I. PURPOSE

The purpose of this procedure is to describe the process to ensure that all hazardous and regulated waste generated by the College of Southern Nevada (CSN) is properly managed and disposed of in accordance with all applicable federal, state, and local regulations and to protect the health and safety of the CSN community and the environment.

II. SCOPE

This Procedure covers all hazardous and regulated waste generated at all CSN facilities.

III. DEFINITIONS

Biohazardous/Medical Waste: Waste that is generated or produced as a result of diagnosis, treatment, immunization of human beings or animals; research pertaining to the production or testing of biologicals, biohazardous waste; or sharps.

Hazardous Waste: Waste that is either 1) a listed hazardous waste under federal regulation 40 CFR Part 261.30, or 2) a waste that exhibits the following hazardous characteristics:
  o Ignitability (flash point less than 140° Fahrenheit);
  o Corrosivity (pH less than or equal to 2 or greater than or equal to 12.5);
  o Reactivity (reacts with air or water to produce an explosive, flammable or toxic product); or
  o Toxicity (contains specific pesticides, heavy metals or organic solvents).

Regulated Non-hazardous Waste: Waste that is not categorized as hazardous under federal regulation 40 CFR 261 and, according to other federal, state or local regulations, cannot be added to a dumpster or sewage line.

Universal Waste: Any hazardous waste subject to 40 CFR Part 273 and 30 TAC 335.261 to include:
  o Batteries including lead-acid as described in 40 CFR 273.2;
  o Pesticides as described in 40 CFR 273.3;
  o Mercury Thermostats as described in 40 CFR 273.4;
  o Lamps as described in 40 CFR 273.5

IV. PROCEDURE

A. Hazardous Waste Determination

1. All waste must be evaluated and classified as hazardous or non-hazardous. A chemical waste is considered to be a hazardous waste if it is specifically listed by the EPA as a hazardous waste or if it meets any of the four hazardous characteristics as defined by 40 CFR 261.

2. Most hazardous materials and waste regularly generated at CSN have already been evaluated and identified by the office of Environmental Health and Safety (EH&S). Any materials or items that have not been previously evaluated must be classified by EH&S before they are discarded.

3. Waste determinations shall be reevaluated upon vendor request, when a change in the process generating the waste occurs, or every three years.
4. The results of waste determinations shall be recorded in a profile for each hazardous waste
stream.

5. Wastes typically generated by CSN include but are not limited to:

- **D001: Ignitable Characteristics**
  - Spent aerosol cans
  - Waste paint and spent solvents
  - Small amounts of flammable chemicals generated in the science labs

- **D002: Corrosive Characteristics**
  - Small amounts of corrosive chemicals generated in the science labs

- **D008: Lead**
  - Lead foils used in x-rays generated by the dental programs

- **D011: Silver**
  - Silver thiosulfate generated by photography developer

- **Expired and unusable chemicals**
  - Small amounts of expired or discarded commercial chemical product or material,
    in their original containers generated in the science labs or operations

- **Biohazardous/Medical**
  - Used Sharps
  - Medical wastes generated by veterinary and dental programs
  - Organic biological waste generated by the science labs

- **Universal and Recyclable Wastes**
  - Used oil and anti-freeze
  - Spent lamps and ballasts
  - Spent batteries

- **Non-Hazardous Regulated Wastes**
  - Oil contaminated sand/absorbent material

B. Managing Hazardous Waste

1. CSN is regulated as a hazardous waste generator, governed by a specific set of regulations that
   are based on the generator status of each campus. All chemical and biological hazardous waste
   must be handled and disposed of in accordance with the applicable regulations.

2. Hazardous waste should never be disposed of by pouring down the sanitary sewer drain, by
   evaporation inside or outside of a fume hood, by disposal in the regular trash, or by pouring down
   a storm drain, on a paved surface, or on the ground.

3. EH&S works with waste generators in each department on what rules and regulations apply to
   managing and storing waste properly. The ultimate responsibility to ensure proper storage and
   management remains with the department that created the waste.

C. Waste Containers and Labeling

1. Waste must be stored in containers that are compatible with the waste and have a tight fitting cap
   or cover.

2. Waste containers must be in good condition and not leaking or damaged.

3. Working containers may be open until the end of the procedure, daily course instruction, or until
   full.

4. Containers should be labeled as soon as waste is put into them and must always be capped
   when not actively adding waste.

