University of Wyoming Safety
Web: www.uwyo.edu/safety/
Phone: (307) 766-3277
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Regulated Materials Management Center
Phone: (307)766-3698 Fax: (307)766-3699
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I. Purpose

The University of Wyoming maintains a wastewater discharge permit with the City of Laramie. The University of Wyoming Safety Office, Regulated Materials Management Center (RMMC) manages this permit and performs required wastewater monitoring of selected sanitary sewer outfalls to ensure compliance with the permit. This plan describes the measures implemented by the University of Wyoming to prevent unwanted sanitary sewer discharges from occurring, and to prepare UW to respond in a safe, effective, and timely manner to mitigate the impacts of a wastewater discharge within the City of Laramie.

II. Scope

This wastewater spill control plan shall contain information on the discharge practices, chemical storage, notification procedures and procedures to prevent adverse impacts from accidental spills.

III. Description of discharge practices

A. General wastewater system:
The UW wastewater system collects wastewater from sinks, toilets, floor drains and discharge lines from the academic, research and service buildings, residential halls, apartments, housing units, special events and athletic facilities, and various maintenance, utility systems, and warehouse units on the UW campus (see map, section VII).

B. General wastewater discharge and chemical disposal:
UW is responsible for coordinating disposal of all hazardous and other regulated waste and unused chemicals from laboratories, shops and campus farm areas in compliance with Federal, State, and Local regulations. All campus disposals of chemicals, infectious materials and hazardous waste are to be performed or arranged under the authority and control of RMMC. UW prohibits the general discharge or disposal of any chemicals, infectious materials, and hazardous waste to the sanitary sewers without review.

C. Academic and research facilities:

1. Laboratories: The UW main Laramie campus has multiple academic and research buildings with laboratories. There are also eight academic and research building not on the main campus within Laramie City and County limits. Chemicals in these areas are used and stored in small amounts, which are segregated and stored by compatibility. All lab users are required to attend training that covers chemical safety and handling, emergency response, and disposal

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requirements. The chemicals in these areas have the potential to be accidentally discharged to floor drains or bench sinks. Such discharges are rare and are generally limited to small quantities (less than a gallon of liquid) due to accidental spillage.

2. Custodial closets: Nearly every campus academic, research, farm, residential, special event, athletic and maintenance building contains at least one custodial closet with a floor drain for general discharge of used wash and mop water. Any blood waste is collected and sent for disposal as medical waste. Unused chemicals and cleanup waste from hazardous materials spills are turned over to RMMC for disposal. Containers of one gallon or less of cleaning fluids, polishes, and disinfectants are kept in each closet. Larger volumes are maintained only at the Central Stores of Physical Plant.

D. Farm/Agricultural units:

1. Animal Science: A small slaughter facility used for butchering farm animals are located in the Animal Science wing of the Animal Science and Molecular Biology Building. The blood from animal bleed-out is collected by a local disposal service (currently, Honeywagon Company) and disposed. Incidental wash water from other butcher operations is sent directly to the sanitary sewers via the floor drains and sinks.

2. Wyoming State Veterinarian Laboratory (WSVL): There is also a blood basin at the WSVL is located at 1174 Snowy Range Rd., which is also pumped by septic service operators.

E. Cooling/heating systems:

1. Central Utility Plant: The cooling towers at the Campus Central Energy Plant on 19th street have continuous blow-down controls, which automatically discharge treated cooling water to the sanitary sewer. The treated water is monitored periodically to ensure that it is within wastewater discharge limits. Drums of sodium hydroxide are segregated from the sanitary drains by secondary containment within the facility.

F. Cafeteria/kitchen grease disposal:

1. Washakie Dining Hall: The grease from the kitchens in the cafeteria and snack areas in Washakie Dining Hall is discharged to a grease sump tank at the north side of the building. This sump is pumped out, on an as-needed basis, utilizing a University contract for disposal.

