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NMT Laboratory Drainage Disposal Guidance

Purpose:

To protect the municipal sewer system, wastewater treatment processes, public health, and the environment by restricting what may be drained from laboratories into the sewer system.

1. What CANNOT Be Disposed by Drain

The City of Socorro's sewer ordinance prohibits the discharge of the following into sanitary sewers:

- Ashes, cinders, sand, mud, straw, shavings, metal, glass, rags, feathers, tar, plastics, wood, manure, entrails, paint residues, solid or viscous substances capable of causing obstruction to the flow of sewers
- Oil, grease, petroleum, or other water insoluble chemicals
- Materials that are not biodegradable or would pass through the sewage treatment plant into the river and be toxic to aquatic organisms or accumulate in sediments
- Materials that could interfere with the biological processes of sewage treatment or would contaminate the sludge-making disposal
- All compounds that could result in the presence of toxic gases
- Infectious substances
- Hazardous Wastes – either listed or characteristic hazardous wastes, for example:
    - Halogenated hydrocarbons
    - Nitro compounds: organic compounds that contain one or more nitro functional groups (-NO2) and are often explosive
    - Mercaptans (thiols)
    - Flammables (immiscible in water) or at concentrations of concern
    - Explosives such as azides and peroxides
    - Water soluble polymers that could form gels in the sewer system
    - Water reactive materials
    - Malodorous chemicals
    - Toxic chemicals such as carcinogens, mutagens, teratogens
    - Nanomaterials
    - Substances that boil below 50 °C (122℉)
    - Solid or viscous substances in amounts that will cause obstruction of the flow in the sewerage system
    - Flammable and combustible solvents (flashpoints less than 140℉)

- Discharges with a pH below 5.0 or higher than 9.0
- Wastes that could impart color that cannot be removed by treatment process (dye wastes, stains)
- Solutions that have a strong odor
- Metallic ions and salts
- Radioactive Materials
- Unknown solutions

2. What Can Be Disposed by Drain

Materials suitable for sewer disposal **in limited quantities** must meet the following physical and chemical criteria:

- Water-Soluble liquids (at least 3% soluble)
- Readily biodegradable or effectively treated by typical standard waste water treatment processes
- Are simple, non-toxic, inorganic salt solutions
- Dilute, non-toxic, organic solutions of low concentrations.
- Have a pH between 5.5 and 9.0

Important: All discharges must comply with Socorro sewer ordinances. If any doubt exists as to whether your waste can be discharged to the drain, please contact the Hazardous Materials and Laboratory Safety Specialist at 575-517-0646 for guidance and clarification ***before*** you discharge to the drain.

3. Required Practices

- Always discharge to a drain that connects to the sewer. No storm or floor drains.
- Use a sink that does not have a history of clogging or overflowing.
- Use a sink in your laboratory.
- Flush with a minimum of 10-to-20 times the amount of waste with water after drain disposal to thoroughly rinse out the sink and sink trap.
- Limit the quantities being discharged to 100 grams (or equivalent dilute volume) of solute per lab, per day.
- Wear appropriate PPE (gloves, eye protection, lab coat, face shield, etc.).
- Render all biological materials inactive (e.g. autoclave, or bleach-treat) before releasing to the sewer.

4. When to Contact The Office of Research Compliance and Safety (ORCS)

- Before any drain disposal involving:
    - Hazardous chemicals

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- Biological agents
- Unknown solutions
- Substances with a strong odor or color
- If you have any questions about compliance and local sewer code

When in doubt, waste it out by completing an NMT Hazardous Waste Pick Up Request for disposal instead of disposing of it in the drain.

For more information, please see Socorro's Code for Sewer Use, at:
https://ecode360.com/27029201