**A complete application consists of the following sections:** *(Refer to NAC 459.95345 to 459.953475)*

Sections 1-6 are made available for public review once the application is determined to be complete.

1. **Registration Information**
   1. Facility Information
   2. Contact Information
   3. Process Information
2. **Hazard Assessments**
   1. Worst-case Scenario Summary
   2. Alternative Release Scenario Summary
3. **Project Information**
   1. Submitting Organization
   2. Project Overview
   3. Construction Inspector Information
4. **Emergency Response**
   1. Responding Agencies
   2. Coordinated Emergency Response Plan Document
5. **Stamped Site Plan**
6. **Conditional Use Permit**
7. **Process Safety Information**
   1. Hazard Information
   2. Process Chemistry
   3. Control Logic
   4. Material and Energy Balance
   5. Safety Systems
   6. Vessels and Rotating Equipment
   7. Stamped Drawings
   8. Stamped Specifications
   9. Stamped Calculations
8. **Process Hazard Analysis**

A complete application (hard copy) must be submitted to the following address:

**State of Nevada**

**NDEP/Chemical Accident Prevention Program**

**Bureau of Air Pollution Control**

**901 South Stewart Street, Suite 4001**

**Carson City, NV 89701-5249**

Should you have any questions completing the application, please contact the Division at 775-687-9349.

**Protection of confidentiality of certain information:** *(Refer to NRS 459.3822 and NAC 459.95523)*

The Division shall protect the confidentiality of any information that is obtained pursuant to C.A.P.P., including any information obtained through an observation made by the Division during a visit to a facility.

**To protect the confidentiality of information, the owner or operator of the facility must request such protection in writing, indicating which information is to be protected and stating how the following conditions are satisfied:**

* The information has not been disclosed to any other person, other than a member of a local emergency planning committee, an officer or employee of the United States or a state or local government, an employee of such a person, or a person who is bound by an agreement of confidentiality, and the owner or operator of the facility has taken reasonable measures to protect the confidentiality of the information and intends to continue to take such measures
* The information is not required to be disclosed, or otherwise made available, to the public under any other federal or state law
* Disclosure of the information is likely to cause substantial harm to the competitive position of the owner or operator of the facility
* The chemical identity of a substance, if that is the information, is not readily discoverable through analysis of the product containing it or scientific knowledge of how such a product must be made

In addition to providing the confidential information to the Division, the owner or operator of the facility for which protection of the confidentiality of information is obtained shall, upon the request of the Division, provide a redacted version of any submitted information that is intended for public review which substitutes the term “CBI” or provides generic information for the information deemed confidential.

**Reviews following a complete application:**

After the application is determined to be administratively complete, technical reviews of the following program elements will commence utilizing the checklists available online at <https://ndep.nv.gov/air/chemical-accident-prevention/guidance>.

For these reviews, please submit the following information.

1. Process Safety Information *(refer to NAC 459.95412)*
   1. Calculations for the maximum intended inventory
   2. The safe upper and lower limits for any applicable process variable
   3. An evaluation of the consequences of deviations
   4. An evaluation of conformance to applicable codes, standards, and RAGAGEP
   5. Management plan and document control
2. Process Hazard Analysis *(refer to NAC 459.95414)*
   1. List of previous incidents considered
   2. PHA worksheets
   3. Human factors analysis
   4. Facility siting analysis
   5. External forces analysis
   6. Recommendation tracking log
   7. Management plan and document control
3. Emergency Action / Response Plan *(refer to NAC 459.9544 and NAC 459.95442)*
   1. Emergency procedures
   2. Alarm system description, requirements, maintenance and testing
   3. Training requirements
   4. Management plan and document control
4. Hazard Assessments *(refer to NAC 459.95364 to NAC 459.95376)*
   1. Worst case scenario(s)
   2. Alternative release scenario(s)
   3. Offsite consequence analyses

**100% compliance with the above checklists is required prior to issuance of the Permit to Construct.**

After issuance of the Permit to Construct, 100% compliance with the remaining program elements is required prior to the issuance of the Permit to Operate.

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| **Facility Information**  Name of Facility:  Physical Address:      County:  Facility phone #:  (incl Area Code)  Mailing Address:      Facility Latitude (degrees/minutes/seconds):       Facility Longitude (degrees/minutes/seconds):  *(Refer to attachment for answer key to next line)*  Method used to determine Lat/Long:       Description of location:  US EPA Identification number (if any):  Dun & Bradstreet number for facility:  Dun & Bradstreet number of any parent corporation:  Name of parent corporation:  Number of full-time employees at facility:  **Is facility subject to one or more of the following?:**  **29 CFR 1910.119**  **40 CFR Part 355**  Operating permit pursuant to **40 CFR Part 70** and,  **29 CFR 1910.38**  **29 CFR 1910.120** if applicable, permit number:  Date of last safety inspection:  Safety inspection conducted by:  Federal  State  Local Government agency  Name of inspecting entity: | |
| **Owner or Operator *(Designated pursuant to NAC 459.95275; to be addressed on formal correspondence)***  Contact name:  Title:  Company name:  Mailing address:      Phone # (incl Area Code):  Email address:  Cell (optional): | |
| **Person responsible for CAPP implementation *(Main contact for NDEP-CAPP staff)*** Contact name:  Title:  Company name:  Mailing address:  *(if different than owner/operator)*    Phone # (incl Area Code):  Email address:  Cell (optional): |
| **Emergency Contact *(Available 24 per day)***  Contact name:  Title:  Company name:  *(if different than owner/operator)*  Phone number:  24-hour emergency  phone number: |
| **WHERE TO SEND INVOICE FOR PERMITTING FEES *(NAC 459.953475)***  Name:  Title:  Company:  Mailing address:      Phone # (incl Area Code): |

