STORM WATER MANAGEMENT PROGRAM PLAN

2026-2031

For the

UNIVERSITY OF UTAH

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SIGNATURE PAGE

Storm Water Management Program Plan

Permittee: University of Utah

Permit Number: UTR090024

Location of MS4: East side of Salt Lake City, Utah

Submitted with this permit is the following:

- ☒ A map of the MS4 location.
- ☒ Information regarding the overall quality concerns, priorities, and measurable goals specific to the Permittee that were considered in the development and/or revisions to the SWMP document.
- ☒ A description of the program elements that will be implemented in each of the six minimum control measures.
- ☒ A description of any modifications to ordinances or long-term/ongoing processes implemented in accordance with the previous MS4 general permit for each of the six minimum control measures.
- ☒ A description of how the Permittee intends to meet the requirements Permit as described in Part 4.0 by either referencing existing program areas that already meet the Permit requirements or a description and relevant measurable goals that include, as appropriate, the year by which the Permittee will achieve required actions, including interim milestones.
- ☒ If applicable, indication of joint submittal of Co-Permittees and the associated responsibility in meeting requirements of the SWMP.

Certification

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those people directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Authorized Signature — Date

James Russell, Associate Vice President of Facilities

Authorized Signature — Date

Amit Nair, Associate Director Environmental Health and Safety

GLOSSARY OF TERMS

Best Management Practices (BMPs): Includes schedules of activities, prohibitions of practices, maintenance procedures, design standards, and other management practices to prevent or reduce the discharge of pollutants directly or indirectly into the waters of the United States. BMPs also include treatment requirements, operating procedures, educational activities, and practices to control plant site runoff spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

Clean Water Act (CWA): The Federal Water Pollution Control Act (33 U.S.C. § 1251 et seq.), and any subsequent amendments thereto.

Construction Activity: Activities subject to UPDES Construction Permits. These include construction projects resulting in land disturbance of one acre or more. Such activities include but are not limited to clearing and grubbing, grading, excavating, and demolition.

Conveyance System: Any channel or pipe for collecting and directing the storm water.

Culvert: A covered channel or large diameter pipe that directs water flow below the ground surface.

Discharge: The release of storm water or other substance from a conveyance system or storage container.

Drainage: Refers to the collection, conveyance, containment, and/or discharge of surface and storm water runoff.

Erosion: The wearing away of land surface by wind or water. Erosion occurs naturally from weather or runoff but can be intensified by land-clearing practices related to farming, residential and industrial development, road building, or timber-cutting.

General Permit**:** A permit issued under the UPDES program to cover a class or category of storm water discharges.

Grading: The cutting and/or filling of the land surface to a desired slope or elevation.

Hazardous Waste: By-products of society that can pose a substantial or potential hazard to human health or the environment when improperly managed. Possess at least one of four characteristics (flammable, corrosivity, reactivity, or toxicity) or appears on special EPA lists.

Illicit Discharge: Any direct (i.e. illicit connection), or indirect non-storm water discharge to the storm drain system, except discharges from firefighting activities and other discharges exempted in the Permit.

Illicit Discharge Detection and Elimination (IDDE): A program that each municipality develops to identify and eliminate any illicit discharges they might have within their collection system.

Impervious Surface: A surface which prevents or retards the penetration of water into the ground including, but not limited to roofs, sidewalks, patios, driveways, parking lots, concrete and asphalt paving, gravel, compacted native surfaces and earthen materials, and oiled, macadam, or other surfaces which similarly impede the natural infiltration of storm water.

Infiltration: The downward movement of water from the surface to the subsoil. The infiltration capacity is expressed in terms of inches/hour.

Inlet: An entrance into a ditch, storm sewer, or other waterway.

Low Impact Development (LID): This term is used to describe means and methods that can be utilized to reduce the impact of development on the environment.

Maximum Extent Practicable (MEP): MEP is a standard that establishes the level of pollutant reductions that the MS4 operators must achieve through implementation of a storm water management program. The strategies used to reduce pollutants to the MEP may be different for each small MS4 because of unique local hydrologic, geologic, and water quality concerns in different areas. EPA envisions that permittees will determine what the MEP is on a location-by-location basis and consider such factors as conditions of receiving waters, specific local concerns, and other aspects of a comprehensive watershed plan.

