LCB File No. R121-98

NOTICE OF INTENT TO ACT UPON REGULATIONS
NEVADA STATE ENVIRONMENTAL COMMISSION
NOTICE OF HEARING

The Nevada State Environmental Commission will hold a public hearing beginning at 8:30 a.m. on Friday, April 9, 1999, at the Nevada Commission on Tourism, Commission Chamber, 2nd Floor, 401 N. Carson Street, Carson City, Nevada (located immediately south of the Carson Nugget and two blocks north of the Capitol Building).

The purpose of the hearing is to receive comments from all interested persons regarding the adoption, amendment, or repeal of temporary and permanent regulations in Nevada Administrative Code (NAC) Chapters 445A, 445B, and 459. If no person directly affected by the proposed action appears to request time to make an oral presentation, the State Environmental Commission may proceed immediately to act upon any written submission.

Petition 98007 (LCB File No. R-121-98) is a permanent regulation amending NAC 459.952 to 459.9542, the regulation of highly hazardous substances. This regulation implements Senate Bill 266 of the 1997 session to allow delegation of the EPA's Clean Air Act Risk Management Program (RMP), 40 CFR Part 68, to regulate facilities with hazardous substances. Facilities affected by the program would be required to prepare risk management plans that would be available to the public. The proposed regulations mesh the existing State authorized Chemical Accident Prevention Program with the Federal Risk Management Program. This petition was previously noticed with an intent to act upon regulations for the December 9, 1998 Environmental Commission hearing.
Petition 1999-06 proposes to temporarily amend NAC 445A.347 by removing the Division of Emergency Management in the Nevada Department of Motor Vehicles & Public Safety from the list of agencies required to be notified of spills and releases pursuant to Nevada's water pollution control regulations. The intent of this regulation is to provide for regulatory relief regarding the disclosure of spills and releases. Other emergency reporting requirements are not affected by this amendment.

The proposed temporary regulation is not anticipated to have any significant adverse short or long term economic impact on Nevada businesses. Business should find the process of reporting less burdensome. The adoption of this regulation is not anticipated to have a direct short or long term adverse economic impact upon the public. The proposed regulations do not overlap or duplicate any regulations of another state or local governmental agency. The regulations are no more stringent than federal regulations. There is no additional cost to the agency for enforcement. This regulation does not add a new fee, nor increase an existing fee.

Petition 1999-07 proposes to temporarily amend NAC 445B.001 to 445B.395, the air pollution control regulations. Amendments are proposed to NAC 445.221 to update the reference to the Code of Federal Regulations from 1997 to 1998. The amendments to 445B.300 extends the expiration of an operating permit from one year to 18 months. NAC 445B.362 and 445B.373 are proposed to be amended to correct equation errors and add the term "maximum." NAC 445B.383 is amended to correct the references from cubic feet to yards.

The proposed temporary regulation is not anticipated to have any significant adverse short or long term economic impact on Nevada businesses. Business should find the process of reporting less burdensome. The adoption of this regulation is not anticipated to have a direct short or long term adverse economic impact upon the public. The proposed regulations do not overlap or duplicate any regulations of another state or local governmental agency. The regulations are no more stringent than federal regulations. The proposed amendments will make the Nevada air pollution control regulations consistent with the federal air pollution control rules. There is no additional cost to the agency for enforcement. This regulation does not add a new fee, nor increase an existing fee.

Persons wishing to comment upon the proposed regulations or any other matter listed above may appear at the scheduled public hearing or may address their comments, data, views or arguments, in written form, to the Environmental Commission, 333 West Nye Lane, Carson City, Nevada 89706-0851. Written submissions must be received at least 5 days before the scheduled public hearing.

A copy of the regulations to be adopted or amended will be on file at the State Library, 100 Stewart Street and the Division of Environmental Protection, 333 West Nye Lane—Room 104, in Carson City and at the Division of Environmental Protection, 555 E. Washington—Suite 4300, in Las Vegas for inspection by members of the public during business hours. In addition, copies of the regulations and public notice have been deposited at major library branches in each county in Nevada. The notice and the text of the proposed regulations are also available in the State of Nevada Register of Administrative Regulations which is prepared and published monthly by the Legislative Counsel Bureau pursuant to NRS 233B.0653. The proposed regulations are on the Internet at http:/www.leg.state.nv.us. In addition the State Environmental Commission maintains an Internet site at http:/www.state.nv.us/ndep/admin/envir01.htm. This site contains the public notice, agenda, codified regulations, and petitions for pending and past commission actions.

Pursuant to NRS 233B.0603, the provisions of NRS 233B.064(2) is hereby provided: "Upon adoption of any regulation, the agency, if requested to do so by an interested person, either prior to adoption or within 30 days thereafter, shall issue a concise statement of the principal reasons for and against its adoption, and incorporation therein its reason for overruling the consideration urged against its adoption."

Additional copies of the regulations to be adopted or amended will be available at the Division of Environmental Protection for inspection and copying by the members of the public during business hours. Copies will also be mailed to members of the public upon request. A reasonable fee may be charged for copies if it is deemed necessary.

Members of the public who are disabled and require special accommodations or assistance at the meeting are requested to notify the Executive Secretary in writing, Nevada State Environmental Commission, 333 West Nye Lane, Room 128, Carson City, Nevada, 89706-0851, facsimile (775) 687-5856, or by calling (775) 687-4670 Extension 3118, no later than 5:00 p.m. on April 2, 1999.

This public notice has been posted at the following locations: Clark County Public Library, and Grant Sawyer Office Building in Las Vegas; the Washoe County Library and Division of Wildlife in Reno; and at the Division of Environmental Protection, the Department of Museums, Library and Arts, State Library and Archives Division and the Commission on Tourism in Carson City, Nevada.

PROPOSED REGULATION OF THE
NEVADA STATE ENVIRONMENTAL COMMISSION

Petition 98007

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

AUTHORITY: NRS 459.3818.1 and 459.3833.2

Section 1. Chapter 459 of the NAC is hereby amended by adding thereto the provisions set forth as sections 2 to 123, inclusive.

Sec. 2. ***An "Accidental Release" is an unintentional discharge of a Tier A or Tier B substance, as listed in Section 55, to the air, water or land, from a facility, in any amount, or a fire or explosion involving any of those substances.***

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

Sec. 4. ***"Administrative Controls" mean written procedural mechanisms used for hazard control.***

Sec. 5. ***"AIChE/CCPS" means American Institute of Chemical Engineers, Center for Chemical Process Safety.***

Sec. 6. ***"API" means the American Petroleum Institute.***

Sec. 7. *"Article" means a manufactured item, as defined under 29 CFR 1910.1200(b), that is formed to a specific shape or design during manufacture, that has end use functions dependent in whole or in part upon the shape or design during end use, and that does not release or otherwise result in exposure to a Tier A or Tier B substance under normal conditions of processing and use.*

Sec. 8. *"ASME" means the American Society of Mechanical Engineers.*

Sec. 9. *"Assessment report" means the document submitted pursuant to Section 98, to satisfy the requirements for a report of assessment of risk through the analysis of hazards or a risk management plan.*

Sec. 10. *"CAPP" means the State of Nevada, Chemical Accident Prevention Program, which encompasses all activity required pursuant to NRS 459.380 through NRS 459.3874, inclusive, and regulations adopted thereto.*

Sec. 11. *"CAS" means the Chemical Abstracts Service.*

Sec. 12. *"Catastrophic release" means a major uncontrolled emission, fire or explosion, involving one or more regulated substances that presents imminent and substantial endangerment to public health and the environment.*

Sec. 13. *"Classified Information" means "classified information" as defined in the Classified Information Procedures Act, 18 U.S.C. App. 3, section 1(a) as "any information or material that has been determined by the United States Government pursuant to an executive order, statute, or regulation, to require protection against unauthorized disclosure for reasons of national security."*

Sec. 14. *"Condensate" means hydrocarbon liquid separated from natural gas that condenses due to changes in temperature, pressure, or both, and remains liquid at standard conditions.*

Sec. 15. *"Crude Oil" means any naturally occurring, unrefined petroleum liquid.*

Sec. 16. *An "Emergency Response Program" is an action plan with implementation measures, developed with the purpose of responding to accidental releases of Tier A or Tier B substances, and other emergencies. For the purpose of this regulation, the emergency response program is defined in Sections 95 and 96.*

Sec. 17. *"Environmental Receptor" means natural areas such as national or state parks, forests, or monuments; officially designated wildlife sanctuaries, preserves, refuges, or areas; and Federal wilderness areas, that could be exposed at any time to toxic concentrations, radiant heat, or overpressure greater than or equal to the endpoints provided pursuant to Section 67.1 , as a result of an accidental release and that can be identified on local U. S. Geological Survey maps.*

Sec. 18. *"Facility" means:*

1. The physical stationary source as defined in Section 44, or

2. The physical regulated facility as defined in NRS 459.381.

Sec. 19. *"Field Gas" means gas extracted from a production well before the gas enters a natural gas processing plant.*

Sec. 20. *A "Hazard Assessment" is an evaluation of potential offsite and onsite consequences associated with the accidental release of substances and a summary of a facility's five year accident history, developed pursuant to Sections 66 through 74,*

inclusive.

Sec. 21. *"Hot Work" means an operation involving electric or gas welding, cutting, brazing, or similar flame or spark-producing operations.*

Sec. 22. *"Injury" means any effect on a human that results either from direct exposure to toxic concentrations; radiant heat; or overpressures from accidental releases or from the direct consequences of a vapor cloud explosion (such as flying glass, debris, and other projectiles) from an accidental release and that requires medical treatment or hospitalization.*

Sec. 23. *"Major Change" means introduction of a new process, process equipment, or Tier A or Tier B substance, an alteration of process chemistry that results in any change to safe operating limits, or other alteration that introduces a new hazard.*

Sec. 24. *"Medical Treatment" means treatment, other than first aid, administered by a physician or registered professional personnel under standing orders from a physician.*

Sec. 25. *"Mitigation or Mitigation System" means specific activities, technologies, or equipment designed or deployed to capture or control substances upon loss of containment to minimize exposure of the public or the environment.*

Sec. 26. *"NAICS" means North American Industrial Classification System.*

Sec. 27. *"Natural Gas Processing Plant (gas plant)" means any processing site engaged in the extraction of natural gas liquids from fields gas, fractionation of mixed natural gas liquids to natural gas products, or both, classified as North American Industrial*

Classification System code 211112 (previously Standard Industrial Classification Code 1321).

Sec. 28. *"NFPA" means the National Fire Protection Association.*

Sec. 29. *"Offsite" means areas beyond the property boundary of the facility, and areas within the property boundary to which the public has routine and unrestricted access during or outside business hours.*

Sec. 30. *"OSHA" means the U.S. Occupational Safety and Health Administration.*

Sec. 31. *"Owner/operator" means the party responsible for the implementation of CAPP in any processes subject to NRS 459.380 through 459.3874, inclusive, or any regulations adopted thereto.*

Sec. 32. *"Passive Mitigation" means equipment, devices, or technologies that work without human, mechanical, or other energy input, and function to contain or minimize the consequences of an accidental release.*

Sec. 33. *"Petroleum Refining Process Unit" means a process unit used in an establishment primarily engaged in petroleum refining as defined in NAICS code 32411 for petroleum refining (formerly Standard Industrial Classification code 2911) and used for the following: Producing transportation fuels (such as gasoline, diesel fuels, and jet fuels), heating fuels (such as kerosene, fuel gas distillate, and fuel oils), or lubricants; Separating petroleum; or Separating, cracking, reacting, or reforming intermediate petroleum streams.*

Sec. 34. *"Population" means the public.*

Sec. 35. *A ✐Prevention Program✍ is a group of mandatory elements that are developed and implemented pursuant to Section 75 and Sections 76 through 82, inclusive or Sections 83 through 94, inclusive, with the purpose of preventing the accidental release of Tier A or Tier B substances, minimizing the likelihood of an accidental release or mitigating the impacts of an accidental release.*

Sec. 36. *✐Process✍ means any activity involving a Tier A or Tier B substance including any use, storage, manufacturing, handling, or on-site movement of such substances, or combination of these activities. For the purposes of this definition, any group of vessels that are interconnected, or separate vessels that are located such that a Tier A or Tier B substance could be involved in a potential release, shall be considered a single process.*

Sec. 37. *✐Produced Water✍ means water extracted from the earth from an oil or natural gas production well, or that is separated from oil or natural gas after extraction.*

Sec. 38. *✐PTAH✍ means the plan to abate hazards, submitted pursuant to Section 99.8.*

Sec. 39. *✐Public✍ means any person except employees or contractors at the facility.*

Sec. 40. *✐Public Receptor✍ means offsite residences, institutions (e.g., schools, hospitals), industrial, commercial, and office buildings, parks, or recreational areas inhabited or occupied by the public at any time without restriction by the facility, where members of the public could be exposed to toxic concentrations, radiant heat, or overpressure, as a result of an accidental release.*

Sec. 41. *"Replacement in Kind" means reinstalling or reinstituting equipment, instruments, procedures, raw materials and processing conditions that satisfy the design specifications.*

Sec. 42. *A "Report of Assessment of Risk Through the Analysis of Hazards", also referred as an ARTAH report, is a document developed by the facility to satisfy the requirements of NRS 459.3846 through NRS 459.3852, inclusive.*

Sec. 43. *A "Risk Management Plan" is a document developed by the facility to satisfy the requirements of 40CFR68.150 through 40CFR68.190, inclusive.*

Sec. 44. *"Stationary Source" means any buildings, structures, equipment, installations, or substance emitting stationary activities which belong to the same industrial group, which are located on one or more contiguous properties, which are under the control of the same person (or persons under common control), and from which an accidental release may occur. A stationary source includes transportation containers that are no longer under active shipping papers and transportation containers that are connected to equipment at the stationary source for the purposes of temporary storage, loading, or unloading. The term stationary source does not apply to transportation, including the storage incident to transportation, of any Tier A or Tier B substance or any other extremely hazardous substance under the provisions of CAPP, provided that such transportation is regulated under 49 CFR Parts 192, 193, or 195. Properties shall not be considered contiguous solely because of a railroad or gas pipeline right-of-way.*

Sec. 45. *"Substance" means a chemical listed under Section 55. A Tier A substance is a chemical that has an associated Tier A Threshold Quantity, except that the chemical does not have to be present at or in excess of the threshold quantity. A Tier B substance is a chemical that has an associated Tier B Threshold Quantity, except that the chemical does not have to be present at or in excess of the threshold quantity.*

