation shall be deemed to be a tier A process regardless of the type of substances used in the explosives manufacturing operation and is subject to all the rules and requirements in the tier A program set forth in NAC 459.952 to 459.95528, inclusive.]~~

~~[NAC 459.95325 Tier B program. (NRS 459.3818, 459.3833)~~

~~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 NAC 459.9533 under the column labeled "Tier B Threshold Quantity." If the table in NAC 459.9533 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 NAC 459.9533 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 N.F.P.A. 704, 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 NAC 459.95528. 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 N.F.P.A. 30, the 1996 version of the Flammable and Combustible Liquids Code of the N.F.P.A., which is adopted by reference pursuant to NAC 459.95528. A flammable substance is designated "F" in the table in NAC 459.9533 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 noncontact 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.

(i) Propane, if the process is subject to tier B program level 1 or 2 pursuant to NAC 459.95327.

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 NAC 459.95528; 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.]

~~[NAC 459.95327 Determination of program level for tier B program. (NRS 459.3818, 459.3833)~~
~~1. If an owner or operator determines pursuant to NAC 459.95325 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 NAC 459.95366 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 NAC 459.95528; 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.]~~

Table of Substances

NAC 459.9533 Tabulated values for ~~[~~tier A~~]~~ threshold quantity, ~~[~~tier B threshold quantity,~~]~~ two release quantity and toxic endpoints *and explosives*. (NRS 459.3816, 459.3818, ~~[~~459.3833~~]~~)

1. ***The list of highly hazardous substances and parameters associated with the implementation of C.A.P.P. is as follows:*** ~~[~~Substances that are designated as having a tier A threshold quantity include, without limitation, the substances and quantities that are listed in NRS 459.3816 and the substances listed in the table in this section.

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

Chemical Name	Alternate Chemical Name	Mixture Description	CAS Number	~~[Tier A]~~ Threshold Quantity (lbs)	~~[Tier B Threshold Quantity (lbs)]~~	Two Release Quantity (lbs)	Two Release Source note 1	Tox(T)~~[,]~~ ***or*** Flam(F) ~~[or Expl(E)]~~	Toxic Endpoint (mg/L)
Acetaldehyde	Ethanal		75-07-0	2,500	~~[10,000]~~	1,000	1	F	
Acetylene	Ethyne		74-86-2	***10,000***	~~[10,000]~~	***1,000***	***3***	F	
Acrolein	2-Propenol		107-02-8	150	~~[5,000]~~	1	1 & 2	T	0.0011
Acrylonitrile	2-Propenenitrile		107-13-1	***20,000***	~~[20,000]~~	***100***	***1 & 2***	T	0.076
Acrylyl chloride	2-Propenoyl chloride		814-68-6	250	~~[5,000]~~	100	2	T	0.00090
Alkylaluminums				5,000		50*	3		
Allyl alcohol	2-Propen-1-ol		107-18-6	***15,000***	~~[15,000]~~	***100***	***1 & 2***	T	0.036
Allyl chloride	3-chloropropene		107-05-1	1,000		100	3	***T***	***0.1252***
Allylamine	2-Propen-1-amine		107-11-9	1,000	~~[10,000]~~	500	2	T	0.0032
Ammonia	Anhydrous Ammonia	Anhydrous	7664-41-7	5,000	~~[10,000]~~	100	1 & 2	T	0.14
Ammonia	Ammonia solution Ammonium hydroxide	20wt% ~~[or greater]~~ ***to 44 wt%***	7664-41-7	***20,000*** ***note 2***	~~[20,000]~~	***1,000***	***1***	T	0.14
Ammonia	Ammonia solution Ammonium hydroxide	concentration greater than 44% ammonia by weight	7664-41-7	10,000 ***note 2***		~~[100]~~ ***1,000***	~~[3]~~ ***1***	***T***	***0.14***
Ammonium perchlorate			7790-98-9	7,500		75*	3		
Ammonium permanganate			7787-36-2	7,500		75*	3		
Arsenous trichloride			7784-34-1	***15,000***	~~[15,000]~~	***1***	***1 & 2***	T	0.010
Arsine	Arsenic Hydride		7784-42-1	100	~~[1,000]~~	10	3	T	0.0019
bis(Chloromethyl) Ether	Chloromethyl Ether		542-88-1	100	~~[1,000]~~	10	1 & 2	T	0.00025
Boron trichloride			10294-34-5	2,500	~~[5,000]~~	100	3	T	0.010
Boron trifluoride			7637-07-2	250	~~[5,000]~~	25	3	T	0.028
Boron trifluoride w/Methyl Ether		1:1 ratio	353-42-4	***15,000***	~~[15,000]~~	***1,000***	***2***	T	0.023
Bromine			7726-95-6	1,500	~~[10,000]~~	500	2	T	0.0065
Bromine chloride			13863-41-7	1,500		10	3	***T***	***0.00472***

Chemical Name	Alternate Chemical Name	Mixture Description	CAS Number	~~[Tier A]~~ Threshold Quantity (lbs)	~~[Tier B Threshold Quantity (lbs)]~~	Two Release Quantity (lbs)	Two Release Source note 1	Tox(T)~~[,]~~ ***or*** Flam(F) ~~[or Expl(E)]~~	Toxic Endpoint (mg/L)
Bromine pentafluoride			7789-30-2	2,500		100	3	***T***	***0.00715***
Bromine trifluoride			7787-71-5	15,000		1,000	3	***T***	***0.0025***
Bromotrifluoreth ylene			598-73-2	***10,000***	~~[10,000]~~	***1,000***	***3***	F	
1,3-Butadiene			106-99-0	***10,000***	~~[10,000]~~	***10***	***1***	F	
Butane			106-97-8	***10,000***	~~[10,000]~~	***1,000***	***3***	F	
1-Butene			106-98-9	***10,000***	~~[10,000]~~	***1,000***	***3***	F	
2-Butene			107-01-7	***10,000***	~~[10,000]~~	***1,000***	***3***	F	
Butene			25167-67-3	***10,000***	~~[10,000]~~	***1,000***	***3***	F	
2-Butene-cis			590-18-1	***10,000***	~~[10,000]~~	***1,000***	***3***	F	
2-Butene-trans			624-64-6	***10,000***	~~[10,000]~~	***1,000***	***3***	F	
Butyl hydroperoxide (Tertiary)			75-91-2	5,000		50*	3		
Butyl perbenzoate (Tertiary)			614-45-9	7,500		75*	3		
Carbon disulfide			75-15-0	***20,000***	~~[20,000]~~	***100***	***1 & 2***	T	0.16
Carbon oxysulfide	Carbon Oxide Sulfide		463-58-1	***10,000***	~~[10,000]~~	***100***	***1***	F	
Carbonyl fluoride			353-50-4	2,500		10	3	***T***	***0.00972***
Cellulose nitrate		concentration greater than 12.6% nitrogen	9004-70-0	2,500		25*	3		
Chlorine			7782-50-5	1,500	~~[2,500]~~	10	1 & 2	T	0.0087
Chlorine dioxide			10049-04-4	1,000	~~[1,000]~~	100	3	T	0.0028
Chlorine monoxide			7791-21-1	***10,000***	~~[10,000]~~	***1,000***	***3***	F	
Chlorine pentafluoride			13637-63-3	1,000		10	3	***T***	***0.003***
Chlorine trifluoride			7790-91-2	1,000		100	3	***T***	***0.0038***
Chlorodiethylalu minum	Diethylaluminu m Chloride		96-10-6	5,000		50*	3		

Chemical Name	Alternate Chemical Name	Mixture Description	CAS Number	~~[Tier A]~~ Threshold Quantity (lbs)	~~[Tier B Threshold Quantity (lbs)]~~	Two Release Quantity (lbs)	Two Release Source note 1	Tox(T)~~[,]~~ ***or*** Flam(F) ~~[or Expl(E)]~~	Toxic Endpoint (mg/L)
1-Chloro-2,4-Dinitrobenzene			97-00-7	5,000		50*	3		
Chloroform			67-66-3	***20,000***	~~[20,000]~~	***10***	***1 & 2***	T	0.49
Chloromethyl methyl ether			107-30-2	500	~~[5,000]~~	10	1 & 2	T	0.0018
Chloropicrin			76-06-2	500		50	3	***T***	***0.00134***
Chloropicrin/ Methylbromide mix				1,500		500	3	***T***	***0.00078***
Chloropicrin/Methylchloride mix				1,500		500	3	***T***	
1-Chloropropylene			590-21-6	***10,000***	~~[10,000]~~	***1,000***	***3***	F	
2-Chloropropylene			557-98-2	***10,000***	~~[10,000]~~	***1,000***	***3***	F	
Crotonaldehyde	2-Butenal		4170-30-3	***20,000***	~~[20,000]~~	***100***	***1 & 2***	T	0.029
Crotonaldehyde, (E)-	2-Butenal, (E)-		123-73-9	***20,000***	~~[20,000]~~	***100***	***1 & 2***	T	0.029
Cumene Hydroperoxide			80-15-9	5,000		10	1		
Cyanogen	Ethanedinitrile		460-19-5	2,500	~~[10,000]~~	100	1	F	
Cyanogen chloride			506-77-4	500	~~[10,000]~~	10	1	T	0.030
Cyanuric fluoride			675-14-9	100		10	3	***T***	***0.00017***
Cyclohexylamine	Cyclohexanimine		108-91-8	***15,000***	~~[15,000]~~	***1,000***	***2***	T	0.16
Cyclopropane			75-19-4	***10,000***	~~[10,000]~~	***1,000***	***3***	F	
Diacetyl peroxide		concentration greater than 70%	110-22-5	5,000 ***note 2***		50*	3		
Diazomethane			334-88-3	500		10	3		
Dibenzoyl peroxide			94-36-0	7,500		75*	3		
Diborane			19287-45-7	100	~~[2,500]~~	10	3	T	0.0011
Dibutyl peroxide (tertiary)			110-05-4	5,000		50*	3		
Dichloro acetylene			7572-29-4	250		10	3		