Measurable Goals: BMP design objectives or goals that quantify the progress of the program implementation and the performance of the University's BMP's. They are objective milestones that the University and the Utah Division of Water Quality use to track the progress and effectiveness of the University's BMP's in reducing pollutants to the MEP.

Minimum Control Measure (MCM): The EPA has identified six areas of focus for MS4s in developing a program to minimize the potential for pollutants to leave a jurisdiction and to enter the waters of the United States. These six areas of focus are called minimum control measures and they include:

1) Public Education and Outreach
2) Public Involvement
3) Illicit Discharge Detection and Elimination
4) Construction Site Storm Water Control
5) Post Construction Storm Water Control
6) Pollution Prevention and Good Housekeeping

Municipal Separate Storm Sewer System (MS4): A municipally owned and operated storm water collection system that may consist of any or all of the following: curb & gutter, drainage swales, piping, ditches, canals, detention basins, inlet boxes, or any other system used to convey storm water that discharges into canals, ditches, streams, rivers, or lakes not owned and operated by that municipality.

Outfall: The point, location, or structure where wastewater or drainage discharges from a sewer pipe, ditch, or other conveyance to a receiving body of water.

Pollutant: Generally, any substance introduced into the environment that adversely affects the usefulness of a resource. Pollutants may include, but are not limited to: paints, varnishes, and solvents; oil and other automotive fluids; non-hazardous liquid and solid wastes and yard wastes; refuse, rubbish, garbage, litter, or other discarded or abandoned objects, and accumulations, so that same may cause or contribute to pollution; floatables; pesticides, herbicides, and fertilizers; hazardous substances and wastes; sewage, fecal coliform and pathogens; dissolved and particulate metals; animal wastes; wastes

and residues that result from constructing a building or structure; and noxious or offensive matter of any kind.

Receiving Waters: Bodies of water or surface water systems receiving water from upstream constructed (or natural) systems.

Retention: The holding of runoff in a basin without release except by means of evaporation, infiltration, or emergency bypass.

Standard Operating Procedure (SOP): A written description of the standard method of performing a given task. Can include a step-by-step description. SOPs are developed to bring consistency to a program and to clearly define the expectations of that program. They should be the basis of training programs for municipal employees.

Storm Drain: A slotted opening leading to an underground pipe or open ditch for carrying surface runoff.

Storm Water: Rainfall runoff, snow melt runoff, and drainage.

Storm Water Advisory and Management Team (SWAMT): A team of University of Utah employees, including members of the Environmental Health and Safety department, as well as staff from other departments, who meet to discuss the storm water program and storm water related issues including comments from the public.

Storm Water Management Program (SWMP): A document which describes the Best Management Practices and activities to be implemented by a person or business to identify sources of pollution or contamination at a site and the actions to eliminate or reduce pollutant discharges to storm water, storm water conveyance systems, and/or receiving waters.

Storm Water Pollution Prevention Plan (SWPPP): A document which describes the general plan for addressing storm water pollutants at a given site. The plan characterizes the nature of the potential pollutants, describes methods and concepts for controlling those pollutants and identifies those responsible for the plan.

Swale: An elongated depression in the land surface that is at least seasonally wet, is usually heavily vegetated, and is normally without flowing water. Swales direct storm water flows into primarily drainage channels and allows some of the storm water to infiltrate into the ground surface.

Total Maximum Daily Load (TMDL): An acronym for and in this Permit refers to a study that:

1) quantifies the amount of a pollutant in a stream.
2) identifies the sources of the pollutant, and
3) recommends regulatory or other actions that may need to be taken for the impaired waterbody to meet water quality standards.

Utah Department of Environmental Quality (UDEQ): State of Utah department under whose purview storm water regulation is tasked.

Utah Division of Water Quality (UDWQ): State of Utah division under the Department of Environmental Quality under whose purview storm water regulating (UPDES) is directly tasked.

Utah Pollutant Discharge Elimination System (UPDES)*:* The Utah Pollutant Discharge Elimination System (UPDES) is the Utah version of the National Pollutant Discharge Elimination System (NPDES), which is the permit system mandated by § 402 of the Clean Water Act to control pollutants in waters of the State (Utah), and waters of the United States, including storm water.