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| **process Information** (Complete this section for each process on site)  Process Description:  Check if this process is an explosives manufacturing operation as defined at NAC 459.95247.  NAICS Code:       ( Reference: <http://www.census.gov/epcd/www/naics.html> )  Maximum quantity of each Highly Hazardous Substance (HHS) or Explosive that is expected to be on site between startup and the following May 31st:   | **HHS or Explosive Name** | **Weight %** | **CAS Number** | **\*Quantity in lbs.** | | --- | --- | --- | --- | |  |  |  |  | |  |  |  |  | |  |  |  |  | |  |  |  |  | |  |  |  |  | |  |  |  |  |   \* **Quantity = (Total Quantity of Mixture) x (Weight % of HHS / 100)** |

**Additional Process (input as necessary)**

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| **process Information** (Complete this section for each process on site)  Process Description:  Check if this process is an explosives manufacturing operation as defined at NAC 459.95247.  NAICS Code:       ( Reference: <http://www.census.gov/epcd/www/naics.html> )  Maximum quantity of each Highly Hazardous Substance (HHS) or Explosive that is expected to be on site between startup and the following May 31st:   | **HHS or Explosive Name** | **Weight %** | **CAS Number** | **\*Quantity in lbs.** | | --- | --- | --- | --- | |  |  |  |  | |  |  |  |  | |  |  |  |  | |  |  |  |  | |  |  |  |  | |  |  |  |  |   \* **Quantity = (Total Quantity of Mixture) x (Weight % of HHS / 100)** |

**ATTACHMENT**

The following are excerpts from RMP\*Submit User's Manual February 1999, Ver. 1.07, in reference to latitude and longitude codes, and codes describing the location identified by latitude and longitude requested in Section 1, 1.5.i & 1.5.j. of the RMP-CAPP Registration Form.

**1.5.i Method for determining Latitude and Longitude**

The most common methods for determining Latitude and Longitude are I1 (Interpolation-Map), and I4 (Interpolation-Digital Map Source). Use I1 if you obtained your latitude and longitude from a paper map. Use I4 if you obtained your latitude and longitude from a computer-based geographic information system (GIS), such as Land View.

**Code/Description of Method**

A1 Address Matching-House Number: derived from a point corresponding to a house or building number along a street segment.

A2 Address Matching-Block Face: derived from a calculated midpoint of one side of a street segment with regard to odd or even addresses.

A3 Address Matching-Street Centerline: derived from a calculated midpoint and centerpoint of a street segment.

A4 Address Matching-Nearest Intersection: derived from the intersection closest to a house or building number.

A5 Address Matching-Primary Name: derived from the primary name of a township or city.

A6 Address Matching-Digitized: derived from hands-on use of computer-based mapping tools.

AO Address Matching-Other: derived through the use of non-specific matching techniques.

C1 Census Block - 1990 - Centroid: derived from the calculated centerpoint of a 1990 Census Block as defined by the U.S. Bureau of the Census.

C2 Census Block/Group - 1990 - Centroid: derived from the calculated centerpoint of a 1990 Census Block/Group as defined by the U.S. Bureau of the Census.

C3 Census Block Tract - 1990 - Centroid: derived from the calculated centerpoint to a 1990 Census Tract as defined by the U.S. Bureau of the Census.

CO Census - Other: derived from other Census-defined areas, such as Metropolitan Statistical Areas (MSAs).

G1 Global Positioning System (GPS) Carrier Phase Static Relative Positioning Technique: derived through the use of a GPS device employing Carrier Static Relative Positioning Technique.

G2 GPS Carrier Phase Kinematic Relative Positioning Technique: derived through the use of a GPS device employing Phase Kinematic Relative Positioning Technique.

G3 GPS Code Measurements (Pseudo Range) Differentially Corrected: derived through the use of a GPS device where measurements have been corrected for error based on the existence of known base stations relative to the study area.

G4 GPS Code Measurements (Pseudo Range) Precise Positioning Service: derived through the use of a GPS devise employing real-time precise positioning techniques.

G5 GPS Code Measurements (Pseudo Range) Standard Positioning Service SA OFF: derived through the use of a GPS device when the Department of Defense Selective Ability was turned off.

G6 GPS Code Measurements (Pseudo Range) Standard Positioning Service SA ON: derived through the use of a GPS device when the Department of Defense Selective Ability was turned on.

G7 GPS Code Measurements (Pseudo Range) Standard Positioning Service Corrected using Canadian Active Control System: derived through he use of a GPS device employing the Canadian Active Control System.

GO GPS-Other/Unspecified: derived through the use of an unspecified GPS device.

I1 Interpolation - Map: derived from a paper or other non-digital map.

I2 Interpolation - Photo: derived from an aerial photograph.

I3 Interpolation - Satellite: derived from a satellite image.

I4 Interpolation - Digital map source (TIGER): derived from a digital map, mapping software or mapping tool.

I5 Interpolation - SPOT: derived from a SPOT image.

I6 Interpolation - MSS (Multi-spectral Scanner): derived from a MSS image.

I7 Interpolation - TM (Thematic Mapper): derived from a thematic mapper.

IO Interpolation - Other

L1 Loran C: derived from the use of a Loran-C positioning device.

P1 Public Land Survey-Section: a coordinate pair corresponding to a point from a public land survey.

P2 Public Land Survey-Quarter Section: a coordinate pair corresponding to a point from a public land survey.

P3 Public Land Survey-Eighth Section: a coordinate pair corresponding to a point from a public land survey.

P4 Public Land Survey-Sixteenth Section: a coordinate pair corresponding to a point from a public land survey.