Chemical Name	Alternate Chemical Name	Mixture Description	CAS Number	~~[Tier A]~~ Threshold Quantity (lbs)	~~[Tier B Threshold Quantity (lbs)]~~	Two Release Quantity (lbs)	Two Release Source note 1	Tox(T)~~[,]~~ ***or*** Flam(F) ~~[or Expl(E)]~~	Toxic Endpoint (mg/L)
Dichlorosilane			4109-96-0	2,500	~~[10,000]~~	100	3	F	
Diethylzinc			557-20-0	10,000		100*	3		
Difluoroethane			75-37-6	***10,000***	~~[10,000]~~	***1,000***	***3***	F	
Diisopropyl peroxydicarbonate			105-64-6	7,500		75*	3		
Dilauroyl peroxide			105-74-8	7,500		75*	3		
Dimethyl sulfide			75-18-3	100		10	3	***T***	***1.27***
Dimethylamine ~~[(anhydrous)]~~		***anhydrous***	124-40-3	2,500	~~[10,000]~~	1,000	1	F	
Dimethyldichlorosilane			75-78-5	1,000	~~[5,000]~~	500	2	T	0.026
1,1-Dimethylhydrazine			57-14-7	1,000	~~[15,000]~~	10	1 & 2	T	0.012
2,2-Dimethylpropane			463-82-1	***10,000***	~~[10,000]~~	***1,000***	***3***	F	
2,4-Dinitroanaline			97-02-9	5,000		50*	3		
Epichlorohydrin			106-89-8	***20,000***	~~[20,000]~~	***100***	***1 & 2***	T	0.076
Ethane			74-84-0	***10,000***	~~[10,000]~~	***1,000***	***3***	F	
Ethyl acetylene	1-Butyne		107-00-6	***10,000***	~~[10,000]~~	***1,000***	***3***	F	
Ethyl chloride			75-00-3	***10,000***	~~[10,000]~~	***100***	***1***	F	
Ethyl ether			60-29-7	***10,000***	~~[10,000]~~	***100***	***1***	F	
Ethyl mercaptan	Ethanethiol		75-08-1	***10,000***	~~[10,000]~~	***1,000***	***3***	F	
Ethyl nitrite			109-95-5	5,000	~~[10,000]~~	50*	3	F	
Ethylamine	Ethanamine		75-04-7	7,500	~~[10,000]~~	100	1	F	
Ethylene	Ethene		74-85-1	***10,000***	~~[10,000]~~	***1,000***	***3***	F	
Ethylene fluorohydrin			371-62-0	100		10	2	***T***	***0.0008***
Ethylene oxide	Oxirane		75-21-8	5,000	~~[10,000]~~	10	1 & 2	T	0.090
Ethylenediamine			107-15-3	***20,000***	~~[20,000]~~	***5,000***	***1 & 2***	T	0.49
Ethyleneimine	Aziridine		151-56-4	1,000	~~[10,000]~~	1	1 & 2	T	0.018
Fluorine			7782-41-4	100	~~[1,000]~~	10	1 & 2	T	0.0039

Chemical Name	Alternate Chemical Name	Mixture Description	CAS Number	~~[Tier A]~~ Threshold Quantity (lbs)	~~[Tier B Threshold Quantity (lbs)]~~	Two Release Quantity (lbs)	Two Release Source note 1	Tox(T)~~[,]~~ ***or*** Flam(F) ~~[or Expl(E)]~~	Toxic Endpoint (mg/L)
Formaldehyde		concentration of 37% or greater by weight	50-00-0	1,000 ***note 2***	~~[15,000]~~	100	1 & 2	T	0.012
Furan			110-00-9	500	~~[5,000]~~	100	1 & 2	T	0.0012
Hexafluoroacetone			684-16-2	5,000		10	3	***T***	***0.0068***
Hydrazine			302-01-2	***15,000***	~~[15,000]~~	***1***	***1 & 2***	T	0.011
Hydrochloric acid		37% or greater	7647-01-0	***15,000*** ***note 2***	~~[15,000]~~	1,000	3	T	0.030
Hydrofluoric acid		50% or greater	7664-39-3	***1,000*** ***note 2***	~~[1,000]~~	100	1	T	0.016
Hydrogen			1333-74-0	***10,000***	~~[10,000]~~	***1,000***	***3***	F	
Hydrogen bromide			10035-10-6	5,000		10	3	***T***	***0.01***
Hydrogen chloride		Anhydrous	7647-01-0	5,000	~~[5,000]~~	100	3	T	0.030
Hydrogen cyanide	Hydrocyanic acid	Anhydrous	74-90-8	1,000	~~[2,500]~~	10	1 & 2	T	0.011
Hydrogen fluoride		Anhydrous	7664-39-3	1,000		100	1 & 2	***T***	***0.016***
Hydrogen peroxide		concentration of 52% or greater by weight	7722-84-1	7,500 ***note 2***		1,000	2		
Hydrogen selenide			7783-07-5	150	~~[500]~~	10	2	T	0.00066
Hydrogen sulfide			7783-06-4	1,500	~~[10,000]~~	100	1 & 2	T	0.042
Hydroxylamine			7803-49-8	2,500		25*	3		
Iron, pentacarbonyl			13463-40-6	250	~~[2,500]~~	100	2	T	0.00044
Isobutane	1,1-dimethyl ethane		75-28-5	***10,000***	~~[10,000]~~	***1,000***	***3***	F	
Isobutyronitrile			78-82-0	***20,000***	~~[20,000]~~	***1,000***	***2***	T	0.14
Isopentane			78-78-4	***10,000***	~~[10,000]~~	***1,000***	***3***	F	
Isoprene			78-79-5	***10,000***	~~[10,000]~~	***100***	***1***	F	
Isopropyl chloride	2 - chloropropane		75-29-6	***10,000***	~~[10,000]~~	***1,000***	***3***	F	

Chemical Name	Alternate Chemical Name	Mixture Description	CAS Number	~~[Tier A]~~ Threshold Quantity (lbs)	~~[Tier B Threshold Quantity (lbs)]~~	Two Release Quantity (lbs)	Two Release Source note 1	Tox(T)~~[,]~~ ***or*** Flam(F) ~~[or Expl(E)]~~	Toxic Endpoint (mg/L)
Isopropyl chloroformate			108-23-6	***15,000***	~~[15,000]~~	***1,000***	***2***	T	0.10
Isopropyl formate			625-55-8	500		100	3	***T***	***0.0014***
Isopropylamine			75-31-0	5,000	~~[10,000]~~	1,000	3	F	
Ketene			463-51-4	100		10	3	***T***	***0.18***
Methacrylaldehyde			78-85-3	1,000		500	3	***T***	***0.007***
Methacryloyl chloride			920-46-7	150		100	2	***T***	***0.0006***
Methacryloyloxy ethyl isocyanate			30674-80-7	100		10	3	***T***	***0.00063***
Methane			74-82-8	***10,000***	~~[10,000]~~	***1,000***	***3***	F	
Methyl acrylonitrile	Methacrylonitrile		126-98-7	250	~~[10,000]~~	25	3	T	0.0027
Methyl bromide			74-83-9	2,500		500	3	***T***	***0.194***
3-Methyl-1-butene	Isopentene		563-45-1	***10,000***	~~[10,000]~~	***1,000***	***3***	F	
2-Methyl-1-butene			563-46-2	***10,000***	~~[10,000]~~	***1,000***	***3***	F	
Methyl chloride			74-87-3	15,000	~~[10,000]~~	100	1	T	0.82
Methyl chloroformate			79-22-1	500	~~[5,000]~~	100	3	T	0.0019
Methyl disulfide			624-92-0	100		10	3	***T***	***0.19***
Methyl ether			115-10-6	***10,000***	~~[10,000]~~	***1,000***	***3***	F	
Methyl ethyl ketone peroxide	Ethyl methyl ketone peroxide	concentration greater than 60%	1338-23-4	5,000 ***note 2***		10	1		
Methyl fluoroacetate			453-18-9	100		10	3	***T***	***0.00025***
Methyl fluorosulfate			421-20-5	100		10	3	***T***	***0.00023***
Methyl formate			107-31-3	***10,000***	~~[10,000]~~	***1,000***	***3***	F	
Methyl hydrazine			60-34-4	100	~~[15,000]~~	10	1 & 2	T	0.0094
Methyl iodide			74-88-4	7,500		100	1	***T***	***0.29***
Methyl isocyanate			624-83-9	250	~~[10,000]~~	10	1 & 2	T	0.0012

Chemical Name	Alternate Chemical Name	Mixture Description	CAS Number	~~[Tier A]~~ Threshold Quantity (lbs)	~~[Tier B Threshold Quantity (lbs)]~~	Two Release Quantity (lbs)	Two Release Source note 1	Tox(T)~~[,]~~ ***or*** Flam(F) ~~[or Expl(E)]~~	Toxic Endpoint (mg/L)
Methyl mercaptan			74-93-1	5,000	~~[10,000]~~	100	1 & 2	T	0.049
Methyl thiocyanate			556-64-9	***20,000***	~~[20,000]~~	***10,000***	***2***	T	0.085
Methyl vinyl ketone			78-94-4	100		10	2	***T***	***0.00007***
Methylamine	Methanamine	Anhydrous	74-89-5	1,000	~~[10,000]~~	100	1	F	
2-Methylpropene			115-11-7	***10,000***	~~[10,000]~~	***1,000***	***3***	F	
Methyltrichlorosilane			75-79-6	500	~~[5,000]~~	50	3	T	0.018
Nickel carbonyl			13463-39-3	150	~~[1,000]~~	10	1 & 2	T	0.00067
Nitric acid		80% or greater	7697-37-2	***15,000*** ***note 2***	~~[15,000]~~	***1,000***	***1 & 2***	T	0.026
Nitric acid		concentration of 94.5% or greater by weight	7697-37-2	500 ***note 2***		50	3	***T***	***0.026***
Nitric oxide	Nitrogen oxide		10102-43-9	250	~~[10,000]~~	10	1 & 2	T	0.031
Nitroaniline	para Nitroaniline		100-01-6	5,000		50*	3		
Nitrogen dioxide			10102-44-0	250		10	1 & 2	***T***	***0.0282***
Nitrogen oxides		NO; NO_2; N_2O_4; N_2O_3	10102-44-0	250		10	3	***T***	***0.0282***
Nitrogen tetroxide			10544-72-6	250		10	1	***T***	***0.0564***
Nitrogen trifluoride			7783-54-2	5,000		1,000	3	***T***	***0.29***
Nitrogen trioxide			10544-73-7	250		10	3	***T***	***0.016***
Nitromethane			75-52-5	2,500		25*	3		
Oleum	Fuming sulfuric acid	65 wt% or greater of SO_3	8014-95-7	1,000	~~[10,000]~~	500	3	T	0.010
Osmium tetroxide			20816-12-0	100		10	3	***T***	***0.001***
Oxygen difluoride	Fluorine monoxide		7783-41-7	100		10	3		
Ozone			10028-15-6	100		10	3		
Pentaborane			19624-22-7	100		10	3	***T***	***0.00026***