Sec. 46. *"Threshold Quantity" means the quantity specified pursuant to Section 55 for Tier A or Tier B. For Tier A, the amount of substance used in determining if a threshold quantity is present, is calculated by adding the quantities of all amounts of a Tier A substance within the facility's contiguous boundary, regardless of the quantity found in each individual process. For Tier B, the threshold quantity is calculated by determining the amount of Tier B substance in a specific process, considering the exemptions provided in Section 53.2.*

Sec. 47. *"Tier A" means an accident prevention program required pursuant to NRS 459.3813.1(a).*

Sec. 48. *"Tier B" means an accident prevention program required pursuant to NRS 459.3833.*

Sec. 49. *"Two Release Quantity" is the amount of Tier A substance designated in Section 55 that may initiate Tier A requirements in an otherwise exempt facility, pursuant to Sections 53.1(c), 112 and 113.*

Sec. 50. *"Typical Meteorological Conditions" means the temperature, wind speed, cloud cover, and atmospheric stability class, prevailing at the site based on data gathered at or near the site or from a local meteorological station.*

Sec. 51. *"Vessel" means any reactor, tank, drum, barrel, cylinder, vat, kettle, boiler, pipe, hose, or other container.*

Sec. 52. *"Worst-Case Release" means the release of the largest quantity of a Tier A or Tier B substance from a vessel or process line failure that results in the greatest distance to an endpoint defined in Section 67.1.*

Sec. 53. ***The owner/operator shall determine the applicable program tier for each process within the facility boundary.***

1. Pursuant to NRS 459.3813, a process shall be subject to the Tier A program if:

(a) The facility does not have an exemption pursuant to NRS 459.3814; and

(b) Within the facility's contiguous boundary, a substance is present in a quantity greater than or equal to the amount designated in Section 55 under the column "Tier A Threshold Quantity", except that where the threshold quantity is blank, a Tier A program shall not apply. Each process containing such a substance shall be subject to the Tier A program, regardless of the quantity of substance in the process; or

(c) Pursuant to NRS 459.3813.1(b), if there are two or more releases from the facility, in excess of the Two Release Quantity for the same or different Tier A substances listed in Section 55, within a twelve calendar month time period, and NRS 459.3813.1(a) is not applicable, and the exemption provided by NRS 459.3814 is not applicable, then the owner/operator shall comply with Sections 56 and 57 for any processes handling the Tier A substances.

2. Pursuant to NRS 459.3833, a process shall be subject to the Tier B program, if:

(a) The facility does not have an exemption pursuant to NRS 459.3814.1;

(b) The facility does not have an exemption pursuant to paragraph (c)(2) of this subsection; and

(c) Within a facility's individual process, a substance is present in a quantity greater than the amount designated in Section 55 under the column "Tier B Threshold Quantity", except that where the threshold quantity is blank, a Tier B program shall not apply.

(1) In calculating the amount of Tier B substance present in a process, the following exemptions shall apply:

(I) Concentrations of a Tier B toxic substance in a mixture. A Tier B toxic substance is designated "T", under the "Tox, Flam or Expl" column in Section 55. If a Tier B substance is present in a mixture and the concentration of the substance is below one percent by weight of the mixture, the amount of the substance in the mixture need not be considered when

determining whether more than a threshold quantity is present at the facility. Except for oleum, toluene 2,4-diisocyanate, toluene 2,6-diisocyanate, and toluene diisocyanate (unspecified isomer), if the concentration of the regulated substance in the mixture is one percent or greater by weight, but the facility can demonstrate that the partial pressure of the regulated substance in the mixture (solution) under handling or storage conditions in any portion of the process is less than 10 millimeters of mercury (mm Hg), 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. The facility shall document this partial pressure measurement or estimate.

(II) Concentrations of a Tier B flammable substance in a mixture. A Tier B flammable substance is designated ☙F❧, under the ☙Tox, Flam or Expl❧ column in Section 55.

1. General provision. If a Tier B flammable substance is present in a mixture and the concentration of the substance is below one percent by weight of the mixture, the mixture need not be considered when determining whether more than a threshold quantity of the regulated substance is present at the facility. Except as provided in parts 2, Gasoline and 3, Naturally occurring hydrocarbon mixtures, of this subsubparagraph, if the concentration of the Tier B flammable substance in the mixture is one percent or greater by weight of the mixture, then, for purposes of determining whether a threshold quantity is present at the facility, the entire weight of the mixture shall be treated as the regulated substance unless the facility can demonstrate that the mixture itself does not have a National Fire Protection Association flammability hazard rating of 4. The demonstration shall be in accordance with the definition of flammability hazard rating 4 in the NFPA 704, Standard System for the Identification of the Hazards of Materials for Emergency Response, National Fire Protection Association, Quincy, MA, 1996. Boiling and flash point shall be defined and determined in accordance with NFPA 30, Flammable and Combustible Liquids Code, National Fire Protection Association, Quincy, MA, 1996. The facility shall document these flash point and boiling point measurements or estimates and the flammability hazard rating.

2. Gasoline. Regulated substances in gasoline, when in distribution or related storage for use as fuel for internal combustion

engines, need not be considered when determining whether more than a threshold quantity is present at a facility.

3. Naturally occurring hydrocarbon mixtures. Prior to entry into a natural gas processing plant or a petroleum refining process unit, regulated substances in naturally occurring hydrocarbon mixtures need not be considered when determining whether more than a threshold quantity is present at a facility. Naturally occurring hydrocarbon mixtures include any combination of the following: condensate, crude oil, field gas and produced water.

(III) Articles. Regulated substances contained in articles need not be considered when determining whether more than a threshold quantity is present at the facility.

(IV) Uses. Regulated substances, when in use for the following purposes, need not be included in determining whether more than a threshold quantity is present at the facility:

1. Use as a structural component of the facility;

2. Use of products for routine janitorial maintenance;

3. Use by employees of foods, drugs, cosmetics, or other personal items containing the regulated substance; and

4. Use of regulated substances present in process water or non-contact cooling water as drawn from the environment or municipal sources, or use of regulated substances present in air used either as compressed air or as part of combustion.

(V) Activities in laboratories. If a regulated substance is manufactured, processed, or used in a laboratory at a facility under the supervision of a technically qualified individual as defined in 40CFR720.3(ee), the quantity of the substance need not be considered in determining whether a threshold quantity is present. This exemption does not apply to:

1. Specialty chemical production;

2. Manufacture, processing, or use of substances in pilot plant scale operations; and

3. Activities conducted outside the laboratory.

(2) Ammonia used as an agricultural nutrient, when held by farmers, is exempt from all requirements of the Tier B.

3. A process can be subject to the requirements of both Tier A and Tier B.

Sec. 54. For each process that is subject to Tier B, the owner/operator shall determine the program level for each process in accordance with:

1. Tier B Program Level 1 eligibility requirements. A process is eligible for Program Level 1, if it meets all of the following requirements:

(a) For the five years prior to the submission of an assessment report, the process has not had an accidental release of a Tier B substance where exposure to the substance, its reaction products, overpressure generated by an explosion involving the substance, or radiant heat generated by a fire involving the substance led to any of the following onsite or offsite:

(1) Death;

(2) Injury; or

(3) Response or restoration activities for an exposure of an environmental receptor;

(b) The distance to a toxic or flammable endpoint for a worst-case release assessment conducted under Section 68 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 Tier A.

2. Program Level 2 eligibility requirements. A process is subject to Program Level 2 requirements if it does not meet the eligibility requirements of either subsection 1 or 3 of this section.

3. Program Level 3 eligibility requirements. A process is subject to Program Level 3 if the process does not meet the requirements of subsection 1 of this section, and if either of the following conditions is met:

(a) The process is in NAICS code 32211, 32411, 32511, 325181, 325188, 325192, 325199, 325211, 325311, or 32532; or

(b) The process is subject to the OSHA process safety management standard, 29 CFR 1910.119.

4. If at any time a process no longer meets the eligibility criteria of its Program level, the facility shall comply with the requirements of the new Program level that applies to the process.

Sec. 55.

1. Substances designated in this section, with a Tier A Threshold Quantity, shall include substances and quantities as designated in NRS 459.3816.

3 2. Substances designated in this section, with a Tier B Threshold Quantity, shall include substances and quantities as designated in 59FR4493 - 4499, and amended in 62FR45129 - 45132 and 63FR639 - 645.

Chemical Name	Alternate Chemical Name	Mixture Description	CAS Number	Tier A Threshold Quantity (lbs)	Tier B Threshold Quantity (lbs)	Two Release Quantity (lbs)	Two Release Source note 1	Tox(T) Flam(F) or Expl(E)	To End (m
Acetaldehyde			75-07-0	2,500	10,000	1,000	1	F	
Acetylene	Ethyne		74-86-2		10,000			F	
Acrolein	2-Propenol		107-02-8	150	5,000	1	1&2	T	0.00
Acrylonitrile	2-Propenenitrile		107-13-1		20,000			T	0.07
Acrylyl chloride	2-Propenoyl chloride		814-68-6	250	5,000	100	2	T	0.00
Alkylaluminums				5,000		50	3		
Allyl alcohol	2-Propen-1-ol		107-18-6		15,000			T	0.03
Allyl chloride			107-05-1	1,000		100	3		
Allylamine	2-Propen-1-amine		107-11-9	1,500	10,000	500	2	T	0.00
Ammonia	Anhydrous Ammonia	Anhydrous	7664-41-7	5,000	10,000	100	1&2	T	0.14
Ammonia	Ammonia solution	20wt% or greater	7664-41-7		20,000			T	0.14
Ammonia	Ammonia solution	44wt% or greater	7664-41-7	10,000		100	3		
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			T	0.01
Arsine	Arsenic Hydride		7784-42-1	100	1,000	10	3	T	0.00
bis(Chloromethyl) Ether	Chloromethyl Ether		542-88-1	100	1,000	10	1&2	T	0.00
Boron trichloride			10294-34-5	2,500	5,000	100	3	T	0.01

Chemical Name	Alternate Chemical Name	Mixture Description	CAS Number	Tier A Threshold Quantity (lbs)	Tier B Threshold Quantity (lbs)	Two Release Quantity (lbs)	Two Release Source note 1	Tox(T) Flam(F) or Expl(E)	To End (m
Boron trifluoride			7637-07-2	250	5,000	25	3	T	0.02
Boron trifluoride w/Methyl Ether		1:1 ratio	353-42-4		15,000			T	0.02
Bromine			7726-95-6	1,500	10,000	500	2	T	0.00
Bromine chloride			13863-41-7	1,500		10	3		
Bromine pentafluoride			7789-30-2	2,500		100	3		
Bromine trifluoride			7787-71-5	15,000		100	3		
Bromotrifluorethylene			598-73-2		10,000			F	
1,3-Butadiene			106-99-0		10,000			F	
Butane			106-97-8		10,000			F	
1-Butene			106-98-9		10,000			F	
2-Butene			107-01-7		10,000			F	
Butene			25167-67-3		10,000			F	
2-Butene-cis			590-18-1		10,000			F	
2-Butene-trans	[2-Butene, (E)]		624-64-6		10,000			F	
Butyl hydroperoxide (Tertiary)			75-91-2	5,000		50	3		
Butyl perbenzoate (Tertiary)			614-45-9	7,500		75	3		
Carbon disulfide			75-15-0		20,000			T	0.16
Carbon oxysulfide	Carbon Oxide Sulfide		463-58-1		10,000			F	
Carbonyl fluoride			353-50-4	2,500		10	3		
		12.6%					3		

Chemical Name	Alternate Chemical Name	Mixture Description	CAS Number	Tier A Threshold Quantity (lbs)	Tier B Threshold Quantity (lbs)	Two Release Quantity (lbs)	Two Release Source note 1	Tox(T) Flam(F) or Expl(E)	To End (m
Cellulose nitrate		nitrogen or greater	9004-70-0	2,500		25			
Chlorine			7782-50-5	1,500	2,500	10	1&2	T	0.00
Chlorine dioxide			10049-04-4	1,000	1,000	100	3	T	0.00
Chlorine monoxide			7791-21-1		10,000			F	
Chlorine pentafluoride			13637-63-3	1,000		10	3		
Chlorine trifluoride			7790-91-2	1,000		100	3		
Chlorodiethylaluminum	Diethylaluminum Chloride		96-10-6	5,000		50	3		
1-Chloro-2,4-Dinitrobenzene			97-00-7	5,000		50*	3		
Chloroform			67-66-3		20,000			T	0.49
Chloromethyl methyl ether			107-30-2	500	5,000	10	1&2	T	0.00
Chloropicrin			76-06-2	500		50	3		
Chloropicrin/Methylbromide mix				1,500		500	3		
Chloropicrin/Methylchloride mix				1,500		500	3		
2-Chloropropylene			557-98-2		10,000			F	
21-Chloropropylene			590-21-6		10,000			F	
Crotonaldehyde	2-Butenal		4170-30-3		20,000			T	0.02
Crotonaldehyde, (E)-	2-Butenal, (E)-		123-73-9		20,000			T	0.02
Cumene Hydroperoxide			80-15-9	5,000		10	1		
Cyanogen	Ethanedinitrile		460-19-5	2,500	10,000	100	1	F	

Chemical Name	Alternate Chemical Name	Mixture Description	CAS Number	Tier A Threshold Quantity (lbs)	Tier B Threshold Quantity (lbs)	Two Release Quantity (lbs)	Two Release Source note 1	Tox(T) Flam(F) or Expl(E)	To End (m
Cyanogen chloride			506-77-4	500	10,000	10	1	T	0.03
Cyanuric fluoride			675-14-9	100		10	3		
Cyclohexylamine	Cyclohexanimine		108-91-8		15,000			T	0.16
Cyclopropane			75-19-4		10,000			F	
Diacetyl peroxide		70% or greater	110-22-5	5,000		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	0.00
Dibutyl peroxide (tertiary)			110-05-4	5,000		50	3		
Dichloro acetylene			7572-29-4	250		10	3		
Dichlorosilane			4109-96-0	2,500	10,000	100	3	F	
Diethylzinc			557-20-0	10,000		10	3		
Difluoroethane			75-37-6		10,000			F	
Diisopropyl peroxydicarbonate			105-64-6	7,500		75	3		
Dilauroyl peroxide			105-74-8	7,500		75	3		
Dimethyl sulfide			75-18-3	100		10	3		
Dimethylamine (anhydrous)			124-40-3	2,500	10,000	1,000	1	F	
Dimethyldichlorosilane			75-78-5	1,000	5,000	500	2	T	0.02
1,1-Dimethylhydrazine			57-14-7	1,000	15,000	10	1&2	T	0.01
2,2-Dimethylpropane			463-82-1		10,000			F	

