

TITLE: HAZARDOUS MATERIALS SYSTEMS - Guideline

SCOPE: Hazardous Material Systems shall be installed and permitted in accordance with this guide and the requirements contained in the 2005 Clark County Fire Code (2000 - UFC with Local Amendments).

PURPOSE: To standardize Fire Department requirements relating to Hazardous Materials Systems.

Note: In addition to a Hazardous Materials Systems Combined Plan/Permit, other applicable Plan/Permit applications may be required. For example: Fire Sprinkler Systems Plans, Fire Alarm Systems Plans, Dust Producing Operations, Spray Booth Permit, Repair Garage Permit, Certain other Permits.

Will your business store, manufacture, or use any of the following types of materials? (Check all the boxes that apply). The following Checklist provides some Examples of chemicals for each Type of Material regulated under the Fire Code. The Examples are **not** intended to provide a complete list. Always refer to your Vendor supplied Material Safety Data Sheets (MSDS) for those chemicals used in your system:

	<u>Types of Materials:</u>	<u>Examples</u>
<input type="checkbox"/>	Explosives	Dynamite, Black Powder, Fireworks, Pyrotechnic Special Effects, Propellants, Fuel & Oxidizer Mixtures used for Blasting.
<input type="checkbox"/>	Compressed Gases	Welding Gases: Acetylene and Oxygen, or Nitric Oxide, Ammonia, Chlorine, Hydrogen Chloride, Fluorine, Hydrogen Fluoride, Hydrogen Sulfide, Argon, Nitrogen, Neon, Helium, Diborane, Refrigerants, Silane, Vinyl Chloride.
<input type="checkbox"/>	Flammable & Combustible Liquids	Pentane, Benzene, Enamel Paint, Vinyl Chloride Gasoline, Lacquer Thinners, Acrolein, Solvents, Turpentine, Acrylonitrile, Resins, Fuel Oil No. 2,, WD-40 Bulk, Photo Shop Chemicals, Cutting oils, Ink(s), Motor, Gear, & Hydraulic Oils, Automatic Transmission Fluids, and Bio-Diesel.
<input type="checkbox"/>	Flammable Solids	Nitrocellulose (wet), Sulfur, Magnesium, Plastics, Wood-Saw Dust, Powdered Metals & Canned Heat.
<input type="checkbox"/>	Oxidizers	Oxygen, Chlorine, Hydrogen Peroxide, Nitric Acid, Fertilizers, Ammonium Nitrate, Ammonium Perchlorate, and some Pool Treatment Chemicals.

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- [] Organic Peroxides Includes: Liquids, Pastes, & Solids: Trigonix, Esperox, Tert-Butyl-Peroxide, Peroxyacetic Acid, & Benzoyl Peroxide (Concentrated).
- [] Pyrophoric Diborane, Silane, White or Yellow Phosphorous, Sodium Metal, Tri-Methyl Aluminum.
- [] Unstable (Reactive) Peroxyacetic Acid, Picric Acid (dry), Styrene, Hydrogen Peroxide (> 35 w/o).
- [] Water Reactive Aluminum alkyls, Calcium Carbide, Sodium Metal, Sulfuric Acid, Sodium Hydroxide, and Titanium Tetrachloride.
- [] Cryogenic Fluids Hydrogen, Methane, Fluorine, Nitric Oxide, Oxygen (LOX), Argon, Helium, and Nitrogen.
Note: All of the cryogens listed will exist as compressed gases when stored at ambient temperatures.
- [] Highly Toxic & Toxic Chlorine, Fluorine, Acrolein - Inhibited, Methyl Parathion, Hydroquinone, Boron Trichloride, and Acrylonitrile. Note: Compressed Gases: Hydrogen Fluoride, Hydrogen Sulfide, and Diborane.
- [] Radioactive Radioactive materials that require a license from the State of Nevada Radiological Health: Isotopes of Americium, Cesium, Cobalt, Potassium
- [] Corrosives Acids: Hydrochloric, Hydrofluoric, Nitric, Sulfuric; Pool Treatment Chemicals.
Bases (Alkalis): Ammonium Hydroxide, Sodium Hydroxide, Pool Treatment Chemicals.
Other Corrosives: Bromine, Aqueous Ammonia, and Chlorine, Janitorial cleaning chemicals.
- [] Carcinogens, Irritants Sensitizers, Other Health Hazards (OHH) Asbestos, Benzene, Carbon Tetrachloride, PCB's, Vinyl Chloride, Menthol, Calcium Selenate, Magnesium Chloride – Hexahydrate, Mercury, Lead, and Carbon Dioxide – Liquefied