Chemical Name	Alternate Chemical Name	Mixture Description	CAS Number	~~[Tier A]~~ Threshold Quantity (lbs)	~~[Tier B Threshold Quantity (lbs)]~~	Two Release Quantity (lbs)	Two Release Source note 1	Tox(T)~~[,]~~ ***or*** Flam(F) ~~[or Expl(E)]~~	Toxic Endpoint (mg/L)
1,3-Pentadinene			504-60-9	***10,000***	~~[10,000]~~	***100***	***1***	F	
Pentane			109-66-0	***10,000***	~~[10,000]~~	***1,000***	***3***	F	
1-Pentene			109-67-1	***10,000***	~~[10,000]~~	***1,000***	***3***	F	
2-Pentene, (E)-			646-04-8	***10,000***	~~[10,000]~~	***1,000***	***3***	F	
2-Pentene, (Z)-			627-20-3	***10,000***	~~[10,000]~~	***1,000***	***3***	F	
Peracetic acid	Peroxyacetic acid	concentration greater than 60% acetic acid	79-21-0	1,000 ***note 2***	~~[10,000]~~	500	2	T	0.0045
Perchloric acid		concentration greater than 60% by weight	7601-90-3	5,000 ***note 2***		50*	3		
Perchloromethyl mercaptan			594-42-3	150	~~[10,000]~~	100	1 & 2	T	0.0076
Perchloryl fluoride			7616-94-6	5,000		100	3	***T***	***0.042***
Phosgene	Carbonyl chloride		75-44-5	100	~~[500]~~	10	1 & 2	T	0.00081
Phosphine	Hydrogen phosphide		7803-51-2	100	~~[5,000]~~	10	3	T	0.0035
Phosphorus oxychloride	Phosphoryl chloride		10025-87-3	1,000	~~[5,000]~~	500	3	T	0.0030
Phosphorus trichloride			7719-12-2	1,000	~~[15,000]~~	500	3	T	0.028
Piperidine			110-89-4	***15,000***	~~[15,000]~~	***1,000***	***2***	T	0.022
Propadiene	1,2 Propadiene		463-49-0	***10,000***	~~[10,000]~~	***1,000***	***3***	F	
Propane			74-98-6	***10,000***	~~[10,000]~~	***1,000***	***3***	F	
Propargyl bromide	3-Bromopropyne		106-96-7	100		10	2	***T***	***0.00003***
Propionitrile			107-12-0	***10,000***	~~[10,000]~~	***10***	***1 & 2***	T	0.0037
Propyl chloroformate			109-61-5	***15,000***	~~[15,000]~~	***500***	***2***	T	0.010
Propyl nitrate			627-13-4	100		25*	3		
Propylene	1 Propene		115-07-1	***10,000***	~~[10,000]~~	***1,000***	***3***	F	
Propylene oxide			75-56-9	***10,000***	~~[10,000]~~	***100***	***1 & 2***	T	0.59
Propyleneimine			75-55-8	***10,000***	~~[10,000]~~	***1***	***1 & 2***	T	0.12

Chemical Name	Alternate Chemical Name	Mixture Description	CAS Number	~~[Tier A]~~ Threshold Quantity (lbs)	~~[Tier B Threshold Quantity (lbs)]~~	Two Release Quantity (lbs)	Two Release Source note 1	Tox(T)~~[,]~~ ***or*** Flam(F) ~~[or Expl(E)]~~	Toxic Endpoint (mg/L)
Propyne	1-Propyne		74-99-7	***10,000***	~~[10,000]~~	***1,000***	***3***	F	
Sarin			107-44-8	100		10	2	***T***	***0.00006***
Selenium hexafluoride			7783-79-1	1,000		1	1	***T***	***0.0016***
Silane			7803-62-5	***10,000***	~~[10,000]~~	***1,000***	***3***	F	
Stibine	Antimony hydride		7803-52-3	500		10	3	***T***	***0.0026***
Sulfur dioxide		Anhydrous	7446-09-5	1,000	~~[5,000]~~	100	3	T	0.0078
Sulfur pentafluoride			5714-22-7	250		10	3	***T***	***0.001***
Sulfur tetrafluoride			7783-60-0	250	~~[2,500]~~	10	3	T	0.0092
Sulfur trioxide	Sulfuric Anhydride		7446-11-9	1,000	~~[10,000]~~	100	2	T	0.010
Tellurium hexafluoride			7783-80-4	250		10	3	***T***	***0.0009***
Tetrafluoroethylene			116-14-3	5,000	~~[10,000]~~	1,000	3	F	
Tetrafluorohydrazine			10036-47-2	5,000		500	3	***T***	***0.0213***
Tetramethyl Lead			75-74-1	1,000	~~[10,000]~~	100	2	T	0.0040
Tetramethylsilane			75-76-3	***10,000***	~~[10,000]~~	***1,000***	***3***	F	
Tetranitromethane			509-14-8	***10,000***	~~[10,000]~~	***10***	***2***	T	0.0040
Thionyl chloride			7719-09-7	250		100	3	***T***	***0.0097***
Titanium tetrachloride			7550-45-0	2,500	~~[2,500]~~	1,000	1 & 2	T	0.020
Toluene 2,4-diisocyanate			584-84-9	***10,000***	~~[10,000]~~	***100***	***1 & 2***	T	0.0070
Toluene 2,6-diisocyanate			91-08-7	***10,000***	~~[10,000]~~	***100***	***1 & 2***	T	0.0070
Toluene diisocyanate			26471-62-5	***10,000***	~~[10,000]~~	***100***	***1 & 2***	T	0.0070
Trichloro(chloromethyl) silane			1558-25-4	100		10	3	***T***	***0.0003***
Trichloro(dichlorophenyl) silane			27137-85-5	2,500		500	2	***T***	***0.008***

Chemical Name	Alternate Chemical Name	Mixture Description	CAS Number	~~[Tier A]~~ Threshold Quantity (lbs)	~~[Tier B Threshold Quantity (lbs)]~~	Two Release Quantity (lbs)	Two Release Source note 1	Tox(T)~~[,]~~ ***or*** Flam(F) ~~[or Expl(E)]~~	Toxic Endpoint (mg/L)
Trichlorosilane			10025-78-2	5,000	~~[10,000]~~	500	3	F	
Trifluorochloroethylene			79-38-9	10,000	~~[10,000]~~	500	3	F	
Trimethoxysilane			2487-90-3	1,500		500	3	***T***	***0.01***
Trimethylamine			75-50-3	***10,000***	~~[10,000]~~	***100***	***1***	F	
Trimethylchlorosilane			75-77-4	***10,000***	~~[10,000]~~	***500***	***2***	T	0.050
Vinyl acetate monomer			108-05-4	***15,000***	~~[15,000]~~	***1,500***	***3***	T	0.26
Vinyl acetylene			689-97-4	***10,000***	~~[10,000]~~	***1,000***	***3***	F	
Vinyl chloride			75-01-4	***10,000***	~~[10,000]~~	***1***	***1***	F	
Vinyl ethyl ether			109-92-2	***10,000***	~~[10,000]~~	***1,000***	***3***	F	
Vinyl fluoride			75-02-5	***10,000***	~~[10,000]~~	***1,000***	***3***	F	
Vinyl methyl ether			107-25-5	***10,000***	~~[10,000]~~	***1,000***	***3***	F	
Vinylidene chloride			75-35-4	***10,000***	~~[10,000]~~	***100***	***1***	F	
Vinylidene fluoride			75-38-7	***10,000***	~~[10,000]~~	***1,000***	***3***	F	

Table Notes:

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

2. The threshold quantity is applied to the fraction of the chemical in the actual mixture where noted.

* These substances must be involved in a fire or explosion to qualify as a release pursuant to ***subparagraph 2 of*** paragraph (b) of subsection 1 of NAC 459.95323.

2. Except as provided otherwise in subsection 3, explosives are comprised of substances that are classified in column 3 of the hazardous materials table in 49CFR172.101, which is adopted by reference pursuant to NAC 459.95528, as division 1.1, 1.2, 1.3, 1.4 or 1.5.

3. The list of explosive substances defined in subsection 2 shall exclude those specified in 18 U.S.C. 845(a)(1) to 845(a)(6), inclusive.

4. If a material is listed as an explosive pursuant to subsection 2 and is also a listed as a highly hazardous substance pursuant to subsection 1, it shall be treated as a highly hazardous substance for the purposes of NAC 459.952 to 459.95528, inclusive and sections 2 to 7 inclusive, of this regulation, if it is present in the process in excess of the highly hazardous substance threshold quantity. The exclusion provided in subsection 3 shall also apply to the materials defined in this subsection.

General Performance and Submission Requirements

NAC 459.95332 General requirements. (NRS 459.3818, ~~[459.3833]~~) The owner or operator of a facility that has a process which is subject to ***C.A.P.P. as determined pursuant to NAC 459.95323*** ~~[the tier A program or tier B program]~~ shall:

1. Register annually with the division pursuant to NAC 459.95348 to 459.95358, inclusive;
2. Pay the annual fees pursuant to NAC 459.95334 if the facility contains one or more processes and does not have explosives manufacturing operations;
3. Pay the annual fees pursuant to NAC 459.953345 if the facility contains one or more explosives manufacturing operations; ~~[and]~~
4. Develop a management system pursuant to NAC 459.95516~~[.]~~***;***
5. Conduct a hazard assessment pursuant to NAC 459.95364 to 459.95376, inclusive;
6. Develop and implement a prevention program pursuant to 459.95412 to 459.95435, inclusive;
7. Develop and implement an emergency response program pursuant to NAC 459.9544 and 459.95442; and
8. Provide information to the division in advance of an inspection, pursuant to subsections 2 and 3 of NAC 459.9552.

NAC 459.95334 Annual fee. (NRS 459.3818, 459.3824, ~~[459.3833]~~)

1. ***Except as otherwise provided in NAC 459.953477,*** ~~[A]~~ ***a***n owner or operator ***of each facility that does not have an explosives manufacturing operation*** shall pay the fee required by subsections 1 and 2 of NRS 459.3824 before July 31 of each year.
2. The amount of this annual fee for each facility will equal the sum of:
(a) A base fee that is established pursuant to subsection ~~[3]~~ ***4***; and
(b) A graduated fee that is established pursuant to subsection ~~[4]~~ ***5***.
3. ***The total annual fee required by this section shall not exceed $ 35,000 at any facility.***
4. The amount of the annual base fee that is authorized pursuant to subsection 1 of NRS 459.3824 is ***$5,600.*** ~~[:~~
~~(a) If the facility has a process that is subject to the tier A program or tier B program level 3, $4,100.~~
~~(b) If the facility has a process that is subject to the tier B program level 2 and no process that is subject to the tier A program or tier B program level 3, $2,000.~~
~~(c) If the facility has a process that is subject to the 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.]~~
5. ~~[4.]~~ The amount of the annual graduated fee that is authorized pursuant to subsection 2 of NRS 459.3824 is ~~[$23]~~ ***$39.00*** per unit of ***highly hazardous*** substance at a facility. A unit of substance is ***the total amount of highly hazardous substance present at the facility, divided by the corresponding threshold quantity that is listed in subsection 1 of NAC 459.9533.*** ~~[the greater of:~~
~~(a) The total amount of a tier A substance that is present at a facility divided by the tier A threshold quantity for the substance that is listed in NAC 459.9533; or~~
~~(b) The total amount of a tier B substance that is present at a facility divided by the tier B threshold quantity for the substance that is listed in NAC 459.9533.]~~

NAC 459.953345 Annual fees for facility with explosives manufacturing operation. (NRS 459.3818, 459.3824)

1. Except as otherwise provided in NAC 459.953477, an owner or operator of a facility that has an explosives manufacturing operation shall pay to the division an annual fee before July 31, as prescribed in this section.