Chemical Name	Alternate Chemical Name	Mixture Description	CAS Number	Tier A Threshold Quantity (lbs)	Tier B Threshold Quantity (lbs)	Two Release Quantity (lbs)	Two Release Source note 1	Tox(T) Flam(F) or Expl(E)	To End (m
Epichlorohydrin			106-89-8		20,000			T	0.07
Ethane			74-84-0		10,000			F	
Ethyl acetylene	1-Butyne		107-00-6		10,000			F	
Ethyl chloride			75-00-3		10,000			F	
Ethyl ether			60-29-7		10,000			F	
Ethyl mercaptan	Ethanethiol		75-08-1		10,000			F	
Ethyl nitrite			109-95-5	5,000	10,000	50	3	F	
Ethylamine	Ethanamine		75-04-7	7,500	10,000	100	1	F	
Ethylene	Ethene		74-85-1		10,000			F	
Ethylene fluorohydrin			371-62-0	100		10	2		
Ethylene oxide	Oxirane		75-21-8	5,000	10,000	10	1&2	T	0.09
Ethylenediamine			107-15-3		20,000			T	0.49
Ethyleneimine	Aziridine		151-56-4	1,000	10,000	1	1&2	T	0.01
Fluorine			7782-41-4	1,000	1,000	10	1&2	T	0.00
Formaldehyde		90% or greater	50-00-0	1,000	15,000	100	1&2	T	0.01
Furan			110-00-9	500	5,000	100	1&2	T	0.00
Hexafluoroacetone			684-16-2	5,000		100	3		
Hydrazine			302-01-2		15,000			T	0.01
Hydrochloric acid		37% or greater	7647-01-0		15,000	1,000	3	T	0.03
Hydrofluoric acid		50% or greater	7664-39-3		1,000	100	1	T	0.01
Hydrogen			1333-74-0		10,000			F	

Chemical Name	Alternate Chemical Name	Mixture Description	CAS Number	Tier A Threshold Quantity (lbs)	Tier B Threshold Quantity (lbs)	Two Release Quantity (lbs)	Two Release Source note 1	Tox(T) Flam(F) or Expl(E)	To End (m
Hydrogen bromide			10035-10-6	5,000		10	3		
Hydrogen chloride		Anhydrous	7647-01-0	5,000	5,000	100	3		
Hydrogen cyanide	Hydrocyanic acid	Anhydrous	74-90-8	1,000	2,500	10	1&2	T	0.01
Hydrogen fluoride		Anhydrous	7664-39-3	1,000		100	1&2		
Hydrogen peroxide		52 wt% or greater	7722-84-1	7,500		1,000	2		
Hydrogen selenide			7783-07-5	150	500	10	2	T	0.00
Hydrogen sulfide			7783-06-4	1,500	10,000	100	1&2	T	0.04
Hydroxylamine			7803-49-8	2,500		25*	3		
Iron, pentacarbonyl			13463-40-6	250	2,500	100	2	T	0.00
Isobutane			75-28-5		10,000			F	
Isobutyronitrile			78-82-0		20,000			T	0.14
Isopentane			78-78-4		10,000			F	
Isoprene			78-79-5		10,000			F	
Isopropyl chloride			75-29-6		10,000			F	
Isopropyl chloroformate			108-23-6		15,000			T	0.10
Isopropyl formate			625-55-8	500		100	3		
Isopropylamine			75-31-0	5,000	10,000	1,000	3	F	
Ketene			463-51-4	100		10	3		
Methacrylaldehyde			78-85-3	1,000		500	3		
Methacryloyl chloride			920-46-7	150		100	2		

Chemical Name	Alternate Chemical Name	Mixture Description	CAS Number	Tier A Threshold Quantity (lbs)	Tier B Threshold Quantity (lbs)	Two Release Quantity (lbs)	Two Release Source note 1	Tox(T) Flam(F) or Expl(E)	To End (m
Methacryloyloxyethyl isocyanate			30674-80-7	100		10	3		
Methane			74-82-8		10,000			F	
Methyl acrylonitrile	Methacrylonitrile		126-98-7	250	10,000	25	3	T	0.00
Methyl bromide			74-83-9	2,500		500	3		
3-Methyl-1-butene			563-45-1		10,000			F	
2-Methyl-1-butene			563-46-2		10,000			F	
Methyl chloride			74-87-3	15,000	10,000	100	1	T	0.82
Methyl chloroformate			79-22-1	500	5,000	100	3	T	0.00
Methyl disulfide			624-92-0	100		10	3		
Methyl ether			115-10-6		10,000			F	
Methyl ethyl ketone peroxide		60% or greater	1338-23-4	5,000		10	1		
Methyl fluoroacetate			453-18-9	100		10	3		
Methyl fluorosulfate			421-20-5	100		10	3		
Methyl formate			107-31-3		10,000			F	
Methyl hydrazine			60-34-4	100	15,000	10	1&2	T	0.00
Methyl iodide			74-88-4	7,500		100	1		
Methyl isocyanate			624-83-9	250	10,000	10	1&2	T	0.00
Methyl mercaptan			74-93-1	5,000	10,000	100	1&2	T	0.04
Methyl thiocyanate			556-64-9		20,000			T	0.08

Chemical Name	Alternate Chemical Name	Mixture Description	CAS Number	Tier A Threshold Quantity (lbs)	Tier B Threshold Quantity (lbs)	Two Release Quantity (lbs)	Two Release Source note 1	Tox(T) Flam(F) or Expl(E)	To End (m
Methyl vinyl ketone			78-94-4	100		10	2		
Methylamine	Methanamine	Anhydrous	74-89-5	1,000	10,000	1,000	1	F	
2-Methylpropene			115-11-7		10,000			F	
Methyltrichlorosilane			75-79-6	500	5,000	50	3	T	0.01
Nickel carbonyl			13463-39-3	150	1,000	10	1&2	T	0.00
Nitric acid		80% or greater	7697-37-2		15,000			T	0.02
Nitric acid		94.5 wt% or greater	7697-37-2	500		500	1&2		
Nitric oxide	Nitrogen oxide		10102-43-9	250	10,000	10	1&2	T	0.03
Nitroaniline	para Nitroaniline		100-01-6	5,000		500	3		
Nitrogen dioxide			10102-44-0	250		10	1&2		
Nitrogen oxides		NO; NO2; N2O4; N2O3	10102-44-0	250		10	1&2		
Nitrogen tetroxide			10544-72-6	250		10	1		
Nitrogen trifluoride			7783-54-2	5,000		1,000	3		
Nitrogen trioxide			10544-73-7	250		10	3		
Nitromethane			75-52-5	2,500		25	3		
Oleum	Fuming sulfuric acid	65 wt% or greater of SO3	8014-95-7	1,000	10,000	500	3		
Osmium tetroxide			20816-12-0	100		10	3		
Oxygen difluoride	Fluorine monoxide		7783-41-7	100		10	3		
Ozone			10028-15-6	100		10	3		

Chemical Name	Alternate Chemical Name	Mixture Description	CAS Number	Tier A Threshold Quantity (lbs)	Tier B Threshold Quantity (lbs)	Two Release Quantity (lbs)	Two Release Source note 1	Tox(T) Flam(F) or Expl(E)	To End (m
Pentaborane			19624-22-7	100		10	3		
1,3-Pentadinene			504-60-9		10,000			F	
Pentane			109-66-0		10,000			F	
1-Pentene			109-67-1		10,000			F	
2-Pentene, (E)-			646-04-8		10,000			F	
2-Pentene, (Z)-			627-20-3		10,000			F	
Peracetic acid	Peroxyacetic acid		79-21-0	5,000	10,000	500	2		
Perchloric acid		60% or greater	7601-90-3	5,000		50	3		
Perchloromethyl mercaptan			594-42-3	150	10,000	100	1&2	T	0.00
Perchloryl fluoride			7616-94-6	5,000		100	3		
Phosgene	Carbonyl chloride		75-44-5	100	500	10	1&2	T	0.00
Phosphine	Hydrogen phosphide		7803-51-2	100	5,000	10	3	T	0.00
Phosphorus oxychloride	Phosphoryl chloride		10025-87-3	1,000	5,000	500	3	T	0.00
Phosphorus trichloride			7719-12-2	1,000	15,000	500	3	T	0.02
Piperidine			110-89-4		15,000			T	0.02
Propadiene	1,2 Propadiene		463-49-0		10,000			F	
Propane			74-98-6		10,000			F	
Propargyl bromide			106-96-7	7,500		10	2		
Propionitrile			107-12-0		10,000			T	0.00
Propyl chloroformate			109-61-5		15,000			T	0.01

Chemical Name	Alternate Chemical Name	Mixture Description	CAS Number	Tier A Threshold Quantity (lbs)	Tier B Threshold Quantity (lbs)	Two Release Quantity (lbs)	Two Release Source note 1	Tox(T) Flam(F) or Expl(E)	To End (m
Propyl nitrate			627-13-4	2,500		25	3		
Propylene	1 Propene		115-07-1		10,000			F	
Propylene oxide			75-56-9		10,000			T	0.59
Propyleneimine			75-55-8		10,000			T	0.12
Propyne	1-Propyne		74-99-7		10,000			F	
Sarin			107-44-8	100		10	2		
Selenium hexafluoride			7783-79-1	1,000		1	1		
Silane			7803-62-5		10,000			F	
Stibine	Antimony hydride		7803-52-3	500		10	3		
Sulfur dioxide		Anhydrous	7446-09-5	1,000	5,000	500	2	T	0.00
Sulfur pentafluoride			5714-22-7	250		10	3		
Sulfur tetrafluoride			7783-60-0	250	2,500	10	3		
Sulfur trioxide	Sulfuric Anhydride		7446-11-9	1,000	10,000	100	2	T	0.01
Tellurium hexafluoride			7783-80-4	250		10	3		
Tetrafluoroethylene			116-14-3	5,000	10,000	500	3	F	
Tetrafluorohydrazine			10036-47-2	5,000		500	3		
Tetramethyl Lead			75-74-1	7,500	10,000	100	1	T	0.00
Tetramethylsilane			75-76-3		10,000			F	
Tetranitromethane			509-14-8		10,000			T	0.00
Thionyl chloride			7719-09-7	250		100	3		

Chemical Name	Alternate Chemical Name	Mixture Description	CAS Number	Tier A Threshold Quantity (lbs)	Tier B Threshold Quantity (lbs)	Two Release Quantity (lbs)	Two Release Source note 1	Tox(T) Flam(F) or Expl(E)	To End (m
Titanium tetrachloride			7550-45-0	2,500	2,500	1,000	1&2		
Toluene 2,4-diisocyanate			584-84-9		10,000			T	0.00
Toluene 2,6-diisocyanate			91-08-7		10,000			T	0.00
Toluene diisocyanate			26471-62-5		10,000			T	0.00
Trichloro(chloromethyl) silane			1558-25-4	100		10	3		
Trichloro(dichlorophenyl) silane			27137-85-5	2,500		500	2		
Trichlorosilane			10025-78-2	5,000	10,000	500	3	F	
Trifluorochloroethylene			79-38-9	10,000	10,000	500	3	F	
Trimethoxysilane			2487-90-3	1,500		500	3		
Trimethylamine			75-50-3		10,000			F	
Trimethylchlorosilane			75-77-4		10,000			T	0.05
Vinyl acetate monomer			108-05-4		15,000			T	0.26
Vinyl acetylene			689-97-4		10,000			F	
Vinyl chloride			75-01-4		10,000			F	
Vinyl ethyl ether			109-92-2		10,000			F	
Vinyl fluoride			75-02-5		10,000			F	
Vinyl methyl ether			107-25-5		10,000			F	
Vinylidene chloride			75-35-4		10,000			F	
Vinylidene fluoride			75-38-7		10,000			F	

Table Notes:

1. For Two Release Source Column: 1 = RQ as listed in 40CFR302; 2 = RQ as listed in 40CFR355; 3 = Two Release Quantity as determined in "Technical Basis Document for CAPP Two Release Quantities and Toxic Endpoints".

** Indicates that the Two Release Quantity determined in "Technical Basis Document" identified in note 1, but the explosive or flammable substance must also be involved in a fire or explosion to qualify as a release under Section 53.1(c).*

2. The substances and threshold quantities listed with values under the "Tier A Threshold Quantity" column are identical to NRS 459.3816.

Sec. 56. *The owner/operator of a facility having processes subject to Tier A, Tier B, or any combination thereof shall:*

1. Register annually with the division pursuant to Sections 60 through 65, inclusive;

2. Pay fees pursuant to NAC 459.9542; and

3. Develop a management system pursuant to Section 121.

Sec. 57. *In addition to requirements defined in Section 56, the owner/operator of a facility having processes that are subject to Tier A shall:*

1. Submit assessment team information, assessment plans and prioritization schedules pursuant to Section 109;

2. Conduct a hazard assessment pursuant to Sections 66 through 74, inclusive

3. Implement a prevention program pursuant to Section 75 and Sections 83 through 94, inclusive;

4. Implement an emergency response program pursuant to Sections 95 and 96;

5. Submit assessment reports pursuant to Sections 97 through 107, inclusive; and

6. Submit an annual compliance report pursuant to Sections 110 and 111.

Sec. 58. *In addition to the requirements defined in Section 56, the owner/operator of a facility having processes that are subject to Tier B, and are not also subject to Tier A, shall:*

1. Determine the program level for each process pursuant to Section 54;

2. Conduct a hazard assessment pursuant to Sections 66 through 74, inclusive;

3. Implement a prevention program for each process subject to program level 2 pursuant to Sections 75 through 82, inclusive;

4. Implement a prevention program for each process subject to program level 3 pursuant to Section 75 and 83 through 94, inclusive;

5. Implement an emergency response program pursuant to Sections 95 and 96; and

6. Submit an assessment report pursuant to Sections 97 through 107, inclusive.

Sec. 59. *The owner/operator of a facility with a process that is subject to both Tier A and Tier B shall comply with the general requirements as defined in Section 56 and comply with the requirements for a Tier A process as defined in Section 57, with the following*

exceptions:

1. The timing for initial registration shall be in accordance with Section 60.2(b),

2. The timing for assessment report submission shall be in accordance with Section 98.2 or 98.3.

Sec. 60.