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2. Crane Hill Cafeteria: The grease from the kitchen is collected downstairs in the grease trap. This trap is pumped out, on an as-needed basis, utilizing a University contract for disposal.

3. Student Union Dining Area: The grease from the kitchens in the cafeteria and snack areas in Student Union is discharged to a centrally located grease sump. This sump is pumped out, on an as-needed basis, utilizing a University contract for disposal.

G. Pool Maintenance:

Pool water is discharged to the sanitary sewer. Chlorine is stored in tablet form and presents little risk to the wastewater lines. Hydrochloric acid in 142-pound containers are stored in a basement with limited access to waste-water drains.

H. Vehicle Maintenance:

1. Physical Plant: The motor pool and heavy equipment maintenance at the Physical Plant provide limited vehicle maintenance. Landscaping services also performs limited service at their location on Willet street. All waste oil and antifreeze are collected by RMMC or an oil recycler. RMMC disposes of the antifreeze as waste and the waste oil is removed under contract by an oil recycler.

2. Athletics and Student Housing: The Athletics Department and student housing provide minor vehicle maintenance at interior bays under War Memorial Stadium and the Housing Warehouse, respectively. Used antifreeze is sent for waste disposal while the waste oil is recycled. Neither bay has access to floor drains.

3. Farms: All waste oil and antifreeze are collected for disposal. The products and waste do not have access to the sanitary sewer system.

4. Jacoby Golf Course: All waste oil and antifreeze are collected for disposal. The products and waste do not have access to the sanitary sewer system.

I. Paint Shop and Booth Operation:

1. Physical Plant: Physical Plant operates a paint shop and booth at the Physical Plant Services building. The paint booth filter's and all oil/solvent-based paint wastes are collected for disposal as

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hazardous waste. The material is stored in an enclosed room with a 4-inch concrete secondary storage floor.

J. Warehouse Storage:

1. Physical Plant. Physical Plant stores individual containers of solvents, flammables and lead/acid batteries, as well as provides a loading area for temporary storage of research chemicals in the Physical Plant Warehouse. Spill kits are available and sewer access is limited.

2. Chemical Stock Room: The Stock Room maintains individual containers (up to 5 gallons) of solvents, flammables, corrosives, and toxic material. Larger quantities of solvents are stored with built-in secondary containment. Spill kits are available and sewer access is limited.

K. Medical Facilities:

1. Student Health Center: Any blood or related waste from these units is collected and disposed of as medical waste. Chemical waste is also collected by RMMC.

L. Grounds Maintenance:

All areas of campus have planted grounds that need to be maintained. Fertilizer and Pesticide wastes are disposed of as Universal wastes and collected by the Regulated Materials Management Center (RMMC). Only incidental wash water is expected to enter the system.

IV. Description of stored chemicals:

Currently the University has chemical storage throughout campus (e.g., labs, shops or storage rooms). Chemical storage in the academic campus buildings is primarily within the teaching and research labs, chemical stock rooms, and custodial closets. The chemicals used by UW maintenance and trades are primarily in the warehouse, motor pool, central plant, shops, and other buildings at the Physical Plant and Housing departments.

The chemicals in the research labs and shops are not static and change in type and quantity throughout the year and from semester-to-semester. With the exception of the chemical stockroom, motor pool and central energy plant areas, the chemicals are generally stored in small containers of five gallons or less. Depending on the quantities within an area, the flammable and corrosive containers are typically stored within self-contained flammable, as per NFPA

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guidelines, or corrosive cabinets. The following is a listing of the location and amount of the hazardous chemicals reported under annual EPA Tier 2 Report. This report lists extremely hazardous substances and large quantities of any hazardous materials stored on campus.