P5 Public Land Survey-Footing: a coordinate pair corresponding to a point from a public land survey.

**ATTACHMENT (Continued)**

**Code/Description of Method (continued)**

S1 Classical Surveying Techniques: derived from traditional surveying techniques associated with construction activities.

Z1 ZIP Code-Centroid: derived form the calculate center of a U.S. postal ZIP code.

Z2 ZIP+2 Code-Centroid: derived from an averaging of multiple street segments. Approximately the size of a Census Block Group.

Z4 ZIP+4 Code-Centroid: derived from a calculated midpoint of one side of a street segment with regard to odd or even house or building numbers.

OT Other

UN Unknown

**1.5.j. Description of location identified by Latitude and Longitude**

Describe the exact location your latitude and longitude values represent. The table below lists the codes to be used for this element. The most common Latitude and Longitude location descriptions are PG (Plant Entrance - General) and CE (Center of Facility).

**Code/Description of Location**

AB Administrative Building: a building, structure, or portion thereof that houses the administrative functions of a facility as opposed to production or manufacturing activities.

AE Atmospheric Emissions Treatment Unit: equipment installed for the express purpose of treating chemical emissions prior to their release into the atmosphere.

AM Air Monitoring Station: equipment installed at a predetermined location for the automatic, manual or periodic collection of environmental air samples.

AS Air Release Stack: a free-standing vertical structure constructed for the conveyance and release of chemical emissions into the air.

AV Air Release Vent: a horizontal structure constructed for the release of chemical emissions into the air, typically from the side or roof of a building.

CE Center of Facility: a representative center point within the boundary of a facility.

FC Facility Centroid: the calculated center of a contiguous facility.

IP Intake Pipe: a pipe or intake opening constructed for the collection and conveyance of water.

LC Loading Area Centroid: the calculated center of a portion of a facility associated with loading activities

LF Loading Facility: the portion of a facility associated with loading and/or transshipment activities.

LW Liquid Waste Treatment Unit: Equipment installed for the express purpose of treating chemical emissions prior to their release to water, publicly owned treatment works (POTW) or off-site transfer.

NE NE Corner of Land Parcel: the northeast most corner or boundary of a land parcel.

NW NW Corner of Land Parcel: the northwest most corner or boundary of a land parcel.

OT Other: see descriptive comment field.

PC Process Unit Area Centroid: the calculated center of a portion of a facility associated with processing and/or manufacturing activities.

PF Plant Entrance (Freight): the entrance to a facility associated with transshipment activities.

PG Plant Entrance (General): the front gate or general entrance of a facility.

PP Plant Entrance (Personnel): the entrance to a facility associated with employees.

PU Process Unit: the portion of a facility associated with processing and/or manufacturing activities.

SD Solid Waste Treatment/Disposal Unit: the portion of a facility associated with the treatment and/or disposal of solid waste.

SE SE Corner of Land Parcel: the southeast corner or boundary of a land parcel.

SP Lagoon or Settling Pond: the portion of a facility designed to accommodate sedimentation or settling of chemical by-products necessitated by the manufacture, production, or use of chemicals.

SS Solid Waste Storage Area: the portion of a facility associated with the storage of solid waste.

ST Storage Tank: a receptacle or chamber used for storing bulk fuels or chemicals.

SW SW Corner of Land Parcel: the southwest most corner or boundary of a land parcel.

WA Wellhead Protection Area: an area at the earth's surface buffering a wellhead.

WL Well: a shaft drilled in the earth for purposes such as obtaining subsurface drinking water, or collecting water samples.

WM Water Monitoring Station: a location or study area for the automatic, manual or periodic collection of water samples.

WR Pipe Release to Water: the point at which a pipe constructed for the conveyance and release of water-borne chemical emissions reaches a water body.

UN Unknown

/end

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| **worst-case scenario SUMMARY**  **For Toxic Substances**   |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | **Chemical**  Name  Percent weight of chemical (if in a mixture)       **.**       % | | | | | | | **Physical state (select one)** | | | | | | | a. Gas | | | | | c. Gas liquefied by pressure | | b. Liquid | | | | | d. Gas liquefied by refrigeration | | **Model Used (select one or enter another model name in other below)**  a. EPA’s OCA Guidance Reference Tables or Equations  b. EPA’s RMP\* Comp  c. Aerial locations of Hazardous Atmospheres (ALOHA®)  d. Other model (specify) (max. 255 characters) | | | | | | | **Scenario (select one)**  a. Gas Release  b. Liquid Spill and Vaporization | | | | | | | **Quantity released (lbs.)**       **.** | | **Release rate (lbs./minute)**       **.** | | | | | **Topography (select one)**  a. Urban  b. Rural | | | | | | | **Distance to endpoint (miles)**       **.** | | | | | | | **Estimated residential population within distance to endpoint (numeric)** | | | | | | | **Public receptors within distance to endpoint (select all that apply)** | | | | | | | a. Schools | e. Recreation Areas  f. Major commercial, office, or industrial areas  g. Other (specify) | | | | | | b. Residences | | c. Hospitals | | d. Prison/Correctional Facilities | | **Environmental receptors within distance to endpoint (select all that apply)** | | | | | | | a. National or State Parks, Forests, or  Monuments | | | | c. Federal Wilderness Area  d. Other (specify) | | | b. Officially Designated Wildlife Sanctuaries,  Preserves, or Refuges | | | | | **Passive mitigation considered (select all that apply)** | | | | | | | a. Dikes | | | e. Sumps  f. Other (specify) | | | | b. Enclosures | | | | c. Berms | | | | d. Drains | | | |