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

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

4. If a facility that has an explosives manufacturing operation also has a ~~[tier A or tier B substance on site]~~ ***highly hazardous substance in a process in excess of the threshold quantity listed in subsection 1 of NAC 459.9533***, the owner or operator of the facility shall pay, in addition to the fees set forth in this section, the graduated fee set forth in subsection ~~[4]~~ ***5*** of NAC 459.95334 and is exempt from the ~~[annual]~~ ***base*** fee set forth in subsection ~~[3]~~ ***4*** of NAC 459.95334.

5. The total annual fee required by this section shall not exceed $35,000 at any facility.

~~[NAC 459.95336 Requirements specific to tier A program. (NRS 459.3818) In addition to the requirements set forth in NAC 459.95332, the owner or operator of a facility with a process that is subject to the tier A program shall:~~

~~1. Submit assessment plans and information about the assessment team pursuant to NAC 459.95476;~~

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

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

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

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

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

~~[NAC 459.95338 Requirements specific to tier B program. (NRS 459.3818, 459.3833) In addition to the requirements set forth in NAC 459.95332, the owner or operator of a facility with a process that is subject to the tier B program, but not also subject to the tier A program, shall:~~

~~1. Determine the program level for the process pursuant to NAC 459.95327;~~

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

~~3. Implement a prevention program for each process subject to program level 2 pursuant to NAC 459.95382 to 459.95398, inclusive;~~

~~4. Implement a prevention program for each process subject to program level 3 pursuant to NAC 459.95382 and 459.95412 to 459.95435, inclusive;~~

~~5. Implement an emergency response program pursuant to NAC 459.9544 and 459.95442; and~~

~~6. Submit an assessment report pursuant to NAC 459.95448 to 459.95468, inclusive.]~~

~~[NAC 459.95342 Requirements for both tier A and tier B programs. (NRS 459.3818, 459.3833) The owner or operator of a facility with a process that is subject to both the tier A program and~~

~~tier B program shall comply with the general requirements set forth in NAC 459.95332 and the requirements for a tier A process set forth in NAC 459.95336.]~~

NAC 459.95344 Reports of regulatory agencies: Submission; form *(NRS 459.382)*. A governmental entity or agency of the state that is required by subsection 1 of NRS 459.382 to submit a report to the division shall do so***, upon request,*** within 10 working days after a determination is made or an action is taken related to hazards involving highly hazardous substances ***or explosives*** at a ~~[regulated]~~ facility. The report must be submitted on the following form:

NEVADA DIVISION OF ENVIRONMENTAL PROTECTION
~~[PREVENTION OF CHEMICAL CATASTROPHE PROGRAM]~~
CHEMICAL ACCIDENT PREVENTION PROGRAM
GOVERNMENTAL AGENCY REPORTING FORM

A facility which produces, uses, stores or handles a highly hazardous substance ***or manufactures an explosive for sale as*** designated in ***NAC 459.95323*** ~~[NRS 459.3816]~~ is subject to the provisions of NRS 459.380 to 459.3874, inclusive. Pursuant to NRS 459.382, governmental entities or agencies of the state are required to complete the following information whenever a determination is made or an action is taken related to hazards involving highly hazardous substances ***or explosives*** at a ~~[regulated]~~ facility. Please complete this form and return it to the Nevada Division of Environmental Protection, 333 W. Nye Lane, ***Room 138,*** Carson City, Nevada ~~[89710]~~ ***89706-0851***.

1. Facility Name . . . . . .
2. Facility Location . . . . . .
. . . . . .
. . . . . .
3. Highly Hazardous Substances ***or Explosives*** Present at the Facility

Substance	Estimated Quantity (lbs.)
. . . . .	. . . . .
. . . . .	. . . . .
. . . . .	. . . . .

4. Describe any specific hazards related to highly hazardous substances ***or explosives*** which were noticed by regulatory or inspection staff at the facility . . . . . .
. . . . . .
. . . . . .
. . . . . .
. . . . . .
. . . . . .
. . . . . .
5. Describe any action your agency has taken at this facility related to highly hazardous substances ***or explosives***. Include orders, notices, penalties, etc.
. . . . . .
. . . . . .
. . . . . .

. . . . . .
. . . . . .
. . . . . .
. . . . . .
. . . . . .

6. List statutes, regulations, standards or codes related to or controlling actions taken by your agency

. . . . . .
. . . . . .

7. Agency contact: . . . . . Phone: . . . . . .

8. Authorized signature: . . . . . Date: . . . . . .

Attach additional sheets if required.

Permits to Construct and Operate New Process

NAC 459.95345 Application for permit to construct: Preliminary meeting with division. (NRS 459.3818, *459.3829*)

1. Before an owner or operator of a facility may commence the construction of a new process subject to ~~[the tier A program or the tier B program level 2 or 3]~~ ***C.A.P.P.***, the owner or operator must obtain a permit to construct the new process from the division pursuant to NAC 459.95345 to ***459.953467*** ~~[459.953477]~~, inclusive.

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

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

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

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

NAC 459.953451 Application for permit to construct: Submission; contents; requirements for accompanying documents, specifications and calculations. (NRS 459.3818, *459.3829*)

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

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

(a) Registration for the process that includes:

(1) The information required by NAC ***459.9535*** ~~[459.95452, 459.95454, 459.95456 and 459.95464]~~;

(2) ***A summary of the hazard assessment conducted pursuant to NAC 459.95364 through 459.95376, inclusive;***

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

(4) ~~[(3)]~~ An overview of the project that includes a description of:

(I) The process;

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

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

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

(V) The scope of the construction; and

(VI) The schedule for the project; and

(5) ~~[(4)]~~ Information concerning the inspectors of the construction required pursuant to NAC 459.953461;

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

(c) Information concerning the process and safety process hazard analysis required pursuant to NAC 459.953455;

(d) Documents, specifications and calculations required pursuant to NAC 459.953457, 459.953459 and 459.95346; and

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

3. Documents, specifications and calculations submitted pursuant to NAC 459.953457, 459.953459 and 459.95346 must:

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

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

~~[NAC 459.953453 Application for permit to construct: Information held as trade secret. (NRS 459.3818)~~

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

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

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

~~(b) Must not be reproduced;~~

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

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

NAC 459.953455 Contents of application for permit to construct: Process hazard analysis; information concerning process safety. (NRS 459.3818*, 459.3829*)

1. In addition to any other information required to be included pursuant to NAC 459.95345 to 459.953477, inclusive, an application for a permit to construct must include:

(a) Information relating to the hazards of any ~~[tier A or tier B]~~ ***highly hazardous*** substance or ***explosive*** as described in paragraph (a) of subsection 2 of NAC 459.95412.

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

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

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

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

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

(g) A list of vessels and rotating equipment, traceable to the piping and instrument diagram, and select design and code information as requested by the division.

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

NAC 459.953457 Contents of application for permit to construct: Site plan; plot plans of project area; diagrams; drawings. (NRS 459.3818*, 459.3829*)

1. In addition to any other information required to be included pursuant to NAC 459.95345 to 459.953477, inclusive, an application for a permit to construct a new process must include:

(a) A site plan, drawn to scale, that identifies the location within the facility of the new process on a map.

A site plan must include and indicate, without limitation:

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

(2) The area encompassing the endpoint of the worst-case release scenarios developed pursuant to NAC 459.95366***, but in no case less than an area extending one mile radially from the facility.*** ~~[, the first responding fire station and the hazardous materials response station]~~.

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

(4) All major roads and transportation corridors.

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

(6) The location of the first responding fire station and the hazardous materials response station. ***If the stations are outside of the map limits, indicate the station address, direction and distance.***

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

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

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

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

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

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

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

(V) Personal protective equipment.

(VI) Major process equipment.

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

(I) Provide the necessary elevations and include detailed drawings to distinguish between electrically unclassified and electrically classified areas, as those terms are defined in Article 500

of the N.F.P.A. 70, the *National Electric Code*, adopted by reference pursuant to NAC 459.95528; and

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

(c) Process flow diagrams, shown on as many drawings as necessary, developed pursuant to NAC 459.95412. The process flow diagrams must correspond to the material and energy balance submitted pursuant to NAC 459.953455.

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

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

(2) Be on an easily legible scale.

(3) Cover the new process. The division may request that the diagrams include any associated systems, including, without limitation, air, water, nitrogen and process drain systems, if the division determines that the inclusion of the additional information is necessary to assist with the review of the process hazard analysis.

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

(5) Correspond to:

(I) The process flow diagrams;

(II) The documentation concerning the control logic and the process hazard analysis submitted pursuant to NAC 459.953455; and

(III) The specifications submitted pursuant to NAC 459.953459.

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

(1) The preparation for the base and subbase, including, without limitation, compaction requirements;

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

(3) The specifications relating to concrete and grout;

(4) The requirements for testing and inspection; and

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

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

(1) Specifications for the steel and bolting;

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

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

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

3. As used in this section:

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

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

NAC 459.953459 Contents of application for permit to construct: Specifications. (NRS 459.3818*, 459.3829*)

Specifications included in an application for a permit to construct a new process:

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

2. Must define:

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

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

(c) The required materials of construction;

(d) The qualification requirements for*:*

(1) ~~[t]~~ *T*he installation methods to be used*;* and ~~[for t]~~

*(2) T*he personnel performing the construction and inspection activities; and

(e) The requirements for inspection and testing; and

3. Must be provided for process piping, fittings and valves. ***Inspection, examination and testing requirements related to piping construction must be appropriate for the application but shall, at a minimum:***

(a) Meet the requirements defined under Chapter VI of ASME B31.3, Process Piping, which is adopted by reference pursuant to NAC 459.95528;

(b) Require random radiography of not less than 5% of all circumferential butt and mitre groove welds read to normal fluid service criteria, as defined in ASME B31.3; and

(c) Require examination of not less that 5% of socket welds and other fillet welds by magnetic particle or liquid penetrant methods as defined in ASME B31.3.

NAC 459.95346 Contents of application for permit to construct: Calculations. (NRS 459.3818*, 459.3829*)

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

(a) Concrete foundations for drawings submitted pursuant to NAC 459.953457, including, without limitation, a soils report to support the design calculations;

(b) Structural steel drawings submitted pursuant to NAC 459.953457; and

(c) ~~[Any]~~ ***The capacity of*** pressure relief devices to be included in the new process.

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

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

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

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

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

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

NAC 459.953461 Contents of application for permit to construct: Information concerning inspectors for construction of process pipes, concrete foundations and structural steel. (NRS 459.3818, *459.3829*)

1. An applicant for a permit to construct must include in the application information concerning the inspectors for the construction of process pipes, concrete foundations and structural steel if these activities are to be permitted pursuant to NAC 459.953467.

2. The information concerning the inspectors must identify:

(a) Each inspector to be employed by the applicant;

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

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

NAC 459.953463 Initial review of application for permit to construct; notification of applicant concerning completeness of application. (NRS 459.3818, *459.3829*)

1. Upon receipt of an application for a permit to construct a new process, the division shall review the application to determine if the application includes all the information required by NAC 459.953451. Not later than 30 days after the date on which an application is received, the division shall provide to the applicant its initial determination as to the completeness of the application.

2. If the division determines that an application for a permit to construct does not include all the information required by NAC 459.953451, the division shall notify the applicant of its determination and include in the notice a description or list of the deficiencies.