1. Annually, the facility shall complete a single registration form covering all processes, both Tier A and Tier B. The registration shall be submitted by June 21st of each calendar year, and shall reflect the maximum quantity of all Tier A and Tier B substances on site between June 1st of the prior year and May 30th of the current year.

2. Upon starting a new process the facility shall submit an initial registration:

(a) If the process is subject to Tier A, and not Tier B, the facility shall submit the registration pursuant to Sections 60 through 65, inclusive within ten days of bringing the Tier A substance on site.

(b) If the process is subject to Tier B, regardless of Tier A applicability, the facility shall submit the registration pursuant to Sections 60 through 65, inclusive, within 10 days of bringing the substance on site, up to June 21, 1999. After June 21, 1999, the complete assessment report must be submitted to the division upon process startup pursuant to Sections 97 through 106, inclusive.

3. If a facility is subject to the provisions of Section 53.1(c), the facility shall submit the registration pursuant to Sections 60 through 65, inclusive, within 90 days of Section 53.1(c) taking effect.

4. Upon addition of a new substance by the State Environmental Commission to Section 55, the facility shall submit an initial registration to the division pursuant to Sections 60 through 65, inclusive, within 90 days of the regulation effective date.

5. The registration shall consist of facility information pursuant to Section 61, an offsite consequence analysis pursuant to Section 62, a five year accident history pursuant to Section 63, an emergency response plan description pursuant to Section 64, and a certification pursuant to Section 65.

6. Annual submission of the registration pursuant to Sections 60 through 65, inclusive, shall satisfy the requirements of NRS 459.3828.1 and NRS 459.383.

Sec. 61. ***Facility information on the annual registration form shall include:***

1. Facility name, street, city, county, state, zip code, latitude, and longitude, method for obtaining latitude and longitude, and description of location that latitude and longitude represent;

2. The facility Dun and Bradstreet number;

3. Name and Dun and Bradstreet number of the corporate parent company;

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

5. The name and title of the person or position with overall responsibility for CAPP implementation;

6. The name, title, telephone number, and 24-hour telephone number of the emergency contact;

7. For each process, the name and CAS number of each substance, the maximum quantity of each substance on site between June 1st of the previous year and May 30th of the current year, the NAISC code, the program Tier(s) to which the process is subject , the Tier B Program Level, if applicable, of the process as defined in Section 3;

8. The facility EPA identifier;

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

10. Whether the facility is subject to 29 CFR 1910.119;

11. Whether the facility is subject to 40 CFR part 355;

12. Whether the facility has a CAA Title V operating permit, the permit number; and

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

Sec. 62. ***Offsite consequence analysis summary on the annual registration form shall include:***

1. A summary of the following release scenarios, which were evaluated pursuant to Sections 66, 67, 68, 70, 71 and 73:

(a) One worst-case release scenario for each Tier B, Program Level 1 process; and

(b) For all processes subject to either Tier A or Tier B, Program Level 2 or 3, one worst-case release scenario to represent all toxic substances held above the threshold quantity

and one worst-case release scenario to represent all flammable and explosive substances held above the threshold quantity. If additional worst-case scenarios for toxics or flammables are required by Section 68.1(b)(3), the facility shall submit the same information for the additional scenario(s).

2. Data for each release scenario:

(a) Chemical name;

(b) Percentage weight of the chemical in a mixture (toxics only);

(c) Physical state (toxics only);

(d) Basis of results (give model name if used);

(e) Scenario (explosion, fire, toxic gas release, or liquid spill and vaporization);

(f) Quantity released in pounds;

(g) Release rate;

(h) Release duration;

(i) Wind speed and atmospheric stability class (toxics only);

(j) Topography (toxics only);

(k) Distance to endpoint;

(l) Public and environmental receptors within the distance; and

(m) Passive mitigation considered.

Sec. 63.

1. The five-year accident history summary on the annual registration form shall include the five-year accident history data developed pursuant to Section 74.

2. Additionally, the annual registration form shall include a description of all unanticipated and unusual events at the facility which resulted in the release of any quantity of a Tier A or Tier B substance and the efforts undertaken by the facility to assess and remedy the release of any quantity of a Tier A or Tier B substance.

Sec. 64. *The emergency response program information on the annual registration form shall respond to the following questions:*

1. Do you have a written emergency response plan?

2. Does the plan include specific actions to be taken in response to an accidental releases of a Tier A or Tier B substance?

3. Does the plan include procedures for informing the public and local agencies responsible for responding to accidental releases?

4. Does the plan include information on emergency health care?

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

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

7. The name and telephone number of the local agency with which the plan is coordinated.

8. Identification of other Federal or state emergency plan requirements to which the facility is subject.

Sec. 65.

1. If a registration form, submitted pursuant to Sections 60 through 64, inclusive, only reflects processes that are subject to Tier B Program Level 1, the certification statement shall be provided as follows:

Based on the criteria in Section 54.1, 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 five years, the process(es) has (have) had no accidental release that caused onsite or offsite impacts. No additional measures are necessary to prevent offsite impacts from accidental releases. In the event of fire, explosion, or a 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 registration forms submitted pursuant to Sections 60 through 64 inclusive, to which subsection 1 of this section does not apply, the certification statement shall be provided in either 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, including fines or imprisonment,

or both.

(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, including the possibility of fines or imprisonment, or both."

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

Sec. 66. *Sections 66 through 74, inclusive, define the requirements for conducting a hazard assessment. If all facility processes are subject to Tier A or Tier B, Program Level 2 or 3, Sections 67 through 74, inclusive, are applicable toward the conduct of a hazard assessment. If a process is subject to Tier B, Program Level 1, all sections are applicable with the exception of section 69.*

Sec. 67.

1. Endpoints. The endpoint shall be the toxic concentration, ambient overpressure, radiant heat level or lowest flammable gas concentration achieved at the outer boundary of the offsite consequence analysis. For analyses of offsite consequences, the following endpoints shall be used:

(a) Toxic Substances. The toxic endpoints provided in Section 55.

(b) Flammable or Explosive Substances. The endpoints for flammables and explosives vary according to the scenarios studied:

(1) Explosion. An overpressure of 1 psi.

(2) Radiant heat/exposure time. A radiant heat of 5 kw/m^2 for 40 seconds.

(3) Lower flammability limit. A lower flammability limit as provided in NFPA documents or other generally recognized sources.

(c) Where toxic endpoints are not defined in Section 55, or a designation for toxic,

flammable or explosive is not identified, the owner/operator shall define an appropriate endpoint. Toxic endpoints shall be comparable to health impacts defined by ERPG-2, Emergency Response Planning Guidelines, as published by the American Industrial Hygiene Association. Flammable or explosive endpoints shall be those defined in paragraph (b) of this subsection.

2. Wind speed/atmospheric stability class. For the worst-case release analysis, the facility shall use a wind speed of 1.5 meters per second and F atmospheric stability class. If the owner/operator can demonstrate that local meteorological data show a higher minimum wind speed or less stable atmosphere at all times during the previous three years, these minimums may be used. For analysis of alternative scenarios, the owner/operator may use the typical meteorological conditions.

3. Ambient temperature/humidity. For worst-case release analysis of a Tier A or Tier B toxic substance, the owner/operator shall use the highest daily maximum temperature in the previous three years and average humidity for the site, based on temperature/humidity data gathered on site or at a local meteorological station; a facility using the RMP Offsite Consequence Analysis Guidance, available free of charge from the US Environmental Protection Agency, may use 25 ☜C and 50 percent humidity as values for these variables. For analysis of alternative scenarios, the owner/operator may use typical temperature/humidity data gathered on site or at a local meteorological station.

4. Height of release. The worst-case release of a Tier A or Tier B toxic substance shall be analyzed assuming a ground level (0 feet) release. For an alternative scenario analysis of a Tier A or Tier B toxic substance, release height may be determined by the release scenario.

5. Surface roughness. The owner/operator shall use either urban or rural topography, as appropriate. Urban means that there are many obstacles in the immediate area; obstacles include buildings or trees. Rural means there are no buildings in the immediate area and the terrain is generally flat and unobstructed.

6. Dense or neutrally buoyant gases. The owner/operator shall ensure that tables or models used for dispersion analysis of Tier A or Tier B toxic substances appropriately account for gas density.

7. Temperature of released substance. For worst case, liquids other than gases liquefied by refrigeration only shall be considered to be released at the highest daily maximum

temperature, based on data for the previous three years appropriate for the facility, or at process temperature, whichever is higher. For alternative scenarios, substances may be considered to be released at a process or ambient temperature that is appropriate for the scenario.

Sec. 68.

1. The owner/operator shall analyze the worst case release scenario and report on the registration form and in the assessment report. The facility may use the RMP Offsite Consequence Analysis Guidance, available free of charge from the US Environmental Protection Agency, to calculate these values.

(a) For Tier B Program Level 1 processes, one worst-case release scenario for each Program Level 1 process;

(b) For Tier A and Tier B, Program Level 2 and 3 processes:

(1) One worst-case release scenario that is estimated to create the greatest distance in any direction to an endpoint defined in Section 67, resulting from an accidental release of a Tier A or Tier B toxic substances from processes under worst-case conditions defined in Section 67;

(2) One worst-case release scenario that is estimated to create the greatest distance in any direction to an endpoint defined in Section 67.1 resulting from an accidental ignition or detonation of flammable or explosive substances from processes under worst-case conditions defined in Section 67; and

(3) Additional worst-case release scenarios for a hazard class if:

(I) A worst-case release from another process at the facility potentially affects public receptors different from those potentially affected by the worst-case release scenario developed under (b)(1) or (b)(2) of this subsection; or

(II) If an Tier B toxic or flammable substance is present in excess of the threshold quantity and was not part of the worst case considered in paragraphs (1) and (2) of this subsection, a worst case release considering the Tier B toxic or flammable substance must be evaluated.

2. The owner/operator shall determine the worst-case release quantity. The worst-case release quantity shall be the greater of the following:

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

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

3. The Tier A or Tier B substance shall be modeled as a toxic, flammable or explosive as indicated in Section 55. Where there is no indication, and when a combination of toxic, flammable or explosive hazards are possible, the owner/operator shall select the scenario providing the most significant impact on employees and the public.

4. Worst-case release scenario ☝ toxic gases.

(a) For toxic substances that are normally gases at ambient temperature and handled as a gas or as a liquid under pressure, the facility shall assume that the quantity in the vessel or pipe, as determined under subsection 2 of this section, is released as a gas over 10 minutes. The release rate, in pounds per minute, shall be assumed to be the total quantity divided by 10 unless passive mitigation systems are in place. Refer to the RMP Offsite Consequence Analysis Guidance, available free of charge from the US Environmental Protection Agency, for information on calculating the impact of passive mitigation measures on the release rate.

(b) For gases handled as refrigerated liquids at ambient pressure:

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

(2) If the released substance is contained by passive mitigation systems in a pool with a depth greater than 1 cm, the facility may assume that the quantity in the vessel or pipe, as determined under subsection 2 of this section, is spilled instantaneously to form a liquid pool. The volatilization rate (release rate) shall be calculated at the boiling point of the substance and at the conditions specified in subsection 4 of this section.

5. Worst-case release scenario ☝ toxic liquids.

(a) For toxic substances that are normally liquids at ambient temperature, the facility shall assume that the quantity in the vessel or pipe, as determined under subsection 2 of this section, is spilled instantaneously to form a liquid pool.

(1) The surface area of the pool shall be determined by assuming that the liquid spreads to 1 centimeter deep unless passive mitigation systems are in place that serve to contain the spill and limit the surface area. Where passive mitigation is in place, the surface area of the contained liquid shall be used to calculate the volatilization rate.

(2) If the release would occur onto a surface that is not paved or smooth, the facility may take into account the actual surface characteristics.

(b) The volatilization rate shall account for the highest daily maximum temperature occurring in the past three years, the temperature of the substance in the vessel, and the concentration of the substance if the liquid spilled is a mixture or solution.

(c) The rate of release to air shall be determined from the volatilization rate of the liquid pool. The facility may use the methodology in the RMP Offsite Consequence Analysis Guidance, available free of charge from the US Environmental Protection Agency, or any other publicly available techniques that account for the modeling conditions and are recognized by industry as applicable as part of current practices. Proprietary models that account for the modeling conditions may be used provided the owner/operator allows the division access to the model and describes model features and differences from publicly available models to local emergency planners upon request.

6. Worst-case release scenario - flammables. The owner/operator shall assume that the quantity of the substance, as determined under subsection 2 of this section, vaporizes resulting in a vapor cloud explosion. A yield factor of 10 percent of the available energy released in the explosion shall be used to determine the distance to the explosion endpoint if the model used is based on TNT-equivalent methods.

7. Worst-case release scenario - explosive. The owner/operator shall employ methods for calculating overpressure based upon generally accepted practices.

8. Parameters to be applied. The facility shall use the parameters defined in Section 67 to determine distance to the endpoints. The facility may use the methodology provided in the RMP Offsite Consequence Analysis Guidance, available free of charge from the US Environmental Protection Agency, or any commercially or publicly available air dispersion modeling techniques, provided the techniques account for the modeling conditions and are recognized by industry as applicable as part of current practices. Proprietary models that account for the modeling conditions may be used provided the owner/operator allows the

division access to the model and describes model features and differences from publicly available models to local emergency planners upon request.

9. Consideration of passive mitigation. Passive mitigation systems may be considered for the analysis of worst case provided that the mitigation system is capable of withstanding the release event triggering the scenario and would still function as intended.

10. Factors in selecting a worst-case scenario. Notwithstanding the provisions of subsection 2 of this section, the facility shall select as the worst case for flammable substances or the worst case for Tier A or Tier B toxic substances, a scenario based on the following factors if such a scenario would result in a greater distance to an endpoint defined in Section 67.1, beyond the facility boundary than the scenario provided under subsection 2 of this section:

(a) Smaller quantities handled at higher process temperature or pressure; and

(b) Proximity to the boundary of the facility.

Sec. 69.