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| **alternatIVE release scenario SUMMARY**  **For Toxic Substances**   |  |  |  |  |  | | --- | --- | --- | --- | --- | | **Chemical**  Name  Percent weight of chemical (if in a mixture)       **.**       % | | | | | | **Physical state (select one)** | | | | | | a. Gas | | | | c. Gas liquefied by pressure | | b. Liquid | | | | d. Gas liquefied by refrigeration | | **Model Used (select one or enter another model name in other below)**  a. EPA’s OCA Guidance Reference Tables or Equations  b. EPA’s RMP\* Comp  c. Aerial locations of Hazardous Atmospheres (ALOHA®)  d. Other model (specify) (max. 255 characters) | | | | | | **Scenario (select one)** | | | | | | | a. Transfer hose failure | | | e. Rupture disk/relief valve failure | | | | b. Pipe leak | | | f. Excess flow device failure | | | | c. Vessel leak | | | g. Other (specify) (max. 35 characters) | | | | d. Overfilling | | | | **Quantity released (lbs.)**       **.** | | | **Release rate (lbs./minute)**       **.** | | | **Topography (select one)**  a. Urban  b. Rural | | | | | | **Distance to endpoint (miles)**       **.** | | | | | | **Estimated residential population within distance to endpoint (numeric)** | | | | | | **Public receptors within distance to endpoint (select all that apply)** | | | | | | a. Schools | e. Recreation Areas  f. Major commercial, office, or industrial areas  g. Other (specify) | | | | | b. Residences | | c. Hospitals | | d. Prison/Correctional Facilities |      |  |  | | --- | --- | | **Environmental receptors within distance to endpoint (select all that apply)** | | | a. National or State Parks, Forests, or  Monuments | c. Federal Wilderness Area  d. Other (specify) | | b. Officially Designated Wildlife Sanctuaries,  Preserves, or Refuges |   **alternatIVE release scenario SUMMARY**  **For Toxic Substances (continued)**   |  |  | | --- | --- | | **Passive mitigation considered (select all that apply)** | | | a. Dikes | e. Sumps  f. Other (specify) | | b. Enclosures | | c. Berms | | d. Drains |  |  |  | | --- | --- | | **Active mitigation considered (select all that apply)** | | | a. Sprinkler systems | f. Flares | | b. Deluge systems | g. Scrubbers | | c. Water curtain | h. Emergency shutdown systems | | d. Neutralization | i. Other (specify) | | e. Excess flow valve | |

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| **worst-case scenario SUMMARY**  **For Flammable or Explosive Substances**   |  |  |  |  |  | | --- | --- | --- | --- | --- | | **Chemical**  Name | | | | | | **Model Used (select one or enter another model name in other below)**  a. EPA’s OCA Guidance Reference Tables or Equations  b. EPA’s RMP\* Comp  c. Aerial locations of Hazardous Atmospheres (ALOHA®)  d. Other model (specify) (max. 255 characters) | | | | | | **Scenario**  Flammable  Explosive  Reactive  Indicate scenario:       (*If flammable is indicated, use* **Vapor Cloud Explosion***as scenario*) | | | | | | **Quantity released (lbs.)**       **.** | | | **Distance to endpoint (miles)**       **.** | | | **Estimated residential population within distance to endpoint (numeric)** | | | | | | **Public receptors within distance to endpoint (select all that apply)** | | | | | | a. Schools | e. Recreation Areas  f. Major commercial, office, or industrial areas  g. Other (specify) | | | | | b. Residences | | c. Hospitals | | d. Prison/Correctional Facilities | | **Environmental receptors within distance to endpoint (select all that apply)** | | | | | | a. National or State Parks, Forests, or Monuments | | | | c. Federal Wilderness Area  d. Other (specify) | | b. Officially Designated Wildlife Sanctuaries,  Preserves, or Refuges | | | | | **Passive mitigation considered (select all that were considered in defining the release quantity or rate for the worst-case scenario)** | | | | | | | a. Blast walls | | | b. Other (specify) | | | |

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| **alternatIVE release scenario SUMMARY**  **For Flammable or Explosive Substances**   |  |  |  |  |  | | --- | --- | --- | --- | --- | | **Chemical**  Name | | | | | | **Model Used (select one or enter another model name in other below)**  a. EPA’s OCA Guidance Reference Tables or Equations  b. EPA’s RMP\* Comp  c. Aerial locations of Hazardous Atmospheres (ALOHA®)  d. Other model (specify) (max. 255 characters) | | | | | | **Scenario (select one)**  a. Vapor Cloud explosion  e. Jet fire  b. Fireball  f. Vapor cloud fire  c. BLEVE  g. Liquid Spill and Vaporization  d. Pool fire | | | | | | **Quantity released (lbs.)**       **.** | | | | **Distance to endpoint (miles)**       **.** | | **Estimated residential population within distance to endpoint (numeric)** | | | | | | **Public receptors within distance to endpoint (select all that apply)** | | | | | | a. Schools | e. Recreation Areas  f. Major commercial, office, or industrial areas  g. Other (specify) | | | | | b. Residences | | c. Hospitals | | d. Prison/Correctional Facilities | | **Environmental receptors within distance to endpoint (select all that apply)** | | | | | | a. National or State Parks, Forests, or Monuments | | | c. Federal Wilderness Area  d. Other (specify) | | | b. Officially Designated Wildlife Sanctuaries, Preserves, or Refuges | | | | **Passive mitigation considered (select all that apply)** | | | | | | a. Dikes | | d. Enclosures  e. Other (specify) (max. 200 characters) | | | | b. Fire walls | | | c. Blast walls | | | **Active mitigation considered (select all that apply)** | | | | | | a. Sprinkler systems | | d. Excess flow valve  e. Other (specify) (max. 200 characters) | | | | b. Deluge systems | | | c. Water curtain | | |