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

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

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

NAC 459.953465 Notice of receipt of application for permit to construct; period for public comment; action by division after period of public comment. (NRS 459.3818, *459.3829*)

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

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

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

(1) The registration submitted pursuant to NAC 459.953451;

(2) The coordinated emergency plan document;

(3) The site plan; and

(4) A copy of the conditional use permit.

2. The period for public comment must be 30 days and commences on the date on which the notice is published in the newspaper.

3. Not later than 15 days after the date on which the period for public comment concerning an application for a permit to construct closes, the division may, after considering the documents that are part of the application, require further modifications if such modifications are determined necessary to satisfy the requirements of NAC ***459.953467*** ~~[459.953469]~~.

NAC 459.953467 Conditions for issuance of permit to construct; approval of site plan; certain modifications in construction to be reflected in pre-startup safety review. (NRS 459.3818*, 459.3829*)

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

(a) Approves the analysis of off-site consequences developed pursuant to NAC ***459.95364 to 459.95376*** ~~[459.95362 to 459.95372]~~, inclusive;

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

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

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

(3) Are not under contract to the company that is being inspected;

(c) Determines that:

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

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

(3) Hazardous materials response capability:

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

(II) Is available 24 hours a day; and

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

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

(e) Approves the site plan developed pursuant to NAC 459.953457;

(f) Determines that:

(1) The plans identifying the locations of the electrical hazardous area developed pursuant to NAC 459.953457 are in compliance with the applicable codes and standards, except that the division may accept a local building official’s approval of the drawing if the criteria set forth in NAC 459.953457 are met;

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

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

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

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

(6) The calculations submitted ***provide answers that represent generally accepted calculation methods and*** comply with ~~[the applicable]~~ ***appropriate*** codes, standards and industry recommended practices ***where applicable***;

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

(h) Completes the public review and comment process and any modifications required by NAC 459.953465 have been put into place~~[.]~~ ***; and***

(i) Determines that the owner or operator is not delinquent on the payment of fees assessed pursuant to NAC 459.953475.

2. For the division to approve a site plan:

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

(b) The alternate release scenarios developed pursuant to NAC 459.95368 must be mitigated in a manner acceptable to the division to minimize the impact on public receptors located outside the industrial zoning district in which the new process will be located. At a minimum, some level of mitigation must be employed, including, without limitation, the use of toxic or combustible gas sensors, as appropriate, that must be physically located to enable the detection of a release and a response thereto in a timely manner to minimize the impact of the release.

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

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

NAC 459.953469 Commencement of construction before issuance of permit to construct. (NRS 459.3818*, 459.3829*)

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

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

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

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

3. The division may:

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

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

NAC 459.95347 Maintenance and availability of information during construction activity before issuance of permit to construct; revised schedule for construction upon issuance of permit. (NRS 459.3818*, 459.3829*)

1. During any construction activity done on a new process ***that was approved*** in accordance with NAC ***459.953467*** ~~[459.953469]~~, the owner or operator of the new process shall:

(a) Maintain on-site:

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

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

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

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

2. Upon the issuance of a permit to construct, the owner or operator to whom the permit is issued shall provide the division with a revised schedule for the construction that includes the approximate timing as to when:

(a) Concrete foundations will be poured;

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

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

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

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

NAC 459.953471 Permit to operate: Requirement to commence operation or to bring certain substances onto site of new process. (NRS 459.3818*, 459.3829*) Before an owner or operator of a facility:

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

2. Brings any ***highly hazardous*** substances ***or explosives*** ~~[classified as a tier A or tier B substance]~~ onto the site of the new process, the owner or operator must obtain a permit to operate from the division pursuant to NAC ***459.953473*** ~~[459.953471]~~.

NAC 459.953473 Permit to operate: Conditions for issuance; submission of assessment report. (NRS 459.3818*, 459.3829*)

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

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

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

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

~~(d)]~~ The division determines that the requirements set forth in NAC 459.95412 to 459.95442, inclusive, ***and NAC 459.95516*** have been satisfied; and

(d) ~~[(e)]~~ The owner or operator ***is not delinquent on the payment of fees assessed pursuant to NAC 459.953475*** ~~[has paid the balance due for any outstanding fees]~~.

2. ***The owner or operator of the new process shall notify the division when he deems the requirements of any section from NAC 459.95412 to 459.95442, inclusive or NAC 459.95516 to be satisfied and ready for review by the division.*** ~~[The division shall consider the submission of an assessment report pursuant to subsection 1 to be an application for a permit to operate. The assessment report must be submitted by an owner or operator before the owner or operator commences operation of the new process or brings tier A substances, tier B substances or explosives onto the site of the new process.]~~

NAC 459.953475 Fees. (NRS 459.3818, 459.3824*, 459.3829*)

1. An owner or operator of a new process shall remit fees to the division for activities conducted by the division relating to ~~[the application for a permit to construct the new process and the application for a permit to operate the new process]~~ ***permitting activities conducted pursuant to NAC 459.95345 to 459.953473, inclusive***.

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

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

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

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

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

(a) Personnel of the division in the amount of ~~[$55]~~ ***$68*** per hour; and

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

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

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

(b) Reviewing corrections, must not be considered when determining the maximum fee owed by the owner or operator.

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

NAC 459.953477 Exemption from payment of certain annual fees. (NRS 459.3818, 459.3824)

1. Notwithstanding any provision of NAC 459.95334 or 459.953345 to the contrary, an owner or operator of a new process is exempt from the payment of annual fees related to the new process for the fiscal year in which the process or operation commences operation and for the following fiscal year.

2. ***If fees are already being remitted by the owner or operator of this facility for other processes or explosive manufacturing operations, those fees shall be unaffected by this section. In such circumstances, the provisions of subsection 1 shall apply only to the incremental annual fee as applied to the new process.***

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

Annual Registration Form

NAC 459.95348 Submission; content; time requirements. (NRS 459.3818, ~~[459.3833]~~)

1. The owner or operator shall:

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

(b) Submit the annual registration pursuant to subsection 6 to the division on or before June 21 of each year ~~[.]~~ ***; and***

(c) Certify the annual registration pursuant to NAC 459.95358.

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

3. Before starting a new process, the owner or operator shall submit ~~[:~~

~~(a) Except as otherwise provided in subsection 4, for a new process subject to the tier A or the tier B program level 2 or 3, an application for a permit to construct pursuant to NAC 459.95345 to 459.953477, inclusive, in lieu of an initial registration; or~~

~~(b) For a new process subject to the tier B program level 1,]~~ a registration ***pursuant to subsection 6*** for the new process at least 90 days before introducing a ~~[tier B]~~ substance into the facility ***unless application has been made for a permit to construct pursuant to NAC 459.953451, in which case the initial registration for the new process is not required***.

4. If a facility is subject to the provisions of ***subparagraph 2 of*** paragraph (b) of subsection 1 of NAC 459.95323, the owner or operator shall submit the registration pursuant to ~~[NAC 459.95348 to 459.95358, inclusive]~~ ***subsection 6***, not later than 90 days after the provisions of ***subparagraph 2 of*** paragraph (b) of subsection 1 of NAC 459.95323 take effect.

5. If the state environmental commission ***amends a threshold quantity or mixture concentration of a substance or*** adds a new substance ***or explosive*** to the~~[table]~~ ***list*** of ***highly hazardous*** substances ***and explosives set forth in NAC 459.9533 and a facility has a process that uses the new or amended substance in excess of the threshold quantity or explosive in an explosives manufacturing operation***, the owner or operator shall, not later than 90 days after the effective date of the regulation which contains the addition ***or amendment***, submit to the division registration for the process pursuant to ***subsection 6.*** ~~[NAC 459.95348 to 459.95358, inclusive.]~~

6. ~~[~~R~~]~~ ***A complete r***registration consists of:

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

(b) A summary of the ***accident history as set forth in NAC 459.95354;*** ~~[off-site consequence analysis as set forth in NAC 459.95352;~~

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

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

~~(e)]~~ ***(c) The status of any process hazard analysis recommendation, developed pursuant to subsection 8 of NAC 459.95414, that was unresolved at the time of submittal of the registration from the prior year;***

(d) Miscellaneous administrative information as required by the division; and

(e) Certification as set forth in NAC 459.95358.

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

NAC 459.9535 Information concerning facility. (NRS 459.3818, ~~[459.3833]~~) Information about the facility on the annual registration form must include:

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

2. The Dun & Bradstreet number for the facility.

3. The name and Dun & Bradstreet number of any parent corporation.

4. The name, telephone number and mailing address of the owner or operator.

5. The name and title of the person with overall responsibility for the implementation of C.A.P.P.

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

7. For each process:

(a) The name and C.A.S. number of each substance.

(b) The maximum quantity of each substance on-site between June 1 of the previous year and May 31 of the current year. For a new process, the owner or operator shall include in its annual registration form information about the maximum inventory they expect to have on-site through the following May 31.

(c) The N.A.I.C.S. code that is applicable to the process.

~~[(d) The program tier to which the process is subject.~~

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

8. The identifier assigned by the United States Environmental Protection Agency, if any, to the facility.

9. The number of full-time employees at the facility.

10. Whether the facility is subject to 29 C.F.R. § 1910.119.

11. Whether the facility is subject to 40 C.F.R. Part 355.

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

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.

~~[NAC 459.95352 Summary of off-site consequence analysis. (NRS 459.3818, 459.3833) 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 substance, flammable substance or explosive is required pursuant to NAC 459.95366, the owner or operator shall submit the same information for the additional scenario that he sends to satisfy the requirements of this paragraph.~~

~~2. The following data for each release scenario:~~

~~(a) The chemical name of the substances;~~

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

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

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

~~(e) The duration of the release;~~

~~(f) The distance to the endpoint;~~

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

~~(h) Any passive mitigation that is considered;~~

~~(i) If the substance is toxic:~~

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

~~(2) The physical state of the substance;~~

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

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

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

NAC 459.95354 Report of accident history. (NRS 459.3818, ~~[459.3833]~~) ~~[An accident history reported on an annual registration must include:~~

~~1. A summary of the history of the facility for the previous 5 years that is developed pursuant to NAC 459.95378; and~~

~~2.]~~ For the period starting on June 1 of the previous year and ending on May 31 of the current year, ***an annual registration must include*** a description of:

~~[(a)]~~ ***1.*** Any unanticipated or unusual event at the facility that resulted in the release, including, without limitation, any accidental releases, of any ***highly hazardous*** substance ***or explosive***; and

~~[(b)]~~ ***2.*** The efforts undertaken by the ***owner or operator of the*** facility to assess the reasons and develop a remedy for the release or accidental release of the substance.