1. The number of scenarios. The owner/operator shall identify and analyze at least one alternative release scenario for each toxic substance held in a process(es) and at least one alternative release scenario to represent all flammable or explosive substances held in processes. The facility may use the RMP Offsite Consequence Analysis Guidance, available free of charge from the US Environmental Protection Agency, to calculate these values.

2. Scenarios to consider.

(a) For each scenario required under subsection 1 of this section, the owner/operator shall select a scenario:

(1) That is more likely to occur than the worst-case release scenario developed under Section 68; and

(2) That will reach an endpoint offsite. If no alternate release scenario with an offsite end point exists, then the alternate release scenario with the most significant onsite impact shall be selected.

(b) Release scenarios considered should include, but are not limited to, the following, where applicable:

(1) Transfer hose releases due to splits or sudden hose uncoupling;

(2) Process piping releases from failures at flanges, joints, welds, valves and valve seals, and drains or bleeds;

(3) Process vessel or pump releases due to cracks, seal failure, or drain, bleed, or plug failure;

(4) Vessel overfilling and spill, or overpressurization and venting through relief valves or rupture disks; and

(5) Shipping container mishandling and breakage or puncturing leading to a spill.

3. Parameters to be applied. The facility shall use the appropriate parameters defined in Section 67 to determine distance to the endpoints. The facility may use either the methodology provided in the RMP Offsite Consequence Analysis Guidance, available free of charge from the US Environmental Protection Agency, or any commercially or publicly available air dispersion modeling techniques, provided the techniques account for the specified modeling conditions and are recognized by industry as applicable as part of current practices. Proprietary models that account for the modeling conditions may be used provided the owner/operator allows the division access to the model and describes model features and differences from publicly available models to local emergency planners upon request.

4. Consideration of mitigation. Active and passive mitigation systems may be considered provided they are capable of withstanding the event that triggered the release and would still be functional.

5. Factors in selecting scenarios. The owner/operator shall consider the following in selecting alternative release scenarios:

(a) The five-year accident history provided in Section 74; and

(b) Failure scenarios identified under Section 77 or Section 84 of this part.

Sec. 70.

1. The owner/operator shall estimate, on the registration form and in the assessment report, the population within a circle with its center at the point of the release and a radius determined by the distance to the endpoint defined in Section 67.1. The facility may use the RMP Offsite Consequence Analysis Guidance, available free of charge from the US Environmental Protection Agency, to calculate these values.

2. Population to be defined. Population shall include residential population. The

presence of institutions (schools, hospitals, prisons), parks and recreational areas, and major commercial, office, and industrial buildings shall be noted on the registration form and in the assessment report.

3. Data sources acceptable. The owner/operator may use the most recent Census data, or other updated information, to estimate the population potentially affected.

4. Level of accuracy. Population shall be estimated to two significant digits.

Sec. 71.

1. The owner/operator shall list, on the registration form and in the assessment report, environmental receptors within a circle with its center at the point of the release and a radius determined by the distance to the endpoint defined in Section 67.1. The facility may use the RMP Offsite Consequence Analysis Guidance, available free of charge from the US Environmental Protection Agency, to calculate these values.

2. Data sources acceptable. The owner/operator may rely on information provided on local U.S. Geological Survey maps or on any data source containing U.S.G.S. data to identify environmental receptors.

Sec. 72.

1. The owner/operator shall review and update the offsite consequence analyses developed pursuant to Section 66 through 71, inclusive, at least once every five years.

2. If changes in processes, quantities stored or handled, or any other aspect of the facility might reasonably be expected to increase or decrease the distance to the endpoint by a factor of two or more, the owner/operator shall complete a revised analysis within six months of the change and submit a revised assessment report as provided in Section 107.2(f).

Sec. 73. *The owner/operator shall maintain the following records on the offsite consequence analyses:*

1. For worst-case scenarios, a description of the vessel or pipeline and substance selected as worst case, assumptions and parameters used, and the rationale for selection; assumptions shall include use of any administrative controls and any passive mitigation that were assumed to limit the quantity that could be released. Documentation shall include the anticipated effect of the controls and mitigation on the release quantity and rate.

2. For alternative release scenarios, a description of the scenarios identified, assumptions and parameters used, and the rationale for the selection of specific scenarios;

assumptions shall include use of any administrative controls and any mitigation that were assumed to limit the quantity that could be released. Documentation shall include the effect of the controls and mitigation on the release quantity and rate.

3. Documentation of estimated quantity released, release rate, and duration of release.

4. Methodology used to determine distance to endpoints.

5. Data used to estimate population and environmental receptors potentially affected.

6. Verification that active and passive mitigation systems are designed to remain functional under the release scenario conditions.

Sec. 74.

1. The owner/operator shall include in the five-year accident history all accidental releases from processes that resulted in deaths, injuries, or significant property damage on site, or known offsite deaths, injuries, evacuations, sheltering in place, property damage, or environmental damage.

2. Data required. For each accidental release included, the owner/operator shall report the following information:

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

(b) Chemical(s) released;

(c) Estimated quantity released in pounds and for mixtures of toxic substances, percentage concentration by weight of the released substance in the mixture;

(d) The NAICS code for the process;

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

(f) Weather conditions, if known;

(g) On-site impacts;

(h) Known offsite impacts;

(i) Initiating event and contributing factors if known;

(j) Whether offsite responders were notified if known; and

(k) Operational or process changes that resulted from investigation of the release.

3. Level of accuracy. Numerical estimates may be provided to two significant digits.

Sec. 75. *The owner/operator shall implement a prevention program in accordance with the following requirements:*

1. The owner/operator of processes subject to Tier B, Program Level 1 is not required to implement a prevention program provided that the process is not also subject to Tier A.

2. The owner/operator of processes that are subject to Tier A or Tier B, Program Level 3 is required to implement a prevention program pursuant to Sections 75 and 83 through 94, inclusive.

3. The owner/operator of each process not qualified under subsection 1 or 2 of this section, shall implement a prevention program pursuant to Sections 75 through 82, inclusive. A prevention program implemented pursuant to Sections 83 through 94, inclusive, may be used to satisfy Tier B, Program Level 2 prevention program requirements.

4. The owner/operator shall be in compliance with all applicable prevention program requirements at the time the assessment report is submitted pursuant to Section 98.

Sec. 76.

1. The facility shall compile and maintain the following up-to-date safety information related to the Tier B substances, processes, and equipment:

(a) Material Safety Data Sheets that meet the requirements of 29 CFR 1910.1200(g);

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

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

(d) Equipment specifications; and

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

2. The owner/operator shall ensure that the process is designed in compliance with recognized and generally accepted good engineering practices. Compliance with Federal or state regulations that address industry-specific safe design or with industry-specific design codes and standards may be used to demonstrate compliance with this paragraph.

3. The owner/operator shall update the safety information if a major change occurs that makes the information inaccurate.

Sec. 77.

1. The owner/operator shall conduct a review of the hazards associated with the Tier B substances, process, and procedures. The review shall identify the following:

(a) The hazards associated with the process and Tier B substances;

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

(c) The safeguards 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. The owner/operator may use checklists developed by persons or organizations knowledgeable about the process and equipment as a guide to conducting the review. Previous incidents as defined in Section 74 shall be considered during the hazard review. For processes designed to meet industry standards or Federal or state design rules, the hazard review shall, by inspecting all equipment, determine whether the process is designed, fabricated, and operated in accordance with the applicable standards or rules.

3. The owner/operator shall document the results of the review and ensure that problems identified are resolved in a timely manner. The owner/operator shall also schedule the resolutions of all recommendations in the PTAH pursuant to Section 99.

4. The review shall be updated at least once every five years. The owner/operator shall also conduct reviews whenever a major change in the process occurs; all issues identified in the review shall be resolved before startup of the changed process.

5. Hazard reviews shall be updated and revalidated pursuant to Sections 114 through 119, inclusive.

Sec. 78.

1. The owner/operator shall prepare written operating procedures that provide clear instructions or steps for safely conducting activities associated with each process consistent with the safety information for that process. Operating procedures or instructions provided by equipment manufacturers or developed by persons or organizations knowledgeable about the process and equipment may be used as a basis for a stationary source's operating procedures.

2. The procedures shall address the following:

(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 that requires a hazard review; (g) Consequences of deviations and steps required to correct or avoid deviations; and

(h) Equipment inspections.

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

Sec. 79.

1. The owner/operator shall ensure that each employee presently operating a process, and each employee newly assigned to a process have been trained or tested competent in the operating procedures provided in Section 78 that pertain to their duties. For those employees already operating a process on June 21, 1999, the owner/operator may certify in writing that the employee has the required knowledge, skills, and abilities to safely carry out the duties and responsibilities as provided in the operating procedures.

2. Refresher training. Refresher training shall be provided at least every three years, and more often if necessary, to each employee operating a process to ensure that the employee understands and adheres to the current operating procedures of the process. The owner/operator, in consultation with the employees operating the process, shall determine the appropriate frequency of refresher training.

3. The owner/operator may use training conducted under Federal or state regulations or under industry-specific standards or codes or training conducted by process equipment vendors to demonstrate compliance with this section to the extent that the training meets the requirements of this section.

4. The owner/operator shall ensure that operators are trained in any updated or new procedures prior to startup of a process after a major change.

Sec. 80.

1. The owner/operator shall prepare and implement procedures to maintain the on-going mechanical integrity of the process equipment. The owner/operator may use procedures or instructions provided by process equipment vendors or procedures in Federal or state regulations or industry codes as the basis for stationary source maintenance procedures.

2. The owner/operator shall train or cause to be trained each employee involved in maintaining the on-going mechanical integrity of the process. To ensure that the employee can perform the job tasks in a safe manner, each such employee shall be trained in the hazards of the process, in how to avoid or correct unsafe conditions, and in the procedures applicable to the employee's job tasks.

3. Any maintenance contractor shall ensure that each contract maintenance employee is trained to perform the maintenance procedures developed under subsection 1 of this section.

4. The owner/operator shall perform or cause to be performed inspections and tests on process equipment. Inspection and testing procedures shall follow recognized and generally accepted good engineering practices. The frequency of inspections and tests of process equipment shall be consistent with applicable manufacturers' recommendations, industry standards or codes, good engineering practices, and prior operating experience.

Sec. 81.

1. The owner/operator shall certify that they have evaluated compliance with the provisions of Sections 76 through 82, inclusive, at least every three years to verify that the procedures and practices developed under the rule are adequate and are being followed.

2. The compliance audit shall be conducted by at least one person knowledgeable in the process.

3. The owner/operator shall develop a report of the audit findings.

4. The owner/operator shall promptly determine and document an appropriate response to each of the findings of the compliance audit and document that deficiencies have been corrected.

5. The owner/operator shall retain the two (2) most recent compliance audit reports. This requirement does not apply to any compliance audit report that is more than five years

old.

Sec. 82.

1. The owner/operator shall investigate each incident which resulted in, or could reasonably have resulted in a catastrophic release.

2. An incident investigation shall be initiated as promptly as possible, but not later than 48 hours following the incident.

3. A summary shall be prepared at the conclusion of the investigation which includes at a minimum:

(a) Date of incident;

(b) Date investigation began;

(c) A description of the incident;

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

(e) Any recommendations resulting from the investigation.

4. The owner/operator shall promptly address and resolve the investigation findings and recommendations. Resolutions and corrective actions shall be documented.

5. The findings shall be reviewed with all affected personnel whose job tasks are affected by the findings. 6. Investigation summaries shall be retained for five years.

Sec. 83.

1. Pursuant to the schedule set forth in Section 84, the owner/operator shall complete a compilation of written process safety information before conducting any process hazard analysis required by Section 84. The compilation of written process safety information is to enable the owner/operator and the employees involved in operating the process to identify and understand the hazards posed by those processes involving Tier A or Tier B substances. This process safety information shall include information pertaining to the hazards of the Tier A or Tier B substances used or produced by the process, information pertaining to the technology of the process, and information pertaining to the equipment in the process.

2. Information pertaining to the hazards of the Tier A or Tier B substances in the process. This information shall consist of at least the following:

(a) Toxicity information;

(b) Permissible exposure limits;

(c) Physical data;

(d) Reactivity data:

(e) Corrosivity data;

(f) Thermal and chemical stability data; and

(g) Hazardous effects of inadvertent mixing of different materials that could foreseeably occur.

Note: Material Safety Data Sheets meeting the requirements of 29 CFR 1910.1200(g) may be used to comply with this requirement to the extent they contain the information required by this subparagraph.

3. Information pertaining to the technology of the process.

(a) Information concerning the technology of the process shall include at least the following:

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

(2) Process chemistry;

(3) Maximum intended inventory;

(4) Safe upper and lower limits for such items as temperatures, pressures, flows or compositions; and,

(5) An evaluation of the consequences of deviations.

(b) Where 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.

4. Information pertaining to the equipment in the process.

(a) Information pertaining to the equipment in the process shall include:

(1) Materials of construction;

(2) Piping and instrument diagrams (P&ID's);

(3) Electrical classification;

(4) Relief system design and design basis;

(5) Ventilation system design;

(6) Design codes and standards employed;

(7) Material and energy balances for processes built after May 26, 1992; and

(8) Safety systems (e.g. interlocks, detection or suppression systems).

(b) The owner/operator shall evaluate processes and equipment for conformance to applicable codes, standards, and good engineering practices and document that the processes and equipment complies with recognized and generally accepted good engineering practices.

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

Sec. 84.

1. The owner/operator shall perform an initial process hazard analysis (hazard evaluation) on processes covered by Section 75.2. The process hazard analysis shall be appropriate to the complexity of the process and shall identify, evaluate, and control the hazards involved in the process. The owner/operator shall determine and document the priority order for conducting process hazard analyses based on a rationale which includes such considerations as extent of the process hazards, number of potentially affected employees, age of the process, and operating history of the process. The initial process hazard analysis for processes that are subject to Tier A shall be conducted as scheduled by the division, but not later than June 21, 1999.The initial process hazard analysis for processes that are not subject to Tier A, shall be conducted as soon as possible, but not later than June 21, 1999. Process hazards analyses previously completed to comply with NRS 459.380 through 459.3874, inclusive, or 29 CFR 1910.119(e) are acceptable as initial process hazards analyses. These process hazard analyses shall be updated and revalidated, pursuant to subsection 7 of this section.