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| **HAZARD ASSESSMENT DOCUMENTATION**  Provide the title(s) of all hazard assessment documents, including revision number, revision date, and number of pages. Any listed documents shall be submitted with this application.   |  |  |  |  | | --- | --- | --- | --- | | **Title of Document** | **Rev. #** | **Date** | **# Pgs.** | |  |  |  |  | |  |  |  |  | |  |  |  |  | |

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| **SUBMITTING ORGANIZATION**  Organization Name:  Address:      Contact Name:  Phone Number:  Email Address: |
| **PROJECT OVERVIEW**  Describe (approximate where necessary) the following:  **The process (include substances; how they are handled, reacted and stored)**    **The hours of operation**    **The number of personnel per shift including operations, maintenance, contract, office staff and other personnel**    **The modes of transport for incoming and outgoing raw materials and products**    **The frequency and hours of transport of incoming and outgoing raw materials and products**    **The scope of the construction project (what is being built: process equipment & piping, tankage, control room buildings, etc.)**    **The construction schedule including anticipated startup date** |
| **CONSTRUCTION INSPECTOR INFORMATION**  **Construction inspectors shall not be employed by or under contract with any entity that will be performing the construction activity subject to the permit to construct unless that entity is the owner or operator.**  For each construction inspector providing services related to the CAPP process, provide the following details.   |  | | --- | | **Process Pipes**  Inspection company:  Inspector’s names:  Inspector’s company is under contract to:  Scope of inspection services:  Types of observations and tests to be used:  Inspector qualifications:  (include a copy of the required certifications or credentials for each inspector) |     **Additional Inspector (input as necessary)**   |  | | --- | | **Process Pipes**  Inspection company:  Inspector’s names:  Inspector’s company is under contract to:  Scope of inspection services:  Types of observations and tests to be used:  Inspector qualifications:  (include a copy of the required certifications or credentials for each inspector) |   **Additional Inspector (input as necessary)**   |  | | --- | | **Process Pipes**  Inspection company:  Inspector’s names:  Inspector’s company is under contract to:  Scope of inspection services:  Types of observations and tests to be used:  Inspector qualifications:  (include a copy of the required certifications or credentials for each inspector) | |
| |  | | --- | | **Concrete Foundations**  Inspection company:  Complete the following only if the inspections are not subject to review and approval by the local building official.  Inspector’s names:  Inspector’s company is under contract to:  Scope of inspection services:  Types of observations and tests to be used:  Inspector qualifications:  (include a copy of the required certifications or credentials for each inspector) |  |  | | --- | | **Structural Steel**  Inspection company:  Complete the following only if the inspections are not subject to review and approval by the local building official.  Inspector’s names:  Inspector’s company is under contract to:  Scope of inspection services:  Types of observations and tests to be used:  Inspector qualifications:  (include a copy of the required certifications or credentials for each inspector) | |

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| **EMERGENCY RESPONSE PLAN DOCUMENT**  Will your employees respond to an accidental release?  Yes  No  Provide the title(s) of all emergency response documents, including revision number, revision date, and number of pages. Any listed documents shall be submitted with this application.   |  |  |  |  | | --- | --- | --- | --- | | **Title of Document** | **Rev. #** | **Date** | **# Pgs.** | |  |  |  |  | |  |  |  |  | |  |  |  |  | |
| **RESPONDING AGENCIES**  List all agencies with which this plan has been coordinated.   |  | | --- | | **Local Responding Fire Department**  Organization:  Address:      Contact:  Phone number:  Email address:  Is this organization in concurrence with the plan?  Yes   No  In Progress  (include documentation showing review with responders)  Is full time response capability available?  Yes  No |      |  | | --- | | **HAZMAT Responder**  Organization:  Is this organization a volunteer fire department?  Yes  No  Address:      Contact:  Phone number:  Email address:  Is this organization in concurrence with the plan?  Yes  No  In Progress  (include documentation showing review with responders)  Is response capability available 24 hours a day?  Yes  No | |
| |  | | --- | | **Local Emergency Medical Facility**  Organization:  Address:      Contact:  Phone number:  Email address:  Is this organization in concurrence with the plan?  Yes  No  In Progress |  |  | | --- | | **Local Law Enforcement**  Organization:  Address:      Contact:  Phone number:  Email address:  Is this organization in concurrence with the plan?  Yes  No  In Progress |  |  | | --- | | **Local Emergency Planning Committee**  Organization:  Address:      Contact:  Phone number:  Email address:  Is this organization in concurrence with the plan?  Yes  No  In Progress |  |  | | --- | | **Other Committees, Agencies, or Companies**  Organization:  Address:      Contact:  Phone number:  Email address:  Is this organization in concurrence with the plan?  Yes  No  In Progress | |

**Site plans must be drawn to scale, locating the facility containing the new process or new explosives manufacturing operation on a map. The site plan shall show at a minimum:**

* The city and county roads in the area of the facility of the new process
* The area encompassing the endpoint of the worst-case release scenarios developed pursuant to [NAC 459.95366](https://www.leg.state.nv.us/NAC/NAC-459.html#NAC459Sec95366) or the area encompassing an area extending 1 mile radially from the facility, whichever is larger.
* A graphical delineation of the endpoints of each worst-case release scenario and alternative release scenario developed pursuant to [NAC 459.95366](https://www.leg.state.nv.us/NAC/NAC-459.html#NAC459Sec95366) and [459.95368](https://www.leg.state.nv.us/NAC/NAC-459.html#NAC459Sec95368).
* All major roads and transportation corridors.
* Routes for incoming and outgoing raw materials and products.
* The location of the first responding fire station and the hazardous materials response station. If the first responding fire station or hazardous materials response station is located outside the plan area, the site plan must include the address of the station and indicate the distance and direction that the station is from the facility.
  + The locations of the emergency responders as shown on the site plan must be consistent with the locations of the emergency responders identified in the emergency response program.
* The location of schools, hospitals and other public receptors within the plan area.