~~[NAC 459.95356 Description of emergency response program. (NRS 459.3818, 459.3833) The description of the emergency response program for the facility on the annual registration form must indicate:~~

~~1. Whether there is a written emergency response program;~~

~~2. Whether the program includes specific actions to be taken in response to an accidental release;~~

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

~~4. Whether the program includes information on emergency health care;~~

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

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

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

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

NAC 459.95358 Certification. (NRS 459.3818, ~~**[**459.3833**]**~~**)**

1.~~**[**If a registration form submitted pursuant to NAC 459.95348 to 459.95356, inclusive, 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 NAC 459.95327, 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 offsite 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 NAC 459.95348 to 459.95356, inclusive, does not reflect only processes that are subject to tier B program level 1, the certification must**]**~~ ***Any document requiring submission and certification pursuant to NAC 459.952 through 459.95528, inclusive, and sections 2 to 7, inclusive, of this regulation shall contain certification language that*** substantially conform***s*** 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.]~~ ***2.*** 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.

Hazard Assessments

~~[NAC 459.95362 Applicability. (NRS 459.3818, 459.3833)~~

~~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 NAC 459.95362 to 459.95378, inclusive.~~

~~2. If a process is subject to tier B program level 1, the owner or operator shall conduct a hazard assessment pursuant to NAC 459.95364, 459.95366 and 459.9537 to 459.95378, inclusive.]~~

NAC 459.95364 Parameters for analysis of off-site consequences. (NRS 459.3818, ~~[~~459.3833~~]~~)

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

(a) For toxic ***highly hazardous*** substances, the toxic endpoints provided pursuant to NAC 459.9533;

(b) For flammable~~[s]~~ ***highly hazardous substances*** and explosives:

(1) In a scenario that studies the potential effects of an explosion, an overpressure of 1 psi (0.0703 kilograms per square centimeter);

(2) In a scenario that studies radiant heat and exposure time, a radiant heat of 5 kw/m2 (1586 BTU per hour per square foot) 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 provided pursuant to NAC 459.9533 or a substance is not designated as toxic, flammable or explosive pursuant to NAC 459.9533, the owner or operator shall define an appropriate endpoint ***that results in the greatest impact to employees and public receptors***. 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 NAC 459.95528, 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 (4.9 feet 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 ***highly hazardous*** substance. A facility using the R.M.P. Off-Site Consequence Analysis Guidance, which is adopted by reference pursuant to NAC 459.95528, may use 25°C (77°F) 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 ***highly hazardous*** substance assuming a ground level (0 feet) release.

(b) An alternative scenario involving a ~~[tier A or tier B]~~ toxic ***highly hazardous*** 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 ***highly hazardous*** 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.

NAC 459.95366 Analysis of worst-case release scenario. (NRS 459.3818, ~~[459.3833]~~)

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

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

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

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

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

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

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

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

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

5. When preparing a worst-case release scenario:

(a) For a ~~[tier A or tier B]~~ ***highly hazardous*** substance, the owner or operator shall assume that the release quantity is the greater of:

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

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

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

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

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

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

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

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

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

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

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

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

mitigation is in place, the owner or operator shall use the surface area of the contained liquid to calculate the volatilization rate. If the release would occur onto a surface that is not paved or smooth, the owner or operator may take into account the actual surface characteristics.

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

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

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

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

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

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

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

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

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

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

NAC 459.95368 Analysis of alternative release scenario. (NRS 459.3818, ~~[459.3833]~~)

1. The owner or operator shall identify and analyze at least one alternative release scenario for each toxic ***highly hazardous*** substance that is used in a process and at least one alternative

release scenario to represent all flammable ***highly hazardous substances*** 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 NAC 459.95528, 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 NAC 459.95366; 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 NAC 459.95364 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 NAC 459.95528; 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 NAC 459.95378]~~ ***Any accidental release or an incident that was investigated pursuant to NAC 459.95429***; and

(b) The analyses performed pursuant to ~~[NAC 459.95388 or]~~ 459.95414.

NAC 459.9537 Defining off-site impacts on population. (NRS 459.3818, ~~[459.3833]~~)

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 NAC

459.95364. 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 NAC 459.95528, 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.

NAC 459.95372 Defining off-site impacts on environment. (NRS 459.3818, ~~[459.3833]~~)

1. The owner or operator shall ~~[include on the registration form and in the assessment report]~~ ***define*** 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 NAC 459.95364.

2. The ~~[facility]~~ ***owner or operator*** may use the R.M.P. Off-Site Consequence Analysis Guidance, which is adopted by reference pursuant to NAC 459.95528, 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.

NAC 459.95374 Review and update of off-site consequence analyses; ~~[revision of assessment report]~~. (NRS 459.3818, ~~[459.3833]~~)

1. The owner or operator shall review and update the off-site consequence analyses developed pursuant to NAC 459.95364 to 459.95372, inclusive, 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 NAC 459.95468]~~.

NAC 459.95376 Documentation to be maintained concerning worst-case release scenarios and alternative release scenarios. (NRS 459.3818, ~~[459.3833]~~) 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; and

(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; and

(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.

~~[NAC 459.95378 Five-year accident history. (NRS 459.3818, 459.3833)~~

~~1. The owner or operator shall include in the 5-year accident history all accidental releases 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.]~~

[General Requirements for Prevention Programs]

[NAC 459.95382 General requirements. (NRS 459.3818, 459.3833)

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 NAC 459.95412 to 459.95435, inclusive, 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 for that process pursuant to:

(a) NAC 459.95386 to 459.95398, inclusive; or

(b) NAC 459.95412 to 459.95435, inclusive.

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 NAC 459.9545.]

]Requirements for Prevention Programs,
Tier B Program Level 2]

[NAC 459.95386 Safety information; compliance with good engineering practices. (NRS 459.3818, 459.3833) Except as otherwise provided in paragraph (b) of subsection 3 of NAC 459.95382, 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 recognized and generally accepted good engineering practices. Compliance with such engineering practices may include, without limitation, 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.]

[NAC 459.95388 Hazard review. (NRS 459.3818, 459.3833) Except as otherwise provided in paragraph (b) of subsection 3 of NAC 459.95382, 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 NAC 459.95378 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 NAC 459.95452;

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 NAC 459.9549 to 459.955, inclusive.]

[NAC 459.9539 Operating procedures. (NRS 459.3818, 459.3833)

1. Except as otherwise provided in paragraph (b) of subsection 3 of NAC 459.95382, 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.]

[NAC 459.95392 Training procedures. (NRS 459.3818, 459.3833)

1. Except as otherwise provided in subsection 2 or paragraph (b) of subsection 3 of NAC 459.95382, 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 NAC 459.9539.

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 NAC 459.9539.

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.**]**

[NAC 459.95394 Procedures for maintenance of equipment. (NRS 459.3818, 459.3833)

1. Except as otherwise provided in paragraph (b) of subsection 3 of NAC 459.95382, 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 practices; and

(4) Previous experience.

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

~~[NAC 459.95396 Verification of compliance; documentation. (NRS 459.3818, 459.3833)~~

~~1. Except as otherwise provided in paragraph (b) of subsection 3 of NAC 459.95382, 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 NAC 459.95386 to 459.95398, inclusive.~~

~~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.]~~

~~[NAC 459.95398 Investigation of incidents. (NRS 459.3818, 459.3833) Except as otherwise provided in paragraph (b) of subsection 3 of NAC 459.95382, 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.]~~

Requirements for Prevention Program~~[s, Tier A Program and Tier B Program Levels 2 and 3]~~

NAC 459.95412 Information concerning process safety. (NRS 459.3818, ~~[459.3833]~~)

1. ~~[Except as otherwise provided in paragraph (a) of subsection 3 of NAC 459.95382, pursuant to the schedule set forth in NAC 459.95414, t]~~ ***T***he 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]~~ ***C.A.P.P.*** shall compile written information concerning process safety before conducting a process hazard analysis required pursuant to NAC 459.95414.

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

(a) The hazards of the ~~[tier A or tier B]~~ ***highly hazardous*** substances or ***explosives***, 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.

NAC 459.95414 Process hazard analysis. (NRS 459.3818, ~~[459.3833]~~)

1. ~~[Except as otherwise provided in paragraph (a) of subsection 3 of NAC 459.95382, t]~~ ***T***he owner or operator shall perform an initial process hazard analysis on a process that is subject to ***C.A.P.P. prior to introducing highly hazardous substances or explosives to the process.*** ~~[the tier A program or tier B program level 2 or 3.]~~

2. ~~[The owner or operator shall conduct the initial process hazard analysis before submission of the assessment report pursuant to NAC 459.9545.~~

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

~~[4.]~~ ***3.*** The owner or operator shall obtain the approval of the division concerning the methodology of the process hazard analysis before conducting the analysis.

~~[5.]~~ ***4.*** The owner or operator shall select one or more of the following methodologies as required by the complexity of the process:

(a) A "what if" analysis;

(b) A checklist;

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

(d) A hazard and operability study;

(e) A failure mode and effects analysis;

(f) A fault tree analysis; or

(g) An appropriate equivalent methodology.

~~[6.]~~ ***5.*** When preparing a process hazard analysis, an owner or operator shall consider:

(a) The hazards of the process;

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

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

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

(e) The siting of the facility;

(f) The human factors; and

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

~~[7.]~~ ***6.*** If not evaluated as part of the process hazard analysis pursuant to subsections 1 to ~~[6]~~ ***5***, inclusive, a separate, dedicated hazard analysis, utilizing a checklist or other appropriate method, must be conducted to evaluate:

(a) Human factors;

(b) Facility siting; and

(c) External forces.

~~[8.]~~ ***7.*** The owner or operator ~~[of a facility with a process that is subject to:~~

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

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

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

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

(a) ~~[(1) With]~~ ***That consists of at least two persons, collectively having*** expertise in engineering and process operations; and

(b) ~~[(2)]~~ That includes at least:

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

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

~~[9.]~~ ***8.*** The owner or operator shall:

(a) Promptly evaluate the findings and recommendations of the ~~[assessment]~~ team ***formed pursuant to subsection 7***;

(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 ***and document such completion***; ***and***

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

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

~~[10.]~~ ***9.*** At least once every 5 years after the completion of the initial process hazard analysis, a team that satisfies the requirements of subsection ~~[8]~~ ***7*** shall update and revalidate the process hazard analysis to ensure that the process hazard analysis is consistent with the current process.

~~[11.]~~ ***10.*** A process hazard analysis must be updated and revalidated ***using a team meeting the requirements of subsection 7 and*** pursuant to the procedures set forth in NAC 459.9549 to 459.955, inclusive.

~~[12.]~~ ***11.*** An owner or operator shall retain a process hazard analysis and an update or revalidation for each process subject to this section, as well as any documented resolution of recommendations described in subsection ~~[9]~~ ***8***, for the life of the process.

NAC 459.95416 Operating procedures. (NRS 459.3818, ~~[459.3833]~~)

1. ~~[Except as otherwise provided in paragraph (a) of subsection 3 of NAC 459.95382, t]~~ ***T***he 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]~~ ***C.A.P.P.*** shall develop and implement written operating procedures for that process which:

(a) Are consistent with the process safety information developed pursuant to NAC 459.95412; 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.