SPECIFICATIONS AND REQUIREMENTS

All hazardous material storage, use, manufacturing, and or repackaging system installations, erected located or relocated are required to obtain plans review, and required permits from the Clark County Fire Department (CCFD).

At the time of Combined Plan/Permit application, three sets of legible documents must be submitted for review and approval. A \$75.00 Permit Fee (minimum) will be collected upon submittal of the Combined Plan/Permit request. Combined Plan/Permits may be expedited for an additional fee of \$85.00/Hr. Additional Permit Fees may be assessed based on quantity, type, and storage configuration of hazardous materials (Ref: CCFD Permit and Service Fee Schedule). **Following “Plan Acceptance” a site inspection shall be performed.** An approved copy of the Combined Plan/Permit Application package shall be available for review at all times. **A “Permit” is issued after the required inspection(s) listed on the “Plan Acceptance” sheet are accepted.**

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SPECIFICATIONS AND REQUIREMENTS (Continued)

Combined Plan/Permit Applications must include the following:

(1) A completed **State of Nevada Fire Marshal's Combined Agency Hazardous Materials Report and a completed copy of this Guideline - Checklist.**

(2) A detailed and legible site plan must accompany your Combined Plan/Permit Application. The site plan shall include manufacturing, storage, and use locations where hazardous materials are present at your business site. As applicable, indicate the presence of hazardous materials storage cabinets, flammable liquid storage cabinets, special fire extinguishing systems, or automatic sprinklers in buildings.

(3) When the Permit Applicant stores and/or uses hazardous materials in amounts that exceed the **Permit Amount**, but is less than the exempt amount, a Hazardous Materials Inventory Statement (HMIS) is required. The State of Nevada Fire Marshal's Combined Agency Hazardous Materials Report may be utilized as the Hazardous Materials Inventory Statement (HMIS); however, your application package must provide the information in a format similar to the Example HMIS provided with this Hazardous Materials Systems – Guideline.

NOTE: A list of the Permit Amounts for hazardous materials may be found in the 2005 Clark County Fire Code (2000 Uniform Fire Code with Amendments). See Article 1 - "Administration" Section 105 – "Permits" for details.

(4) When the Permit Applicant stores, manufactures, or uses hazardous materials in amounts that **Exceed the Exempt Amounts** a Hazardous Materials Management Plan (HMMP) is required. A completed State of Nevada Fire Marshal's Combined Agency Hazardous Materials Report along with a detailed narrative describing the storage, use, and manufacturing operations and processes taking place at the facility may be submitted as the Hazardous Materials Management Plan (HMMP). However, your application must provide the information in a format similar to the Examples provided with this Hazardous Materials Systems – Guideline. Additionally, provide the Building Occupancy rating for any building where manufacturing, storage, and use of hazardous materials in amounts that exceed the Exempt Amounts.

NOTE: A list of the Exempt Amounts for hazardous materials may be found in the 2005 Clark County Fire Code. See both Article 79 - "Flammable and Combustible Liquids" and Article 80 - "Hazardous Materials" for most details.

When necessary the Chief shall determine what additional information is required for a submittal. For example, the vendor supplied MSDS sheets for certain chemicals or hazardous materials may be required.

For additional information call the Clark County Fire Department, Plans Check Division at 455-7100.

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