**Site plans must also be stamped or sealed in accordance with chapter 625 of NRS, and any regulations adopted pursuant thereto, by the engineer who has responsible charge of the document and include a table of contents or cover sheet that complies with the requirements of chapter 625 of NRS and any regulations adopted pursuant thereto.**

Provide the title(s) of all site plan documents, including revision number, revision date, and number of pages. Any listed documents shall be submitted with this application.

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**A copy of the conditional use permit issued by the local governing body of the city or county in which the facility is to be located pursuant to NRS 278.147 shall be submitted with this application.**

Local Governing Body:

Terms and conditions for the operation of the facility specific by the local governing body:

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| **HAZARD INFORMATION**  The hazards of the highly hazardous substances or explosives must include, without limitation:   * **Toxicity information** * **Permissible exposure limits** * **Physical data** * **Reactivity data** * **Corrosivity data** * **Thermal and chemical stability data** * **The foreseeable hazardous effects of inadvertent mixing of different materials**   Information about the substances must be gathered to evaluate the potential hazards posed by its use in the regulated process. Some of this information will be available in the manufacturer’s Material Safety Data Sheets (MSDS). Much of the information will be available in other sources; such as the NIOSH Pocket Guide to Chemical Hazards; Genium’s Handbook of Safety, Health, and Environmental Data for Common Hazardous Substances; Chemical Engineers’ Handbook; etc.  While these data are required to be compiled for the highly hazardous substances as defined by regulation, compiling the same information for other substances that may potentially impact the process would be recommended under this effort as well. Generally, if the impact of a non-regulated substance may need to be considered during the PHA evaluation, the data should be compiled.  **Provide the title(s) of all SDS or MSDS sheets, including revision number, revision date, and number of pages. Any listed documents shall be submitted with this application.**   |  |  |  |  | | --- | --- | --- | --- | | **Title of Document** | **Rev. #** | **Date** | **# Pgs.** | |  |  |  |  | |  |  |  |  | |  |  |  |  | |

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| **PROCESS CHEMISTRY**  For any process that involves chemical reactions, a thorough process chemistry description must be developed. This description not only includes the normal reactions, but also must thoroughly address any potential abnormal situations. The description must include primary, secondary, side and intermediate reactions. It is particularly important to define any undesired reactions that may adversely impact process safety. If catalysts are used, the composition and properties of the catalyst should be known. The potential to form hot spots in a reactor should be identified as should the potential for runaway reactions. Kinetic data may also be important as this may impact process safety systems, including pressure relief requirements.  If the only changes occurring in the process are thermodynamic, such as is the case of an anhydrous ammonia refrigeration system, this section would not be applicable.  **Describe the process chemistry including, without limitation, a description of the potential side reactions, regardless of whether the reactions would create hazardous consequences:** |
| **CONTROL LOGIC**  Documentation concerning the control logic shall explain the function of the process controllers, switches and interlocks. Such documentation must be as concise as possible to allow the Division to review and use the information efficiently.  Is the control logic readily apparent from the piping and instrument diagrams?  Yes  No  If not, **provide the title(s) of all control logic documents**, including revision number, revision date, and number of pages. Any listed documents shall be submitted with this application. |
| |  |  |  |  | | --- | --- | --- | --- | | **Title of Document** | **Rev. #** | **Date** | **# Pgs.** | |  |  |  |  | |  |  |  |  | |  |  |  |  | |
| **MATERIAL AND ENERGY BALANCE**  Material quantities, as they pass through processing operations, can be described by material balances. Such balances are statements of the conservation of mass. Similarly, energy quantities can be described by energy balances, which are statements of the conservation of energy. If there is no accumulation, what goes into a process must come out. This is true for batch operations. It is equally true for continuous operation over any chosen time interval. Balances are fundamental to process control.  **Provide the title(s) of all material and energy balance documents, including revision number, revision date, and number of pages. Any listed documents shall be submitted with this application.**   |  |  |  |  | | --- | --- | --- | --- | | **Title of Document** | **Rev. #** | **Date** | **# Pgs.** | |  |  |  |  | |  |  |  |  | |  |  |  |  | |
| **SAFETY SYSTEMS**  The safety system description should provide a brief description and overview of the function of all safety systems that are present at the facility.  **Check all that apply:**  Emergency Shutdown System  Emergency Generator System  Toxic Gas Sensors  Ventilation System  Combustible Gas Sensors  Flare System  Flame Detectors  Audible and Visual Alarms  Firewater System  Uninterruptable Power Supply System  **Describe the safety systems, such as interlocks, detection or suppression systems:** |
| **VESSELS AND ROTATING EQUIPMENT**  Provide a list of vessels and rotating equipment information on the following tables. |