NAC 459.95418 Training procedures. (NRS 459.3818, ~~[459.3833]~~) ~~[Except as otherwise provided in paragraph (a) of subsection 3 of NAC 459.95382, t]~~ ***T***he 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]~~ ***C.A.P.P.***:

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

(a) The layout of the plant;

(b) The location of equipment and instruments;

(c) The specific safety and health hazards;

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

(e) Safe work practices that are applicable to the job tasks of the employee ~~[.]~~ ***; and***

(f) Training in the management of change program developed and implemented pursuant to NAC 459.95423, including instruction on how to recognize activities that are not replacement in kind.

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 carry out the duties and responsibilities safely as specified in the operating procedures.

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

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

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

6. Shall prepare records that include, without limitation:

(a) The identity of the employee;

(b) The date of training;

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

(d) The means used to verify that the employee understood the training, including, without limitation, any test records from such verification.

NAC 459.95421 Procedures for maintenance of equipment. (NRS 459.3818, ~~[459.3833]~~)

1. ~~[Except as otherwise provided in paragraph (a) of subsection 3 of NAC 459.95382, t]~~ ***T***he owner or operator of a facility with a process subject to ***C.A.P.P.*** ~~[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;

(3) Training in the management of change program developed and implemented pursuant to NAC 459.95423, including instruction on how to recognize activities that are not replacement in kind.

(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 NAC 459.95412 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.

NAC 459.95423 Procedures for management of change in process. (NRS 459.3818, ~~[459.3833]~~)

1. ~~[Except as otherwise provided in paragraph (a) of subsection 3 of NAC 459.95382, t]~~ ***T***he owner or operator of a facility with a process that is subject to ***C.A.P.P.*** ~~[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]~~ ***Buildings, structures and equipment that affect a*** process ~~[that is subject to the tier A program or tier B program level 2 or 3;]~~ ***.***

(b) ***Evaluate the impact of changes to organizational structure or staffing levels on the implementation of the prevention program and the emergency response program;***

(c) Ensure that the procedures established pursuant to paragraph***s*** (a) ***and (b)*** require that the following considerations are addressed before one of the changes listed in paragraph***s*** (a) ***and (b)*** occur~~[s]~~ ***and that they specify the criteria for review and approval of each***:

(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;

(d) ~~[(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

(e) ~~[(d)]~~ Update:

(1) The process safety information required pursuant to NAC 459.95412; and

(2) The operating procedures or practices required pursuant to NAC 459.95416.

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.

NAC 459.95425 Pre-startup safety review. (NRS 459.3818, ~~[459.3833]~~)

1. ~~[Except as otherwise provided in paragraph (a) of subsection 3 of NAC 459.95382, t]~~ ***T***he owner or operator of a facility with a process that is subject to ***C.A.P.P.*** ~~[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 ***highly hazardous*** substance ***or explosive*** is introduced into a process:

(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 NAC 459.95423; and

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

NAC 459.95427 Verification of compliance; documentation. (NRS 459.3818, ~~[459.3833]~~)

1. ~~[Except as otherwise provided in paragraph (a) of subsection 3 of NAC 459.95382, t]~~ ***T***he owner or operator of a facility with a process that is subject to ***C.A.P.P.*** ~~[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 NAC 459.95412 to ~~[459.95435]~~ ***459.95442***, inclusive, 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.

NAC 459.95429 Investigation of incidents. (NRS 459.3818, ~~[459.3833]~~) ~~[Except as otherwise provided in paragraph (a) of subsection 3 of NAC 459.95382, t]~~ ***T***he owner or operator of a facility with a process that is subject to ***C.A.P.P.*** ~~[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]~~ ***and take corrective action to prevent recurrence of the incident***;

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

3. Establish a team ***of at least two persons*** 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.

NAC 459.95431 Employee participation. (NRS 459.3818, ~~[459.3833]~~) ~~[Except as otherwise provided in paragraph (a) of subsection 3 of NAC 459.95382, t]~~ ***T***he owner or operator of a facility with a process that is subject to ***C.A.P.P.*** ~~[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 hazard analyses; and

(b) Developing and implementing the other requirements of NAC 459.95412 to ~~[459.95435]~~ ***459.95442***, inclusive; and

3. Provide to employees and their representatives access to process hazard analyses and other information which is developed pursuant to NAC 459.95412 to ***459.95442*** ~~[459.95435]~~, inclusive.

NAC 459.95433 Hot work permit. (NRS 459.3818, ~~[459.3833]~~) ~~[Except as otherwise provided in paragraph (a) of subsection 3 of NAC 459.95382, t]~~ ***T***he owner or operator of a facility with a process that is subject to ***C.A.P.P.*** ~~[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.

NAC 459.95435 Duties of owner or operator concerning contractors; duties of contractors. (NRS 459.3818, ~~[~~459.3833~~]~~)

1. ~~[~~Except as otherwise provided in paragraph (a) of subsection 3 of NAC 459.95382, t~~]~~ ***T***he owner or operator of a facility with a process that is subject to ***C.A.P.P.*** ~~[~~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 NAC 459.9544 and 459.95442;

(d) Develop and implement safe work practices consistent with NAC 459.95416; 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 NAC 459.95416; 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.

Emergency Response Programs

Effective June 1, 2005

NAC 459.9544 Applicability; compliance. (NRS 459.3818, ~~[~~459.3833~~]~~)

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

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

(a) For facilities subject to 29 C.F.R. § 1910, the facility has implemented ~~[an]~~ ***a written*** 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; ***and***

(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)]~~ The facility has coordinated response actions with the local fire department. ***For response actions to be coordinated, the owner or operator shall:***

(1) Identify the first responding fire station and hazardous materials response station;

(2) Review the emergency response program developed for the owner or operator's facility with the responders identified in subparagraph 1, or representatives of the responders;

(3) Keep a written record of such review meetings, including responder comments to the facility emergency response program; and

(4) Update information on a basis agreeable to the owner or operator and the responder.

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

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

Effective June 1, 2005

NAC 459.95442 Establishment and implementation; review and coordination; written program. (NRS 459.3818, ~~[459.3833]~~)

1. An owner or operator shall:

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

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

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

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

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

(5) Procedures and measures for emergency response after an accidental release;

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

(b) ~~[Coordinate the emergency response program with the community emergency response plan developed pursuant to 42 U.S.C. § 11003. Upon request of the local emergency planning~~

~~committee or emergency response officials, the owner or operator shall promptly provide to the local emergency response officials any information that is necessary for developing and implementing the community emergency response plan.~~

~~(c)]~~ Review and coordinate the emergency response program developed pursuant to paragraphs (a) and (b) with local emergency responders. ***For response actions to be coordinated, the owner or operator shall:***

(1) Identify the first responding fire station and hazardous materials response station;

(2) Review the emergency response program developed for the owner or operator's facility with the responders identified in subparagraph 1, or representatives of the responders;

(3) Keep a written record of such review meetings, including responder comments to the facility emergency response program; and

(4) Update information on a basis agreeable to the owner or operator and the responder.

2. A written program satisfies the requirements of this section if it:

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

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

~~[Assessment Reports]~~

~~[NAC 459.95446 Submission of draft for tier A program. (NRS 459.3818) For a process that is subject to the tier A program, the assessment team may submit to the division a draft of the assessment report. Such a draft must be submitted at least 120 days before the final deadline for submittal of the assessment 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.]~~

~~[NAC 459.95448 Assessment report satisfies requirement for written report of assessment of risk through analysis of hazard. (NRS 459.3818, 459.3833) 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 NAC 459.95448 to 459.95468, inclusive.]~~

~~[NAC 459.9545 Submission; trade secret or confidential business information. (NRS 459.3818, 459.3833)~~

~~1. The owner or operator of a facility in which a new process is subject to:~~

~~(a) The tier A program;~~

~~(b) The tier B program level 3; or~~

~~(c) The tier B program level 2, shall submit an assessment report for the new process in a method and format and to a location specified by the division pursuant to NAC 459.953473.~~

~~2. The owner or operator of a facility in which a process is subject to the tier B program level 1 shall submit an assessment report for the process in a method and format and to a location specified by the division before the owner or operator may:~~

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

~~(b) Commence operation of the process.~~

3. The owner or operator of a facility who is required to submit an assessment report for a process but who is not subject to subsection 1 or 2 shall submit the assessment report in a manner and format, and to a location, pursuant to the schedule established by the division. The division shall schedule a date for the submission of an assessment report pursuant to this subsection that:

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

[NAC 459.95452 Executive summary; submission of P.T.A.H. (NRS 459.3818, 459.3833)

1. 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 or 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 involving a tier A or tier B substance, 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 NAC 459.95382 to 459.95442, inclusive. 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.

5. A P.T.A.H. submitted pursuant to this section shall be deemed to satisfy the requirements of subsection 3 of NRS 459.3852 for a process that is subject to the tier A program.**]**

[NAC 459.95454 Registration form concerning substances. (NRS 459.3818, 459.3833)

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

2. The registration must include, without limitation:

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

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

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

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

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

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

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

(h) For each process:

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

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

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

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

(i) The identifier assigned by the United States Environmental Protection Agency, if any, to the facility;

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

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

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

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

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

[NAC 459.95456 Evaluation of off-site consequences. (NRS 459.3818, 459.3833)

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

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

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

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

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

(3) One alternative release scenario:

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

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

(c) The following data for each release scenario:

(1) The chemical name of the substances;

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

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

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

(5) The duration of the release;

(6) The distance to the endpoint;

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

(8) Any passive mitigation that is considered;

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

(10) If the substance is toxic:

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

(II) The physical state of the substance;

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

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

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

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

[NAC 459.95458 Submission of 5-year accident history. (NRS 459.3818, 459.3833) An owner or operator shall submit in the assessment report the 5-year accident history created pursuant to NAC 459.95378.]

[NAC 459.9546 Contents of report for tier B program level 2. (NRS 459.3818, 459.3833) For each process that is subject to the 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) The major hazards identified;

(c) The process controls in use;

(d) The mitigation systems in use;

(e) 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 resulted in a review or revision of safety information, the hazard review, operating or maintenance procedures, or training.]

[NAC 459.95462 Contents of report for tier A program or tier B program level 3. (NRS 459.3818, 459.3833) For each process that is subject to the tier A program or 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 resulted in 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 NAC 459.95427, 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.**]**

[NAC 459.95464 Emergency response program. (NRS 459.3818, 459.3833) An owner or operator shall:
1. Provide in the assessment report:
(a) Whether he has created a written emergency response program;
(b) Whether the emergency response program includes specific actions to be taken in response to an accidental release;
(c) Whether the program includes procedures for informing the public and local agencies responsible for responding to accidental releases;
(d) Whether the program includes information concerning emergency health care;
(e) The date of the most recent review or update of the emergency response program; and
(f) The date of the most recent emergency response training for employees;
2. Provide the name and telephone number of the local agency with which emergency response activities or the emergency response program is coordinated; and
3. List any other federal or state emergency plan requirements to which the facility is subject.**]**

[NAC 459.95466 Certification. (NRS 459.3818, 459.3833)

1. For a process 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 NAC 459.95327, 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 offsite 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 NAC 459.95448 to 459.95464, inclusive, 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.]