5. Do not cover existing labels or markings unless those labels or markings no longer apply.
6. Containers containing hazardous waste must be identified with:
   • “HAZARDOUS WASTE” label affixed to the side
   • Name of the contents (e.g., Organic Waste, Inorganic Waste, etc.) written on the label
   • Hazard class of the contents (e.g., Corrosive, Flammable, Toxic, etc.) written on the label.

7. Containers containing non-hazardous waste must be identified legibly with the name of the material and marked "NON-HAZARDOUS WASTE". A Non-hazardous label can also be used.

8. Containers too small to affix a label may be boxed up or otherwise segregated and the labels applied to the whole group/container of small containers.

9. Hazardous Waste labels are not required on original manufacture containers.

10. Biohazardous or infectious wastes, including sharps, should be segregated from all other waste types and placed in specially labeled red “biohazard” bags or puncture resistant "sharps" containers.

11. Empty containers that held a hazardous material must be managed as hazardous waste unless they are empty. Empty means drip/dry. A container is only empty when all pourable liquids no longer pour when the container is inverted, and all solid materials are scraped or otherwise removed.

D. Waste Storage

1. Once waste containers are full or when that type of waste will no longer be generated, they should be placed in the department’s designated waste storage areas for pick-up.

2. Designated waste storage areas must be under the control of the personnel generating the waste and should be checked regularly for container leakage.

3. Segregate the containers according to the type of waste. Secondary containment should be used whenever possible.

4. Each department will arrange with EH&S to have the waste in the designated storage areas collected and transported to the campus central storage area.

5. Campus central storage areas are under the control of EH&S and are locked to prevent unauthorized access. These areas will be inspected periodically for proper signage and labeling, container integrity, leaks, and housekeeping.

E. Manifesting and Transportation

1. EH&S is responsible for coordinating all waste pick-ups with a licensed hazardous waste vendor. Hazardous waste pick-ups are normally scheduled after each semester or more frequently if the need arises.

2. EH&S personnel must be present with the hazardous waste vendor to oversee waste pick-ups, sign the shipping manifest, and ensure proper handling, packing, and labeling of the waste.

3. All hazardous waste shipments shall be documented on a uniform hazard waste manifest or bill of lading for non-hazardous waste shipments.

4. Biohazardous waste is picked up weekly in areas that routinely generate waste while academic instruction is in session (i.e., biology and health science labs).

F. Recordkeeping
1. EH&S shall serve as the primary location for records related to hazardous waste. The following records should be kept onsite for a minimum of 3 years:
   - Permits
   - Hazardous waste manifests
   - Bills of Lading
   - Land disposal restrictions
   - Waste stream profiles
   - Waste determinations
   - Disposal certificates
   - Communication to and from regulatory agencies, hazardous waste vendors, and hazardous waste generators

G. Waste Minimization

1. All individuals who work with hazardous waste should institute methods to recycle wastes and/or to reduce waste volume and toxicity. Substitute nonhazardous or less toxic materials whenever possible. Purchase only the amount of chemical that is needed.

H. Chemical Spills and Leaks

1. Alert people in immediate area of the spill or leak.
2. Contact EH&S at x7445 or University Police Services (afterhours) x7911 if you need advice or further assistance.
3. Increase ventilation in area of spill (open windows, turn on hoods).
4. Avoid breathing vapors from spill.
5. Prevent the spill from spreading by returning container to the up-right position or placing into secondary containment.
6. Use appropriate kit to neutralize and absorb inorganic acids and bases. Collect residue, place in container, and dispose as chemical waste.
7. Wear protective equipment, such as safety goggles, gloves, long-sleeve lab coat and closed toe shoes when cleaning up a spill or leak
8. Consult Safety Data Sheet (SDS) for chemical information.
9. Report spill to EH&S if volume exceeds one gallon of liquid or one pound of solid or any quantity of the following: mercury spills, uncontrolled compressed gas release, unintentional release to bare ground or water.

I. Training

1. All individuals who work with hazardous waste must be trained to work safely with the materials being handled. This initial training will be conducted either by the department generating hazardous waste or through EH&S. This initial training is supplemented with annual refresher training.

2. EH&S staff members that oversee hazardous waste operations for CSN must be trained in the following subjects:
   - Hazardous substances
   - DOT shipping requirements
   - RCRA regulations
   - OSHA HAZWOPER

V. AUTHORITY AND CROSS REFERENCE LINKS

   EPA 40 CFR 260-270 (Hazardous Waste)
   NRS 459.00 (Hazardous Waste)
   NAC 444.00 (Sanitation/Medical Waste)
   OSHA 29 CFR 1910.120 (Hazardous Waste)
   Southern Nevada Health District Solid Waste Management Authority Regulations (SWMAR)