**Pressure Vessels** **(MAWP > 15 psi)**

| **Tag** | **Description** | **Serial No.** | | **Design** | | **Design & Construction Code**  **(Rev. & date)** | **Materials**  **of Construction** | **P&ID No.** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Mfg.** | **Nat’l Board** | **MAWP**  **(psi)** | **Temp**  **(F)** |
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**Process Vessels** **(MAWP < 15 psi)**

| **Tag** | **Description** | **Serial No.** | **Design** | | **Design & Construction Code**  **(Rev. & date)** | **Materials**  **of Construction** | **P&ID No.** |
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| **Manufacturer** | **MAWP**  **(psi or inches H2O)** | **Temp**  **(F)** |
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**Storage Tanks** **(non-pressure vessels)**

| **Tag** | **Description** | **Serial No.** | **Design** | | **Design & Construction Code**  **(Rev. & date)** | **Materials**  **of Construction** | **P&ID No.** |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Manufacturer** | **MAWP**  **(psi or inches H2O)** | **Temp**  **(F)** |
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**Liquid Pumps**

| **Tag** | **Description** | **Pump Type** | **Design** | | | **Design & Construction Code**  **(Rev. & date)** | **Materials**  **of Construction** | **P&ID No.** |
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| **centrifugal**  **screw**  **diaphragm**  **piston, etc.** | **max**  **suct**  **pres**  **(psi)** | **max**  **diff**  **head**  **(psi)** | **Temp**  **(F)** |
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**Vapor Compressors**

| **Tag** | **Description** | **Compressor Type** | **Design** | | | **Design & Construction Code**  **(Rev. & date)** | **Materials**  **of Construction** | **P&ID No.** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **centrifugal**  **screw**  **diaphragm**  **piston, etc.** | **max**  **suct**  **pres**  **(psi)** | **max**  **diff**  **head**  **(psi)** | **Temp**  **(F)** |
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**Other Equipment**

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| **OTHER EQUIPMENT**  **(Not Previously Listed)** | **Documentation Reference that contains equipment design information** | **Design Information (i.e. safe limits)** | | **Design codes to which the equipment was constructed and installed** | **Materials of Construction** | **Is the Material of Construction Determined to be Compatible w/Process** |
| **MAWP** | **Temperature** |
| **Revision / Date** | **(psi)** | **(°F)** | **Revision / Date** | **Reference** |
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| **STAMPED DRAWINGS**  **Plot Plans**  Plot plans of the project area, shown on separate drawings, drawn to scale, must show:   1. **Safety systems, including without limitation:**    * Firewater and other suppression system tankage locations    * System pump locations and distribution piping routing    * Hydrant, monitor and other fire suppression equipment locations    * Toxic and combustible gas and flame detector locations    * Personal protective equipment locations    * Major process equipment    * Manufacturer, model number and quantities for items a through d 2. **Electrical hazardous area locations** **must:**    * Provide necessary elevations and include detailed drawings to distinguish between electrically unclassified and electrically classified areas, as those terms are defined in Article 500 of the N.F.P.A. 70, the National Electrical Code    * Denote the nationally recognized code or standard upon which the drawing is based to determine the extent of the electrically classified areas   **Plot plans must also be stamped or sealed in accordance with chapter 625 of NRS, and any regulations adopted pursuant thereto, by the engineer who has responsible charge of the document and include a table of contents or cover sheet that complies with the requirements of chapter 625 of NRS and any regulations adopted pursuant thereto.**  Provide the title(s) of all plot plan documents, including revision number, revision date, and number of pages. Any listed documents shall be submitted with this application.   |  |  |  |  | | --- | --- | --- | --- | | **Title of Document** | **Rev. #** | **Date** | **# Pgs.** | |  |  |  |  | |  |  |  |  | |  |  |  |  | |