[NAC 459.95468 Reviews and updates. (NRS 459.3818, 459.3833)

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

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

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

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

[Assessment Team]

[NAC 459.95472 Qualifications of members. (NRS 459.3818)

1. The members of an assessment team must have:

(a) Completed collectively at least one previous project in:

(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 conducting or leading a process hazard analysis; and

(b) Participated in at least three process hazard analyses.

6. Persons may be used interchangeably to fulfill the different roles that are described in NAC 459.95474 if the persons have been approved by the division.]

[NAC 459.95474 Duties. (NRS 459.3818)

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.]

[NAC 459.95476 Submission of information to division. (NRS 459.3818)

1. The owner or operator shall submit to the division:

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

(1) Engineering related to chemical processes;

(2) Engineering related to safety;

(3) The preparation of operating procedures;

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

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

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

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

(8) The performance of analyses of hazards;

(9) The performance of risk assessments;

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

~~(l) A clear and concise description of how the assessment team will evaluate:~~
~~(1) The emergency response program;~~
~~(2) Process safety information;~~
~~(3) The process hazard analysis;~~
~~(4) Standard operating procedures;~~
~~(5) Training; and~~
~~(6) The maintenance program and procedures.~~
~~2. The owner or operator shall submit the information required pursuant to this section before conducting the assessment.~~
~~3. The owner or operator shall not conduct the process hazard analysis without first obtaining the approval of the division of the information submitted pursuant to this section.]~~

~~[Annual Compliance Report]~~

~~[NAC 459.9548 Submission. (NRS 459.3818) 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.]~~

~~[NAC 459.95482 Content. (NRS 459.3818) The annual report of compliance required pursuant to NAC 459.9548 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;~~
~~8. Any other information requested by the division; and~~
~~9. A certification as set forth in subsection 2 of NAC 459.95466.]~~

Two Release Provisions

NAC 459.95486 Requirements for exemption from C.A.P.P. (NRS 459.3818)
1. A process that is otherwise subject to C.A.P.P. pursuant to ***subparagraph (2) of*** paragraph (b) of subsection 1 of NAC 459.95323 is not subject to C.A.P.P. if:
(a) Two or more years have elapsed since ***the owner or operator has registered pursuant to subsection 4 of NAC 459.95348 and completed the process hazard analysis*** ~~[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 ***developed pursuant to subsection 8 of NAC 459.95414*** ~~[from the P.T.A.H. developed pursuant to NRS 459.3852]~~ are ***implemented*** ~~[verified by the division to be complete]~~; and

(d) The state environmental commission has granted the exemption pursuant to NAC 459.95488.

2. The division shall require continued compliance with C.A.P.P. until the ***process hazard analysis recommendations are*** ~~[P.T.A.H. is]~~ completed and the state environmental commission has granted the exemption pursuant to NAC 459.95488.

NAC 459.95488 Request for exemption from C.A.P.P. (NRS 459.3818)

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 ***subparagraph (2) of*** paragraph (b) of subsection 1 of NAC 459.95323 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]~~ ***A list of all recommendations developed from the process hazard analysis indicating that they have been implemented. This list shall be certified pursuant to NAC 459.95358***.

2. Not later than 60 calendar days after the division receives the ***information*** ~~[letter and report]~~ submitted to it pursuant to subsection 1, the division shall verify ***compliance with paragraphs a through c, inclusive, of subsection 1 of NAC 459.95486*** ~~[that all measures of the P.T.A.H. have been completed]~~.

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

(a) Document its findings concerning ***the verification made pursuant to subsection 2*** ~~[its investigation into whether all measures of the P.T.A.H. have been completed]~~; and

(b) Notify the owner or operator in writing ***of the findings made pursuant to paragraph a.*** ~~[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 ***verified compliance with paragraphs a through c, inclusive, of subsection 1 of NAC 459.95486,*** ~~[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 the reason the commission denied the exemption.

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

Revalidation

NAC 459.9549 Process hazard analysis. (NRS 459.3818, ~~[459.3833]~~)

1. The revalidation of a process hazard analysis that is required pursuant to NAC 459.95414 must:

(a) Confirm pursuant to NAC ~~[459.95494]~~ ***459.95496*** to 459.955, inclusive, that the analysis ~~[or review]~~ is valid for the current process; ~~[and]~~

(b) ***Determine the status of recommendations from the previous process hazard analysis; and***

(c) Satisfy the requirements of NAC 459.95414.

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 NAC 459.95414; 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.

~~[NAC 459.95492 Hazard review. (NRS 459.3818, 459.3833)~~

1. The revalidation of a hazard review that is required pursuant to NAC 459.95388 must:

~~(a) Confirm pursuant to NAC 459.95496, 459.95498 and 459.955 that the analysis or review is valid for the current process; and~~

~~(b) Satisfy the requirements of NAC 459.95388.~~

~~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 NAC 459.95388; 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.]~~

~~[NAC 459.95494 Tier A program. (NRS 459.3818, 459.3833) Revalidation of a facility with a process that is subject to the tier A program must be conducted by an assessment team which satisfies the requirements of NAC 459.95472.]~~

NAC 459.95496 Process safety information. (NRS 459.3818, ~~[~~459.3833~~]~~)

1. A revalidated process hazard analysis must reflect current process safety information, required pursuant to NAC 459.95412. The owner or operator shall document specifically how the accuracy of the process safety information was validated.

2. If ~~[~~process safety information or~~]~~ a change in process safety information was ***not*** subject to a process hazard analysis ~~[~~or hazard review~~]~~, the owner or operator ***shall, at a minimum, reevaluate the process hazard analysis to consider the potential hazard caused by the change and to propose necessary actions to mitigate the hazard as the owner or operator deems necessary.*** ~~[~~is not required to revalidate the analysis or review if the analysis or review reflects the current process~~]~~.

3. A revalidated process hazard analysis must reflect a current hazard assessment.

NAC 459.95498 Current procedures and programs. (NRS 459.3818, ~~[~~459.3833~~]~~)

1. A revalidated process hazard analysis ~~[~~or hazard review~~]~~ must reflect current operating procedures, training programs, maintenance programs and emergency response programs***, required pursuant to NAC 459.95416, 459.95418, 459.95421, 459.9544 and 459.95442. The owner or operator shall document specifically how the accuracy of such information was validated.***

2. If a change in operating procedures, training programs, maintenance programs and emergency response programs was ***not*** subject to a process hazard analysis ~~[~~or hazard review~~]~~, the owner or operator ***shall, at a minimum, reevaluate the process hazard analysis to consider the potential hazard caused by the change and to propose necessary actions to mitigate the hazard as the owner or operator deems necessary*** ~~[~~is not required to revalidate the analysis or review if the analysis or review reflects the current procedures and programs~~]~~.

NAC 459.955 Consideration of incidents. (NRS 459.3818, ~~[~~459.3833~~]~~)

1. All incidents that had the potential for, or actually resulted in, a release, fire or explosion involving a ~~[~~tier A or tier B~~]~~ ***highly hazardous*** substance ***or explosive*** 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.

Change in Ownership

NAC 459.95512 Requirements. (NRS 459.3818, ~~[~~459.3833~~]~~) If a facility with a process that is subject to ***C.A.P.P.*** ~~[~~the tier A program or tier B program~~]~~ changes ownership, the new owner or operator shall ~~[~~comply fully~~]~~ ***assume the responsibility for full compliance*** 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 NAC 459.95348 is not due, satisfy the requirements for registration set forth in NAC 459.9535 and 459.95358 not later than 14 days after the transfer of ownership; or

2. If the annual registration required pursuant to NAC 459.95348 is due, submit the annual registration.

Management Systems

Effective June 1, 2005

NAC 459.95516 Development. (NRS 459.3818, ~~[~~459.3833~~]~~)

The owner or operator of a facility with a process that is subject to ***C.A.P.P.*** ~~[~~the tier A program or tier B program level 2 or 3~~]~~ shall develop***:***

1. ~~[~~a~~]~~ ***A*** management system to oversee the implementation of all ***program*** requirements ~~[~~of C.A.P.P.~~]~~ and:

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

(b) ~~[~~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:

(1) ~~[~~(a)~~]~~ The names of the persons who are members of the team; and

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

2. An implementation plan that covers each prevention program and emergency response program element. The plan shall define how each requirement of the program element will be implemented specifically at the facility and will provide a system that requires all information and documentation be controlled in a manner to ensure that the most current is in circulation and in use.

Inspections

NAC 459.9552 Determination of compliance. (NRS 459.3818, ~~[~~459.3833~~]~~)

1. The division ***must conduct a site inspection at least once per year for each facility registered pursuant to NAC 459.95348 in a manner defined in this section.***

2. The Division may request information from the owner or operator of the facility in advance of any inspection related to compliance with any C.A.P.P. requirement.

3. The Division may require that any information submitted pursuant to subsection 2 be certified pursuant to NAC 459.95358.

4. During site inspections, the Division must:

(a) Evaluate compliance with the requirements of the:

(1) Prevention program;

(2) Emergency response program; and

(3) Hazard assessment.

(b) Validate information submitted by the owner or operator of the facility.

5. The Division is not obligated to perform the evaluation pursuant to subsection 4 in its entirety on an annual basis, but may elect to fulfill the requirements of subsection 4 over multiple inspections, prioritizing the order of the evaluation by perceived program deficiencies and potential hazard.

6. The Division must document the inspection results in a written report. The report must include at a minimum:

(a) The name of the facility, dates of inspection, and the names of facility personnel present;

(b) Processes reviewed and hazardous materials involved;
(c) The findings and conclusions of the inspection; and
(d) The corrective actions required of the owner or operator of the facility.
7. Copies of the report prepared pursuant to subsection 6 must:
(a) Be placed in the facility file, which must be available for public review; and
(b) Be sent to the owner or operator of the facility.

~~[:~~
~~(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 NAC 459.95382 to 459.95435, inclusive;~~
~~(2) The emergency response program developed pursuant to NAC 459.9544 and 459.95442; and~~
~~(3) The requirements of the hazard assessment developed pursuant to NAC 459.95362 to 459.95378, inclusive; and~~
~~(d) May audit the components of the facility's assessment report submitted pursuant to NAC 459.95448 to 459.95468, inclusive, 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.]~~

~~**[Enforcement]**~~

~~[NAC 459.95524 Applicability. (NRS 459.3818, 459.3833) 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.]~~

Standards and Codes

NAC 459.95528 Adoption by reference. (NRS 459.3818, ~~[~~459.3833~~]~~) The following provisions are hereby adopted by reference:

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

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

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

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

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

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

7. 49CFR172.101

8. 40CFR68

9. ASME B 31.3, Process Piping, 1999 version with addenda. A copy may be obtained from the American Society of Mechanical Engineers, P.O. Box 2300Fairfield, NJ 07007-2300, at a cost of $255.

10. ASME B 31.5, Refrigeration Piping and Heat Transfer Components, 2001 version. A copy may be obtained from the American Society of Mechanical Engineers, P.O. Box 2300Fairfield, NJ 07007-2300, at a cost of $105.