2. The owner/operator shall obtain the division's concurrence on process hazard analysis methodology prior to conducting the analysis. The owner/operator shall select from one or more of the following methodologies that are appropriate to the complexity of the process and shall identify, evaluate and control the hazards involved in the process:

(a) What-If;

(b) Checklist;

(c) What-If/Checklist;

(d) Hazard and Operability Study (HAZOP);

(e) Failure Mode and Effects Analysis (FMEA);

(f) Fault Tree Analysis; or

(g) An appropriate equivalent methodology.

3. The process hazard analysis shall address:

(a) The hazards of the process;

(b) The identification of any previous incident which had a likely potential for catastrophic consequences. Previous incidents shall include any near-misses or accidental releases defined pursuant to Section 74;

(c) Engineering and administrative controls applicable to the hazards and their interrelationships such as appropriate application of detection methodologies to provide early warning of releases. (Acceptable detection methods might include process monitoring and control instrumentation with alarms, and detection hardware such as hydrocarbon sensors.);

(d) Consequences of failure of engineering and administrative controls;

(e) Facility siting;

(f) Human factors; and

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

4. If not evaluated as part of the process hazard analysis in subsections 1 through 3, inclusive, of this section, a separate, dedicated hazard analysis, utilizing a checklist or other appropriate method, shall be conducted to evaluate:

(a) Human factors;

(b) Facility siting; and

(c) External forces.

5. The process hazard analysis shall be performed by a team with expertise in engineering and process operations. The owner/operator with processes subject to Tier A shall conduct the process hazard analysis with a team meeting the requirements of Sections 108 and 109 and NAC 459.9536 for those processes. Facilities with processes not subject to Tier A shall conduct the process hazard analysis with a team that includes at least one member who has experience and knowledge specific to the process being evaluated and one member who is knowledgeable in the specific process hazard analysis methodology being used.

6. The owner/operator shall establish a system to promptly address the team's findings and recommendations; assure that the recommendations are resolved in a timely manner and that the resolution is documented; document what actions are to be taken; complete actions as soon as possible; develop a written schedule of when these actions are to be completed; 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. The owner/operator shall also schedule the resolution of all recommendations in the plan to abate hazards pursuant to Section 99.

7. At least every five (5) years after the completion of the initial process hazard analysis, the process hazard analysis shall be updated and revalidated by a team meeting the requirements in subsection 5 of this section, to assure that the process hazard analysis is consistent with the current process. Updated and revalidated process hazard analyses completed to comply with NRS 459.380 through 459.3874, inclusive, or 29 CFR 1910.119(e) are acceptable to meet the requirements of this paragraph.

8. Process hazard analyses shall be updated and revalidated pursuant to Sections 114 through 119, inclusive.

9. Notwithstanding the provisions of NAC 459.953.2, the facility shall retain process hazards analyses and updates or revalidations for each process covered by this section, as well as the documented resolution of recommendations described in subsection 6 of this section for the life of the process.

Sec. 85.

1. The owner/operator shall develop and implement written operating procedures that provide clear instructions for safely conducting activities involved in each process consistent with the process safety information and shall address at least the following elements.

(a) Steps for each operating phase:

(1) Initial startup;

(2) Normal operations;

(3) Temporary operations;

(4) Emergency shutdown including the conditions under which emergency shutdown is required, and the assignment of shutdown responsibility to qualified operators to

ensure that emergency shutdown is executed in a safe and timely manner.

(5) Emergency operations;

(6) Normal shutdown; and,

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

(b) Operating limits:

(1) Consequences of deviation; and

(2) Steps required to correct or avoid deviation.

(c) Safety and health considerations:

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

(2) Precautions necessary to prevent exposure, including 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 and control of hazardous chemical inventory levels; and

(5) Any special or unique hazards.

(d) Safety systems and their functions.

2. Operating procedures shall be readily accessible to employees who work in or maintain a process.

3. The operating procedures shall be reviewed as often as necessary to assure that they reflect current operating practice, including changes that result from changes in process chemicals, technology, and equipment, and changes to regulated processes in the facility. The facility shall certify annually that these operating procedures are current and accurate.

4. The owner/operator shall develop and implement safe work practices to provide for the control of hazards during operations such as lockout/tagout; confined space entry; opening process equipment or piping; and control over entrance into a facility by maintenance, contractor, laboratory, or other support personnel. These safe work practices shall apply to employees and contractor employees.

Sec. 86.

1. Initial training.

(a) Each employee presently involved in operating a process, and each employee before being involved in operating a newly assigned process, shall be trained in an overview of the process and in the operating procedures as specified in Section 85. The training shall include emphasis on plant layout and equipment and instrument location, the specific safety and health hazards, emergency operations including emergency shutdown, and safe work practices applicable to the employee's job tasks.

(b) In lieu of initial training for those employees already involved in operating a process on May 26, 1992, the owner/operator may certify in writing that the employee has the required knowledge, skills, and abilities to safely carry out the duties and responsibilities as specified in the operating procedures.

2. Refresher training. Refresher training shall be provided at least every three years, and more often if necessary, to each employee involved in operating a process to assure that the employee understands and adheres to the current operating procedures of the process. The owner/operator, in consultation with the employees involved in operating the process, shall determine the appropriate frequency of refresher training.

3. Types of training. Any combination of classroom and field training, including on-the-job training, may be employed. Training shall, at a minimum, follow a predefined syllabus or checklist, to ensure each employee receives training that is essential to their job performance. On-the-job training, used solely by the facility to train operators, shall not satisfy the requirements of this section, unless it addresses the elements of a predefined syllabus or checklist.

4. Training documentation. The facility shall ascertain that each employee involved in operating a process has received and understood the training required by this paragraph. The facility shall prepare records which include the identity of the employee, the date of training, the substance of the training provided on that date and the means used to verify that the employee understood the training.

Sec. 87.

1. Application. Subsections 2 through 6 of this section apply to the following process equipment:

(a) Pressure vessels and storage tanks;

(b) Piping systems (including piping components such as valves);

(c) Relief and vent systems and devices;

(d) Emergency shutdown systems;

(e) Controls (including monitoring devices and sensors, alarms, and interlocks) and,

(f) Rotating equipment.

2. Written procedures. The owner/operator shall establish and implement written procedures to maintain the on-going integrity of process equipment.

3. Training for process maintenance activities. The owner/operator shall train each employee involved in maintaining the on-going integrity of process equipment in an overview of that process and its hazards and in the procedures applicable to the employee's job tasks to assure that the employee can perform the job tasks in a safe manner.

4. Inspection and testing.

(a) Inspections and tests shall be performed on process equipment.

(b) Inspection and testing procedures shall follow recognized and generally accepted good engineering practices.

(c) The frequency of inspections and tests of process equipment shall be consistent with applicable manufacturers' recommendations and good engineering practices, and more frequently if determined to be necessary by prior operating experience.

(d) The owner/operator shall document each inspection and test that has been performed on process equipment. The documentation shall identify the date of the inspection or test, the name of the person who performed the inspection or test, the serial number or other identifier of the equipment on which the inspection or test was performed, a description of the inspection or test performed, and the results of the inspection or test.

5. Equipment deficiencies. The owner/operator shall correct deficiencies in equipment that are outside acceptable limits (defined by the process safety information in Section 83) before further use or in a safe and timely manner when necessary means are taken to assure safe operation.

6. Quality assurance.

(a) In the construction of new plants and equipment, the owner/operator shall assure that equipment, as it is fabricated, is suitable for the process application for which they will be used.

(b) Appropriate checks and inspections shall be performed to assure that equipment is installed properly and consistent with design specifications and the manufacturer's instructions.

(c) The owner/operator shall assure that maintenance materials, spare parts and equipment are suitable for the process application for which they will be used.

Sec. 88.

1. The owner/operator shall establish and implement written procedures to manage changes, except for "replacements in kind", to process chemicals, technology, equipment, and procedures; and, changes that affect a Tier A or Tier B, Program Level 3 process.

2. The procedures shall assure that the following considerations are addressed prior to any change:

(a) The technical basis for the proposed change;

(b) Impact of change on safety and health;

(c) Modifications to operating procedures;

(d) Necessary time period for the change; and

(e) Authorization requirements for the proposed change.

3. Employees involved in operating a process and maintenance and contract employees whose job tasks will be affected by a change in the process shall be informed of, and trained in, the change prior to start-up of the process or affected part of the process.

4. If a change covered by this paragraph results in a change in the process safety information required by Section 83, such information shall be updated accordingly.

5. If a change covered by this paragraph results in a change in the operating procedures or practices required by Section 85, such procedures or practices shall be updated accordingly.

Sec. 89.

1. The facility 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. The pre-startup safety review shall confirm that prior to the introduction of a Tier A or Tier B substance to 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 and modified facilities meet the requirements contained in management of change, Section 88; and

(d) Training of each employee involved in operating a process has been completed.

Sec. 90.

1. The owner/operator shall certify that they have evaluated compliance with the provisions of this Sections 83 through 94, inclusive, at least every three years to verify that the procedures and practices developed under Sections 83 through 94, inclusive, are adequate and are being followed.

2. The compliance audit shall be conducted by at least one person knowledgeable in the process.

3. A report of the findings of the audit shall be developed.

4. The facility shall promptly determine and document an appropriate response to each of the findings of the compliance audit, and document that deficiencies have been corrected.

5. The facility shall retain the two (2) most recent compliance audit reports.

Sec. 91.

1. The owner/operator shall investigate each incident which resulted in, or could reasonably have resulted in a catastrophic release of a Tier A or Tier B substance.

2. An incident investigation shall be initiated as promptly as possible, but not later than

48 hours following the incident.

3. An incident investigation team shall be established and consist of at least one person knowledgeable in the process involved, including a contract employee if the incident involved work of the contractor, and other persons with appropriate knowledge and experience to thoroughly investigate and analyze the incident.

4. A report shall be prepared at the conclusion of the investigation which includes at a minimum:

(a) Date of incident;

(b) Date investigation began;

(c) A description of the incident;

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

(e) Any recommendations resulting from the investigation.

5. The owner/operator shall establish a system to promptly address and resolve the incident report findings and recommendations. Resolutions and corrective actions shall be documented.

6. The report shall be reviewed with all affected personnel whose job tasks are relevant to the incident findings including contract employees where applicable.

7. Incident investigation reports shall be retained for five years.

Sec. 92.

1. The owner/operator shall develop a written plan of action regarding the implementation of the employee participation required by this section.

2. The owner/operator shall consult with employees and their representatives on the conduct and development of process hazards analyses and on the development and implementation of the other elements in Sections 83 through 94, inclusive.

3. The owner/operator shall provide to employees and their representatives access to process hazard analyses and to all other information required to be developed under this rule.

Sec. 93.

1. The owner/operator shall issue a hot work permit for hot work operations conducted on or near a process.

2. The permit shall document that the fire prevention and protection requirements in 29 CFR 1910.252(a) have been implemented prior to beginning the hot work operations; it shall indicate the date(s) authorized for hot work; and identify the object on which hot work is to be performed. The permit shall be kept on file until completion of the hot work operations.

Sec. 94.

1. Application. This section applies to contractors performing maintenance or repair, turnaround, major renovation, or specialty work on or adjacent to a process. It does not apply to contractors providing incidental services which do not influence process safety, such as janitorial work, food and drink services, laundry, delivery or other supply services.

2. Owner/operator responsibilities.

(a) The owner/operator, when selecting a contractor, shall obtain and evaluate information regarding the contractor's safety performance and programs.

(b) The owner/operator shall inform contractor of the known potential fire, explosion, or toxic release hazards related to the contractor's work and the process.

(c) The owner/operator shall explain to the contractor the applicable provisions of Sections 95 and 96.

(d) The owner/operator shall develop and implement safe work practices consistent with Section 85.4, to control the entrance, presence, and exit of the contractor and contract employees in process areas.

(e) The owner/operator shall periodically evaluate the performance of the contractor in fulfilling their obligations as specified in subsection 3 of this section.

3. Contractor responsibilities.

(a) The contract employer shall assure that each contract employee is trained in the work practices necessary to safely perform his/her job.

(b) The contract employer shall assure that each contract employee is instructed in the known potential fire, explosion, or toxic release hazards related to his/her job and the process, and the applicable provisions of the emergency action plan.

(c) The contract employer shall document that each contract employee has received and understood the training required by this section. The contract employer shall prepare a record which contains the identity of the contract employee, the date of training, and the

means used to verify that the employee understood the training.

(d) The contract employer shall assure that each contract employee follows the safety rules of the facility including the safe work practices required by Section 85.4.

(e) The contract employer shall advise the facility of any unique hazards presented by the contract employer's work, or of any hazards found by the contract employer's work.

Sec. 95.

1. Except as provided in subsection 3 of this section, the facility with Tier A and Tier B, Program Level 2 or 3 processes shall comply with the requirements of Section 96.

2. The facility shall be in compliance with the provisions of Section 95.3 or Section 96 at the time the assessment report is submitted pursuant to Section 98.

3. The facility, whose employees will not respond to accidental releases of Tier A or Tier B substances, need not comply with Section 96 provided that they meet the following:

(a) The facility has implemented an emergency action plan that contains the elements outlined in 29CFR1910.38(a).

(b) For facilities with any substance that is subject to 40CFR355, and has quantities in excess of the threshold planning quantity, the facility is included in the community emergency response plan developed under 42 U.S.C. 11003;

(c) For facilities to which part (b) of this subsection does not apply, the facility has coordinated response actions with the local fire department; and

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

Sec. 96.

1. The facility, whose employees will not respond to accidental releases of Tier A or Tier B substances, need not comply with the provisions of this section.

2. The facility shall establish and implement an emergency response program for the purpose of protecting employees, public health and the environment. The emergency response program shall consist of an emergency action plan that contains the elements outlined in 29CFR1910.38(a) and a hazardous materials response program that contains the elements outlined in 29CFR1910.120(q). Such program shall include:

(a) An emergency response plan, which shall be maintained at the facility and include the following elements:

(1) Procedures for informing the public and local emergency response agencies about accidental releases;

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

(3) Procedures and measures for emergency response after an accidental release of a Tier A or Tier B substance;

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

(c) Training for all employees in relevant procedures; and

(d) Procedures to review and update, as appropriate, the emergency response plan to reflect changes at the facility and ensure that employees are informed of changes.