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| **Process Flow Diagrams**  Process flow or block flow diagrams, shown on as many drawings as necessary, **must correspond to the material and energy balance.**   * Process flow diagrams are more complex and will show main flow streams, including valves, to enhance the understanding of the process, as well as points of pressure and temperature control. Also, major components of control loops and key utilities may be shown. * PFDs include:   + All major equipment   + Equipment names and identification numbers *(traceable to the equipment list provided)*   + Major bypass and recirculation lines   + Control valves   + Valves required demonstrating routing for all modes of operation   **PFDs must also be stamped or sealed in accordance with chapter 625 of NRS, and any regulations adopted pursuant thereto, by the engineer who has responsible charge of the document and include a table of contents or cover sheet that complies with the requirements of chapter 625 of NRS and any regulations adopted pursuant thereto.**  Provide the title(s) of all PFD documents, including revision number, revision date, and number of pages. Any listed documents shall be submitted with this application.   |  |  |  |  | | --- | --- | --- | --- | | **Title of Document** | **Rev. #** | **Date** | **# Pgs.** | |  |  |  |  | |  |  |  |  | |  |  |  |  |   **Piping and Instruments Diagrams**  The P&ID provides a schematic representation of the piping and control / instrumentation; which depicts the functional relationships among the system components. It accomplishes this by showing all the piping, equipment, principal instruments, instrument loops, and control interlocks; and follows the general layout of the process flow diagram.  This is a vital document for those constructing the process; those responsible for preparing flushing, testing, and blowout procedures; the process hazard analysis team; by the plant operators who operate the process system; and other program elements of the process safety management program.  The first P&ID in the set should contain a legend defining all symbols used.  **P&IDs, shown on as many drawings as necessary, must:**   * + Be submitted on paper that is 11 inches by 17 inches   + Be on an easily legible scale   + Cover the new process   + Indicate all piping, equipment, instruments and controls   + Correspond to the process flow diagrams   + Correspond to the documentation concerning the control logic and the process hazard analysis     - The Division may request that the diagrams include any associated systems, including, without limitation, air, water, nitrogen and process drain systems, if the Division determines that the inclusion of the additional information is necessary to assist with the review of the process hazard analysis.   + Correspond to the specifications   **P&IDs must also be stamped or sealed in accordance with chapter 625 of NRS, and any regulations adopted pursuant thereto, by the engineer who has responsible charge of the document and include a table of contents or cover sheet that complies with the requirements of chapter 625 of NRS and any regulations adopted pursuant thereto.**  Provide the title(s) of all P&ID documents, including revision number, revision date, and number of pages. Any listed documents shall be submitted with this application.   |  |  |  |  | | --- | --- | --- | --- | | **Title of Document** | **Rev. #** | **Date** | **# Pgs.** | |  |  |  |  | |  |  |  |  | |  |  |  |  | |  |  |  |  | |  |  |  |  | |  |  |  |  | |  |  |  |  | |  |  |  |  | |  |  |  |  | |  |  |  |  | |  |  |  |  | |  |  |  |  | |  |  |  |  | |  |  |  |  | |  |  |  |  | |  |  |  |  | |  |  |  |  | |  |  |  |  | |  |  |  |  |     **Concrete Foundations**  For equipment and structures related to the new process or explosives manufacturing operation **that are NOT subject to review and approval by the local building official**. The drawings shall include:   * Base and subbase preparation, including compaction requirements * Forms, reinforcing bar and appurtenance requirements * Concrete and grout specifications * Testing and inspection requirements * Applicable codes, standards or industry recommended practices governing the design and construction   **Structural Steel**  For equipment and piping supports related to the new process **that are NOT subject to review and approval by the local building official.** The drawings shall include;   * Steel and bolting specifications * Welding, testing and inspection requirements * Applicable codes, standards or industry recommended practices governing the design and construction   **Concrete foundation and structural steel drawings must also be stamped or sealed in accordance with chapter 625 of NRS, and any regulations adopted pursuant thereto, by the engineer who has responsible charge of the document and include a table of contents or cover sheet that complies with the requirements of chapter 625 of NRS and any regulations adopted pursuant thereto.**  Provide the title(s) of all concrete foundations and structural steel documents, including revision number, revision date, and number of pages. Any listed documents shall be submitted with this application.   |  |  |  |  | | --- | --- | --- | --- | | **Title of Document** | **Rev. #** | **Date** | **# Pgs.** | |  |  |  |  | |  |  |  |  | |  |  |  |  | |  |  |  |  | |  |  |  |  | |  |  |  |  | |
| **STAMPED SPECIFICATIONS**   1. **The specifications must define the following:**  * The applicable codes, standards or industry recommended practices to be followed for the design, construction and inspection of the new process or a new explosives manufacturing operation * The design conditions, including maximum allowable working pressures, design temperatures and seismic criteria, where applicable * The required materials of construction * The qualification requirements for installation methods used and for the personnel performing the construction and inspection activities * Inspection and testing requirements  1. **Specifications must be provided for process piping, fittings, and valves.**   Requirements for inspection, examination and testing related to piping construction must be appropriate for the application, and must, without limitation:   * Meet the requirements defined in Chapter VI of ASME B31.3 - 1999 Process Piping with Addenda, which is adopted by reference pursuant to NAC 459.95528; * Require examination of: * Not less than 5 percent of all circumferential butt and miter groove welds by random radiography and require that the welds meet the acceptable criteria for normal fluid service specified in Chapter VI of ASME B31.3 * Not less than 5 percent of socket welds and other fillet welds by magnetic particle, liquid penetrant or ultrasonic testing and require that the welds meet the acceptance criteria for normal fluid service specified in Chapter VI of ASME B31.3   **Specifications must also be stamped or sealed in accordance with chapter 625 of NRS, and any regulations adopted pursuant thereto, by the engineer who has responsible charge of the document and include a table of contents or cover sheet that complies with the requirements of chapter 625 of NRS and any regulations adopted pursuant thereto.**  Provide the title(s) of all specification documents, including revision number, revision date, and number of pages. Any listed documents shall be submitted with this application.   |  |  |  |  | | --- | --- | --- | --- | | **Title of Document** | **Rev. #** | **Date** | **# Pgs.** | |  |  |  |  | |  |  |  |  | |  |  |  |  | |
| **STAMPED CALCULATIONS**  Each set of calculations **must include a cite to the applicable code, standard or industry recommended practice governing the design and construction that was used** in making the calculation.   1. **Capacity of Pressure Relief Devices and Pressure Relief Systems**   Supporting calculations for all pressure relief devices and relief header systems, including ventilation systems, flares and end of line scrubber systems, shall be provided.   1. **Concrete Foundations**   Supporting calculations, only for foundations **that are NOT subject to review and approval by the local building official**, shall be provided. Soils reports shall also be submitted to support design calculations.   1. **Structural Steel**   Supporting calculations, only for structural steel **that is NOT subject to review and approval by the local building official**, shall be provided.  If the calculations are computer-generated, the calculations must include:   * A complete description of the mathematical model used in the design * Design program identification, input data required, program application limitations and final results   The Division may request that supporting information for the calculations be provided in the application, including, without limitation, data generated by vendors.  **Calculations must also be stamped or sealed in accordance with chapter 625 of NRS, and any regulations adopted pursuant thereto, by the engineer who has responsible charge of the document and include a table of contents or cover sheet that complies with the requirements of chapter 625 of NRS and any regulations adopted pursuant thereto.**  Provide the title(s) of all calculation documents, including revision number, revision date, and number of pages. Any listed documents shall be submitted with this application.   |  |  |  |  | | --- | --- | --- | --- | | **Title of Document** | **Rev. #** | **Date** | **# Pgs.** | |  |  |  |  | |  |  |  |  | |  |  |  |  | |

**Has methodology approval been obtained from the Division?**  Yes  No

**PHA methodology selected:**

A “what if” analysis

A checklist

A “what if” analysis combined with a checklist

A hazard and operability study

A failure mode and effects analysis

A fault tree analysis

An appropriate equivalent methodology. Specify:

**Was process safety information compiled before conducting the PHA?**  Yes  No

Provide the title(s) of all process hazard analysis documents, including revision number, revision date, and number of pages. Any listed documents shall be submitted with this application.

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