A. Liquid Nitrogen:
Aboveground 1,500-gallon tank on the north side of the Physical Sciences (P.S.) Building.

B. Fuel Oil:
Underground storage at the Central Energy Plant, maximum daily amount 15,000 gallons.

C. Gasoline and Diesel:
Aboveground storage, Fueling Station, maximum daily amount 15,000 gallons.

V. Procedures for notifying the City of Laramie as the Publicly Owned Treatment Works (POTW):

A. In the event of a release of hazardous chemicals or waste to the sanitary wastewater system at or to a floor or sink drain, the chemical users are instructed to immediately notify UW Safety at 766-3277 or the UW Police Department at 766-5179. UW Police will then notify Laramie City Fire and RMMC.

B. If a discharge is deemed likely to upset the operation of the City Wastewater Treatment Plant, the plant contacts will be notified by phone immediately by RMMC. RMMC oversees the UW wastewater discharge permit and is designated as the main contact with the City Wastewater Treatment Plant.

C. Emergency Contacts:

1. UW Safety: 766-3277
2. UW Regulated Materials Management Center (RMMC): 766-3697
3. City of Laramie Waste Treatment Plant: 721-5204
4. UW Police Department: 766-5179

VI. Procedures to prevent adverse impact from accidental spills:

The following includes Best Management Practices (procedures, measures, and/or requirements), which have been either recommended or are a requirement for preventing accidental chemical spills to the sanitary sewers. Training on these items is included in the Hazardous Waste Generator Training.

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A. Measures for containing toxic pollutants (Best Management Practices)

1. Source control and reduction:
   a) Prior approval is required for any experiment or procedure that involves highly toxic or unusual use of hazardous material. Additional details are provided in the Chemical Hygiene Plan.
   b) Minimize storage quantities of chemicals by ordering only what is needed.
   c) Dispose of unwanted chemicals and all hazardous materials through RMMC.
   d) Eliminate (or minimize) the use of mercury and mercury containing devices. Any and all mercury spill are to be reported to RMMC for cleanup. UW also has a mercury trade-in program.

2. Use, storage, and housekeeping measures:
   a) Avoid use of open containers of hazardous chemicals near sinks and floor drains.
   b) When use of open containers of chemicals near sinks and floor drains is unavoidable, cap or plug sinks and drains during chemical use.
   c) Store chemicals in tubs, cabinets, bermed or diked areas, or in other secondary containment.
   d) Use proper containers and restraints.
   e) Secure storage cabinets and shelves to prevent tipping or falling.
   f) Maintain spill containment and clean-up materials nearby. Some spill equipment and information on spill cleanup is available from RMMC and/or the department.
   g) Follow good housekeeping practices. Never store hazardous chemicals in sinks or hoods that have a built-in sink.

B. <u>Inspection and maintenance of storage areas</u>:

All chemical use and storage areas are to be regularly inspected by University staff. In chemical storerooms where floor drains go to the sanitary sewer, the floor drains should be plugged, except when they are in use (for example, when floors are mopped). Chemical storerooms should use removable drain plugs in such cases.

C. <u>Worker training</u>:

All personnel in operations that could cause a spill discharge are to be trained on spill prevention and control, general contents of this plan, and the spill emergency notification. For laboratory staff the training will be part of the Lab

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Safety Series Training. For all other hazardous chemical users, training is provided through Workplace Safety (OSHA Hazard Communication) training. All training is documented in the University's learning management system and is on file in UW Safety office.

D. Containment structures:

As appropriate, containment will be engineering controls (e.g., built-in berms, sumps, plugs, secondary containment vessels, and cabinets).

E. Measures and equipment for emergency response:

RMMC is the hazardous materials response team for the University. RMMC maintain supplies of spill containment and clean-up equipment. In addition, each lab and department using large amounts of chemicals are expected to maintain spill containment and clean-up materials. RMMC provides spill response instruction to users and some spill equipment for labs and departments. Should they be needed, the City of Laramie Fire Department serves as emergency personnel for the university. They are equipped to deal with hazardous materials situations.

VII. UW Laramie Campus Diagram:

Please see: http://www.uwyo.edu/uw/tour/_files/docs/uw-laramie-campus.pdf