3. A written plan that complies with other Federal contingency plan regulations or is consistent with the approach in the National Response Team's Integrated Contingency Plan Guidance ("One Plan") and that, among other matters, includes the elements provided in subsection 2, shall satisfy the requirements of this section if the facility also complies with subsection 4 of this section.

4. The emergency response plan developed under subsection 2 of this section shall be coordinated with the community emergency response plan developed under 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 information necessary for developing and implementing the community emergency response plan.

5. The emergency response plan developed under subsection 2 or 3 of this section shall be reviewed and coordinated with the local emergency responders.

Sec. 97. *Pursuant to NRS 459.3846.3, compliance with Sections 98 through 106, inclusive, shall satisfy the requirements for preparing a written report of assessment of risk through the analysis of hazards and a risk management plan. The report prepared pursuant to this section shall be referred to as an assessment report.*

Sec. 98.

1. The owner/operator of a facility in which all processes are subject to Tier A, and none are subject to Tier B, shall submit an assessment report to a location and on a schedule specified by the division. The report shall contain the elements defined in Sections 99 through 106, inclusive.

2. The owner/operator of a facility in which all processes are subject to both Tier A and Tier B, shall submit an assessment report that contains the elements defined in Sections 99 through 106, inclusive, for all processes. The assessment report shall be submitted in a method and format to a central point as specified by the division prior to the latest of the following dates:

(a) June 21, 1999;

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

(c) For each substance newly added to Section 55, the division shall establish an assessment report due date that shall not exceed three years after the date on which the substance is first listed.

3. A facility in which processes are subject to a combination of Tier A and Tier B, the assessment reports shall be submitted as follows:

(a) For processes that are subject to Tier A, and are not also subject to Tier B, the facility shall submit an assessment report pursuant to subsection 1 of this section;

(b) For processes that are subject to Tier B, or both Tier A and Tier B, the facility shall submit an assessment report pursuant to subsection 2 of this section.

4. Subsequent submissions of assessment reports shall be pursuant to Section 107.

5. Notwithstanding the provisions of Section 99 through Section 107, inclusive, the assessment report shall exclude trade secret information, or confidential business information, if that information meets the conditions defined in NRS 459.3846.4, if the process is subject to Tier A, or 40 CFR 2.301 if the process is subject to Tier B. Classified or trade secret information shall be transmitted to a central point specified by the division as follows:

(a) An unsanitized (unredacted) paper copy of the assessment report that clearly identifies each data element that is being claimed as confidential business information;

(b) A sanitized (redacted) copy of the assessment report that shall be identical to the unsanitized copy of the assessment report except that the submitter shall replace each data element, except chemical identity, claimed as confidential business information with the notation "CBI" or a blank field. For chemical identities claimed as CBI, the submitter shall substitute a generic category or class name; and

(c) At the time of submission of the assessment report, a sanitized and unsanitized document substantiating each claim of confidential business information.

6. The following data shall not be claimed as trade secret or confidential business information:

(a) Registration data pursuant to Section 100.2(a-f), 100.2(h-m), and the NAICS code defined in Section 100.2(g);

(b) Offsite consequence analysis data pursuant to Section 101.2(c) and 101.2(i-j);

(c) Accident history data pursuant to Section 102;

(d) Prevention program data pursuant to Section 103.2, 103.4, 103.5(a), 103.6 through 103.11, inclusive, 104.2, 104.4, 104.5(a), and 104.6 through 104.16, inclusive; and

(e) Emergency response program data pursuant to Section 105.

7. Claims of confidential business information shall be substantiated pursuant to requirements defined in 40 CFR 68.152.

Sec. 99. *The owner/operator shall provide in the assessment report, an executive summary that includes a brief description of the following elements:*

1. The accidental release prevention and emergency response policies at the facility;

2. The facility substances handled;

3. The worst-case release scenario(s) and the alternative release scenario(s), including administrative controls and mitigation measures to limit the distances for each reported scenario;

4. The general accidental release prevention program and chemical-specific prevention steps;

5. The five-year accident history;

6. The emergency response program; and

7. Planned changes to improve safety.

8. Plan to Abate Hazards

(a) For processes subject to Tier A and Tier B, Program Level 2 or 3, a plan to abate hazards shall be included pursuant to this subsection.

(b) Hazard Review or Process Hazard Analysis recommendations made to minimize the likelihood of a release, fire or explosion, or to mitigate the effects of a release, fire or explosion involving a Tier A or Tier B substance, which has the potential for acute health impacts on employees or the public, shall be listed pursuant to paragraph (d) of this subsection.

(c) Each prevention program element and emergency response element shall be evaluated for compliance with Sections 75 through 96, inclusive. Recommendations made to enhance these elements, or to correct deficiencies, shall be listed pursuant to paragraph (d) of this subsection.

(d) For each recommendation made pursuant to paragraphs (b) and (c), provide:

(1) Description of the hazard;

(2) Cause of the hazard;

(3) Consequence of the hazard;

(4) The recommendation made pursuant to subsection 2 or 3; and

(5) The implementation date for the recommendation.

(e) For processes subject to Tier A or both Tier A and B, the information submitted pursuant to this subsection shall be the plan to abate hazards required by NRS 459.3852.8.

Sec. 100.

1. The owner/operator shall complete a single registration form and include it in the assessment report. The form shall cover all substances handled in the processes.

2. The registration shall include the following data:

(a) Facility name, street, city, county, state, zip code, latitude, and longitude, method for obtaining latitude and longitude, and description of location that latitude and longitude represent;

(b) The facility Dun and Bradstreet number;

(c) Name and Dun and Bradstreet number of the corporate parent company;

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

(e) The name and title of the person or position with overall responsibility for CAPP implementation;

(f) The name, title, telephone number, and 24-hour telephone number of the emergency contact;

(g) For each process, the name and CAS number of each substance, the maximum quantity of each substance or mixture in the process (in pounds) to two significant digits, the NAICS code, the program Tier(s) to which the process is subject, the Tier B Program Level, if applicable, of the process as defined in Section 54;

(h) The facility EPA identifier;

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

(j) Whether the facility is subject to 29 CFR 1910.119;

(k) Whether the facility is subject to 40 CFR part 355;

(l) Whether the facility has a CAA Title V operating permit, the permit number; and

(m) The date of the last safety inspection of the facility by a Federal, state, or local government agency and the identity of the inspecting entity.

Sec. 101.

1. The owner/operator shall evaluate offsite consequences pursuant to Sections 66 through 73, inclusive, and submit in the assessment report:

(a) One worst-case release scenario for each Tier B, Program Level 1 process; and

(b) For all processes subject to either Tier A or Tier B, Program Level 2 or 3 processes, one worst-case release scenario to represent all substances designated as toxic in Section 55, or determined to be toxic by the owner/operator, held above the threshold quantity and one worst-case release scenario to represent all substances designated as either flammable or explosive in Section 55, or determined to be flammable or explosive by the owner/operator, held above the threshold quantity. If additional worst-case scenarios for toxics, flammables or explosives are required by Section 68.1(b)(3), the owner/operator shall submit the same information on the additional scenario(s). The owner/operator of facilities with Tier A and Tier B, Program Level 2 and 3 processes shall also submit information on one

alternative release scenario for each substance designated as toxic in Section 4 held above the threshold quantity and one alternative release scenario to represent all substances designated as flammable or explosive held above the threshold quantity.

2. The owner/operator shall submit the following data:

(a) Chemical name;

(b) Percentage weight of the chemical in a mixture (toxics only);

(c) Physical state (toxics only);

(d) Basis of results (give model name if used);

(e) Scenario (explosion, fire, toxic gas release, or liquid spill and vaporization);

(f) Quantity released in pounds;

(g) Release rate;

(h) Release duration;

(i) Wind speed and atmospheric stability class (toxics only);

(j) Topography (toxics only);

(k) Distance to endpoint;

(l) Public and environmental receptors within the distance;

(m) Passive mitigation considered; and

(n) Active mitigation considered (alternative releases only);

Sec. 102. *The owner/operator shall submit in the assessment report, the information provided in Section 74.2 on each accident covered by Section 74.1.*

Sec. 103.

1. For each Tier B, Program Level 2 process for which a separate hazard analysis review was conducted, the owner/operator shall provide in the assessment report, the information indicated in subsections 2 through 11, inclusive.

2. The NAICS code for the part of the process.

3. The name(s) of the chemical(s) covered.

4. 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.

5. The date of completion of the most recent hazard review or update.

(a) The expected date of completion of any changes resulting from the hazard review;

(b) Major hazards identified;

(c) Process controls in use;

(d) Mitigation systems in use;

(e) Monitoring and detection systems in use; and

(f) Changes since the last hazard review.

6. The date of the most recent review or revision of operating procedures.

7. The date of the most recent review or revision of training programs;

(a) The type of training provided ☝ classroom, classroom plus on the job, on the job; and

(b) The type of competency testing used.

8. The date of the most recent review or revision of maintenance procedures and the date of the most recent equipment inspection or test and the equipment inspected or tested.

9. The date of the most recent compliance audit and the expected date of completion of any changes resulting from the compliance audit.

10. The date of the most recent incident investigation and the expected date of completion of any changes resulting from the investigation.

11. The date of the most recent change that triggered a review or revision of safety information, the hazard review, operating or maintenance procedures, or training.

Sec. 104.

1. For each Tier A and Tier B, Program Level 3 process for which a separate process hazard analysis was conducted, the facility shall provide the information indicated in subsections 2 through 16, inclusive.

2. The NAICS code for the part of the process.

3. The name(s) of the substance(s) covered.

4. The date on which the safety information was last reviewed or revised.

5. The date of completion of the most recent PHA or update and the technique used.

(a) The expected date of completion of any changes resulting from the PHA;

(b) A summary of major hazards identified;

(c) A summary of process controls in use;

(d) A summary of mitigation systems in use;

(e) A summary of monitoring and detection systems in use; and

(f) A summary of changes since the last PHA.

6. The date of the most recent review or revision of operating procedures.

7. The date of the most recent review or revision of training programs;

(a) The type of training provided ♁ classroom, classroom plus on the job, on the job; and

(b) The type of competency testing used.

8. The date of the most recent review or revision of maintenance procedures and the date of the most recent equipment inspection or test and the equipment inspected or tested.

9. The date of the most recent change that triggered management of change procedures and the date of the most recent review or revision of management of change procedures.

10. The date of the most recent pre-startup review.

11. The date of the most recent compliance audit, required pursuant to Section 81 or 90, and the expected date of completion of any changes resulting from the compliance audit;

12. The date of the most recent incident investigation and the expected date of completion of any changes resulting from the investigation;

13. The date of the most recent review or revision of employee participation plans;

14. The date of the most recent review or revision of hot work permit procedures;

15. The date of the most recent review or revision of contractor safety procedures; and

16. The date of the most recent evaluation of contractor safety performance.

Sec. 105.

1. The owner/operator shall provide in the assessment report, the following information:

(a) Do you have a written emergency response plan?

(b) Does the plan include specific actions to be taken in response to an accidental release of a Tier A or Tier B substance?

(c) Does the plan include procedures for informing the public and local agencies

responsible for responding to accidental releases?

(d) Does the plan include information on emergency health care?

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

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

2. The owner/operator shall provide the name and telephone number of the local agency with which emergency response activities or the emergency response plan is coordinated.

3. The owner/operator shall list other Federal or state emergency plan requirements to which the facility is subject.

Sec. 106.

1. For Tier B, Program Level 1 processes, the facility shall submit in the assessment report, the following certification statement: "Based on the criteria in Section 54, 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 five years, the process(es) has (have) had no accidental release that caused onsite or offsite impacts as designated in Section 54.1(a). No additional measures are necessary to prevent offsite impacts from accidental releases. In the event of fire, explosion, or a 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 assessment reports submitted pursuant to Sections 97 through 105 inclusive, to which subsection 1 of this section does not apply, the certification statement shall be provided in either 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, including fines or imprisonment,

or both.

(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, including the possibility of fines or imprisonment, or both."

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

Sec. 107.

1. The owner/operator shall review and update the assessment report as specified in subsection 2 of this section and submit it in a method and format to a central point specified by the division.

2. The owner/operator shall review and update the assessment report, submitted pursuant to Section 98:

(a) Within five years of its initial submission or most recent update required by paragraphs 2(b) through 2(g), inclusive, of this subsection, whichever is later.

(b) After a substance is first listed under Section 55, as required by the division, but no later than three years after the substance is first listed;

(c) No later than the date on which a new substance is first present, above the threshold quantity, in a process already subject to Tier A or Tier B;

(d) No later than the date on which a substance is first present above a threshold quantity in a process;

(e) Within six months of a change that requires a revised process hazard analysis or hazard review;

(f) Within six months of a change that requires a revised offsite consequence analysis as provided in Section 72; and

(g) Within six months of a change that alters applicability or Program Level as

defined in Sections 53 and 54.

3. If a facility or single process is no longer subject to CAPP, the owner/operator shall submit a revised registration to the division within six months indicating that the facility or process is no longer covered.

Sec. 108.

1. The entire assessment team as defined in NAC 459.9536.1 through 459.9536.5, inclusive, shall:

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

(b) Review and approve the content of the assessment report and plan to abate hazards.

2. As part of the assessment, assessment team individuals may audit prevention program and emergency response program elements independent of the entire assessment team, however, the findings and recommendations from such audits shall be reviewed by the entire assessment team, and revised as the assessment team requires.

Sec. 109. *The members of the assessment team, required pursuant to Section 57, shall satisfy the requirements of NAC 459.9536. Pursuant to NRS 459.384.1, the owner/operator shall submit the following to the division within 60 days of being notified of the assessment report schedule, or prior to commencing the assessment, which ever comes earlier:*

1. Assessment Team Member Qualifications. Each person designated to conduct the assessment shall present appropriate documentation describing their ability to perform the assessment, including:

(a) Engineering related to chemical processes;

(b) Engineering related to safety;

(c) Preparation of operating procedures;

(d) Preparation or review of procedures for maintenance;

(e) Preparation or review of procedures for safety;

(f) Preparation or review of programs to train operators;

(g) Performance or review of investigations of accidents;

(h) Performance of analyses of hazards;

(i) Performance of risk assessments;

(j) Preparation or review of plans for response to emergencies;

(k) Performance of audits of programs to manage risks;

(l) Knowledge of the state of the art as it relates to the technology of the processes used.

2. The owner/operator shall submit the resumes of each person designated to be on the assessment team.

3. Additional Personnel. The owner/operator shall provide the qualifications and experience of any additional key personnel who may be assigned as needed.

4. Level of Effort and Schedule. The owner/operator shall provide:

(a) Expected start date and schedule for performing the assessment;

(b) Estimated personnel hours for each assessment team member; and

(c) Scope and extent of usage of collateral items such as computers, software and outside consultants.

5. Professional Engineer. The owner/operator shall provide the name, discipline and registration number of at least one assessment team member who is a professional engineer, licensed in the State of Nevada.

6. Facility-Specific Experience. The owner/operator shall provide the name/documentation of at least one member who has experience and knowledge specific to the operations or process being evaluated.

7. Assessment Team Leader. The owner/operator shall designate the team leader and document this person's experience as a project or operations manager.

8. Technical Leader. The owner/operator shall designate the technical leader and document:

(a) Training that this person has completed specific to the assessment of chemical hazards;

(b) At least three assessments of chemical hazards in which this person has participated.

9. Assessment Plan. The owner/operator shall provide a clear and concise description of how the assessment team will evaluate the applicable prevention program elements and emergency response program elements as defined in Sections 75 through 96, inclusive. At a

minimum, the following elements shall be addressed:

(a) Process Safety Information.

(b) Process Hazard Analysis.

(c) Standard Operating Procedures.

(d) Training.

(e) Maintenance Program and Procedures.

(f) Emergency Response Program.

10. Approved Methodology. The owner/operator shall define the scope, process boundaries and proposed methodology for the process hazard analysis.

11. Submission Timing.

(a) For processes subject to Tier A and not Tier B, the facility shall submit the information required by this section within 60 days of being notified by the division of the assessment report due date.

(b) For processes subject to Tier A and Tier B, the facility shall submit the information required by this section prior to conducting the assessment, recognizing the assessment report submission date established pursuant to Section 98.2.

Sec. 110. *Pursuant to NRS 459.387.3, within 30 days after each anniversary on which the plan to abate hazards was adopted, the owner/operator shall submit a report on compliance for any process subject to Tier A requirements, pursuant to Section 111.*

Sec. 111. *The annual compliance report shall include, at a minimum:*

1. Each plan to reduce accidents measure adopted by the division pursuant to NRS 459.3854 or NRS 459.386;

2. The due date for each measure as adopted by the division;

3. The completion status of each measure; and

4. Any additional comments on the status of each measure as determined necessary by the facility.

5. In addition to providing status on the plan to abate hazards measures, the facility shall provide information on:

(a) All efforts that were undertaken by the facility during the previous calendar year to

assess and reduce risks related to Tier A substances;

(b) 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;

(c) All efforts undertaken by the facility to assess and remedy the release of any quantity of a Tier A substance.

6. The report required by this section shall include a certification pursuant to Section 106.2.

Sec. 112.

1. Pursuant to NRS 459.3813.2, a facility subject to the provisions of Section 53.1(c), may become exempt from that section after the following requirements have been met:

(a) A minimum of two years have elapsed since the division receipt of the assessment report, submitted pursuant to Section 53.1(c).

(b) All requirements of Section 53.1(c) must be complete;

(c) The recommendations from the Plan to Abate Hazards, developed pursuant to NRS 459.3852.8, must be verified by the division to be complete; and

(d) The State Environmental Commission must have granted the exemption pursuant to Section 113.

2. Prior to completion of the detailed Plan to Abate Hazards as defined in subsection 1(c) of this section, and prior to obtaining State Environmental Commission exemption as defined in Section 113, the division shall require continued compliance with Section 53.1(c).

Sec. 113. *A facility subject to the provisions of Section 53.1(c) must initiate the activity defined in this section in order to become exempt from Section 53.1(c), otherwise, no such exemption will be granted by the State Environmental Commission..*

1. The facility shall submit a written letter to the division, requesting exemption from Section 53.1(c). With the written request, the facility shall submit an annual compliance report, developed pursuant to Section 53.1(c). The annual compliance report must indicate that all measures in the Plan to Abate Hazards have been completed.

2. Within sixty calendar days of the receipt of the letter and report defined in

subsection 1 of this section, the division shall verify that the measures in the Plan to Abate Hazards are complete. Within ninety calendar days of receipt of the letter and report defined in subsection 1 of this section, the division shall document their findings with respect to completion of the measures in the Plan to Abate Hazards. Within the same ninety calendar days, the division shall notify the facility in writing, whether the measures in the Plan to Abate Hazards have been satisfied.

3. The facility shall petition the State Environmental Commission to become exempt from the requirements of Section 53.1(c) as follows:

(a) File a letter requesting exemption from the requirements of Section 53.1(c) with the secretary of the State Environmental Commission. The facility shall include a copy of the division's findings and notification letter as defined in subsection 2 of this section.

(b) The secretary of the State Environmental Commission shall schedule the review of this petition at the next meeting of the State Environmental Commission and, by publication and use of public-service announcements, inform the public of the owner/operator's intent to seek exemption from CAPP.

4. The State Environmental Commission shall consider the following in determining if an exemption to the requirements of Section 53.1(c) shall be granted:

(a) Have the causes of the releases been adequately mitigated to prevent recurrence of future releases?;

(b) Does the facility have an adequate program in place to maintain the accident prevention program established in Section 53.1(c)?;

(c) Does the division concur with the exemption?; and

(d) Has the facility had any accidental releases since becoming subject to the provisions of Section 53.1(c)?

5. If an exemption is granted to the facility by the State Environmental Commission, it shall become effective on the day following the hearing. The facility will no longer be subject to the requirements of Section 53.1(c).

6. If an exemption is not granted by the State Environmental Commission, an explanation of why the exemption was denied shall be provided by the commission.

7. The facility may reapply for exemption at any time pursuant to this section.

Sec. 114.

1. Revalidation of process hazard analyses required pursuant to Section 84 and revalidation of hazard reviews required pursuant to Section 77, shall confirm that the analysis or review is valid for the current process, pursuant to Sections 115 through 119, inclusive.

2. A new process hazard analysis or hazard review may be performed in lieu of revalidating a previous analysis or review, provided that:

(a) The process hazard analysis complies with the requirements of Section 84;

(b) The hazard review complies with the requirements of Section 77; and

(c) All supporting information, including process safety information, operating procedures, training program, mechanical integrity program and emergency response program, reflect current operations.

Sec. 115. *For processes subject to Tier A, the revalidation shall be conducted by an assessment team approved by the division and in compliance with Sections 108, 109 and NAC 459.9536.*

Sec. 116. *The revalidated process hazard analysis shall be in compliance with the requirements of Section 84 and the revalidated hazard review shall be in compliance with the requirements of Section 77.*

Sec. 117.

1. The revalidated process hazard analysis or safety review shall reflect current information.

2. If changes in process safety information or safety information were subject to a process hazard analysis or safety review, those analyses or reviews shall satisfy the requirements of this section, provided that the cumulative analyses or reviews reflect the current process.

Sec. 118.

1. The revalidated process hazard analysis or safety review shall reflect current operating procedures, training programs, maintenance programs and emergency response

programs.

2. If changes in programs and procedures were subject to a process hazard analysis or safety review, those analyses or reviews shall satisfy the requirements of this section, provided that the cumulative analyses or reviews reflect the current programs and procedures.

Sec. 119.

1. All incidents that had the potential for, or actually resulted in a release, fire or explosion involving a Tier A or Tier B substance, shall be considered by the team conducting the analysis or review. The analysis shall include a review of recommendations made as a result of the investigation and a confirmation that they are being implemented in a timely manner.

2. If deficient prevention program elements were contributing factors to the incidents, the team shall make recommendations to correct the deficiencies.

Sec. 120. *If a facility subject to Tier A or Tier B changes ownership, the new owner or operator shall:*

1. Comply fully with the requirements of NRS 459.380 through NRS 459.3874, inclusive, and any regulations adopted thereto; and

2. Register, completing only Sections 61 and 65 of the registration form within 14 days of the transfer of ownership, unless the annual registration pursuant to Section 60 is due.

Sec. 121.

1. The owner/operator of a facility with processes subject to Tier A or Tier B, Program Level 2 or 3, shall develop a management system to oversee the implementation of all CAPP requirements. A management system is not required in a facility containing only Tier B, Program Level 1 processes.

2. The facility shall assign a qualified person or position that has the overall responsibility for the development, implementation, and integration of the CAPP requirements.

3. When responsibility for implementing individual requirements of this part is assigned to persons other than the person identified under subsection 2 of this section, the

names or positions of these people shall be documented and the lines of authority defined through an organization chart or similar document.

Sec. 122.

1. The division shall conduct an annual compliance inspection at each facility having a Tier A process pursuant to NRS 459.387.4. In addition to the annual compliance inspection, the division may inspect any facility with processes subject to Tier A for program compliance, pursuant to NRS 459.387.1.

2. The division may inspect any facility that contains processes subject to Tier B, for compliance with program requirements, which includes prevention program elements pursuant to Sections 75 through 94, inclusive, emergency response program elements pursuant to Sections 95 and 96, and hazard assessment requirements pursuant to Sections 66 through 74, inclusive. Additionally, the division may audit the components of the facility's assessment report submitted pursuant to Sections 97 through 107, inclusive, that contains processes subject to Tier B, to verify the accuracy of the report content.

3. Inspection records shall be made available for public review.

Sec. 123.

1. The division may take enforcement action at any facility having a Tier A process, pursuant to NRS 459.3872 and NRS 459.3874.

2. The division may take enforcement action at any facility having a Tier B process, pursuant to NRS 459.3833.2(c).

Sec. 124. NAC 459.953 is hereby amended to read as follows:

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

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

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

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

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

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

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

Sec. 125. NAC 459.9534 is hereby amended to read as follows:

459.9534

[1. The owner or operator of a regulated facility shall cause an assessment team to conduct and submit to the division an assessment of risk through the analysis of hazards in accordance with the schedule that is established by the division for that facility pursuant to NRS 459.3838.

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

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

(a) Any documentation that:

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

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

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

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

4.] ***For processes subject to Tier A,*** the assessment team may submit to the division a draft of the assessment report. **[of risk through the analysis of hazards,]** Such a draft must be submitted at least 120 days before the final deadline for submittal of the assessment ***report.*** **[of risk through the analysis of hazards.]** The Division will provide the leader of the assessment team with written comments on the draft within 60 days after the division receives the draft.

Sec. 126. NAC 459.9536 is hereby amended to read as follows:

459.9536 Qualifications of members of assessment teams.

1. The members of an assessment team must have completed collectively at least one previous project in: **[each of the 12 areas of experience listed in subsection 3 of NRS 459.384.]**

(a) Engineering related to chemical processes;

(b) Engineering related to safety;

(c) Preparation of operating procedures;

(d) Preparation or review of procedures for maintenance;

(e) Preparation or review of procedures for safety;

(f) Preparation or review of programs to train operators;

(g) Performance or review of investigations of accidents;

(h) Performance or analyses of hazards;

(i) Performance of risk assessments;

(j) Preparation or review of plans for response to emergencies;

(k) Performance of audits of programs to manage risks;

(l) Knowledge of the state of the art as it relates to the technology of the processes used.

2. At least one member of the assessment team must be a licensed professional engineer ***in the State of Nevada***.

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

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

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

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

(b) Participated in at least three **[assessments of chemical hazards]** ***process hazard analyses***. ***6. Individuals may be used interchangeably to fulfill the requirements defined in Section 108, provided that the individuals have been approved by the division.***

Sec. 127. NAC 459.954 is hereby amended to read as follows:

459.954

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

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

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

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

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

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

(c) The maximum number of persons present at any time at each special facility

located in the area of influence, including all hospitals, schools, day care centers, convention centers and recreational facilities.

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

(a) Has been approved by the division; and

(b) Includes an evaluation of the worst conditions which may reasonably occur. The regulated facility shall provide the division with a detailed description of the modelling method and parameters applied by the regulated facility in determining the area of influence.]

1. For processes subject to Tier B, the schedule for submission of the assessment report shall be in accordance with Section 98.

2. For processes not subject to Tier B, the schedule for the submission of the assessment report shall be determined, by the division, considering the offsite consequence analysis summary provided in the facility registration.

Sec. 128. NAC 459.9542 is hereby amended to read as follows:

459.9542

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

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

(a) A base fee **[in the amount of $3,100; and]** ***established pursuant to subsection 3 of this section; and***

(b) A graduated fee **[determined by multiplying the sum of all highly hazardous units present at the facility by a factor of $10.50.]** ***established pursuant to subsection 4 of this section.***

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

through June 30, by the quantity designated for that substance respectively in NRS 459.3816.]

3. The amount of the annual base fee, authorized by NRS 459.3824, subsection 1, shall be:

(a) $3,100 per facility that has one or more processes subject to Tier A or Tier B, Program Level 3,

(b) If the facility has no Tier A or Tier B, Program Level 3 processes, $2,000 per facility that has one or more processes subject to Tier B, Program Level 2,

(c) If the facility has no Tier A, or Tier B, or Program Level 2 or 3 processes, the annual fee shall be $250 per facility that has one or more processes subject to Tier B, Program Level 1.

4. The amount of the annual graduated fee, authorized by NRS 459.3824, subsection 2, shall be $10.50 per unit of substance, multiplied by the total number of units at the facility. Units shall be calculated by:

(a) For facilities with processes subject to Tier A, a unit is the total amount of the Tier A substance present on site divided by the Tier A Threshold Quantity listed in Section 55.

(b) For facilities with processes that are not subject to Tier A, but are subject to Tier B, a unit is the total amount of the Tier B substance present in all processes, divided by the Tier B Threshold Quantity listed in Section 55.

Sec. 129. Chapter 459 of the NAC is hereby amended by deleting thereto the sections set forth as follows: 459.9526 and 459.9528.

Sec. 130. ***Effective dates.***

1. Section 62 and Section 101 shall become effective June 21, 1999.

2. Sections 60, 61, 63, 64, 65, and 128 shall become effective 90 days after regulatory modifications are filed with the Secretary of State.

3. All other sections not specified in subsections 1 and 2 of this section, shall become effective upon filing with the Secretary of State.

END OF PETITION 98007

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TEXT OF DELETED SECTIONS

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

(Added to NAC by Div. of Environmental Protec., eff 7-10-92)

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

(Added to NAC by Div. of Environmental Protec., eff. 7-10-92)