Waters of the State: Surface waters and ground waters within the boundaries of the State of Utah and subject to its jurisdiction.

Waters of the United States: Surface watercourses and water bodies as defined in 40 CFR § 122.2. including all natural waterways and definite channels and depressions in the earth that may carry water, even though such waterways may only carry water during rains and storms and may not carry storm water at and during all times and seasons.

1.0 ADMINISTRATIVE

The purpose of this Storm Water Management Program (SWMP) is to comply with Utah Department of Environmental Quality's (UDEQ) general permit (UTR090000) for the discharge of storm water from the Municipal Separate Storm Sewer System (MS4) of the University of Utah Campus, hereafter described as "University." The general permit became effective on May 12th, 2026 and expires on May 11th, 2031. The University desires to discharge under that permit and thus has completed the Notice of Intent (NOI) and an update to their SWMP in accordance with Part 2.2 and Part 4.1 of the permit. The University intends to fully implement the conditions in this SWMP 180 days from the effective date.

1.1 Plan Organization

The introductory section of this plan describes the key elements of the permit issued by the Utah Department of Environmental Quality and how the University is responding to each of these elements. The storm water management program is based on the requirements of the Minimum Control Measures (MCMs) and the actions the University is taking to address each. The MCMs are described on a separate table (Appendix A Tables 1 through 6). These tables include the reference to the UPDES permit requirement, measurable goals from the permit, action items/program response to each of the permit identified measurable goals, target pollutants, target audiences, documentation in the SWMP, responsible department, initiation date, milestone date and measure of success for each of the MCMs.

1.2 Responsibility and Legal Authority

The majority of the MS4 is comprised of University of Utah owned and operated facilities. Through its ownership and control, the University controls discharges to and from the MS4, as described in this plan. The University will have the responsibility to implement all measures within this SWMP.

The University of Utah is both responsible for and has legal authority for storm water discharges from both University owned and non-University facilities. This legal authority includes enforcing storm water requirements and regulations.

The University is not responsible for or in control of the quantity or quality of water flowing into their storm drain system from sources such as upstream municipalities or natural sources like Red Butte Creek.

1.3 Reviewing and Updating the SWMP

The Storm Water Advisory Management Team (SWAMT) will continue to meet on an annual basis to review the SWMP and evaluate the implementation status of the SWMP components as well as the effectiveness of each component or combination of components. The University, in consideration of any received public comment, will determine how the SWMP needs to be revised, if at all. The University will continue to update the SWMP as program improvements are completed.

1.4 Annual Report

The University will submit an annual report to the Division of Water Quality by October 1 of each year of the Permit term for the preceding period of July 1 through June 30. The University will report on the information required in Part 5.5 of the permit. To answer 'Section 9' in the UPDES MS4 Annual Report (submitted each October) the University will analyze available Salt Lake County macroinvertebrate data. This macroinvertebrate data is generated three times every five years and provides comparable data from Red Butte Creek before it enters the University MS4 area (location RB_05.19) and just before the creek exits the University's MS4 area (location RB_0268).

1.5 Analytical Monitoring

Permittees are not required to conduct analytical monitoring during the effective term of this permit, unless one of the exceptions listed in part 5.2 of the MS4 Permit apply. The University does not elect to conduct analytical monitoring as part of its Storm Water Management Program.

1.6 Program Contacts

This plan was prepared by the Environmental Health & Safety Department with input from the Storm Water Advisory & Management Team (SWAMT). Questions or comments on the storm water program plan should be directed to:

Storm Water Management Plan Program Contacts

This list will be reviewed at least annually and updated as necessary.

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Storm Water Advisory Management Team

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1.61 Facilities and Operations Divisions (MS4 Staff)

- Environmental Health and Safety
    - Storm water program administration
    - MS4 program oversight, compliance tracking, corrective action follow-up, and verification of stormwater program implementation
    - Regulatory liaison
    - Pre-Construction SWPPP review and approval
    - Construction site inspections
    - Project post construction BMP annual inspections
    - IDDE Program implementation
    - Hazardous Material Emergency Response Plan
- Technical Resources (Plumbing Shop)
    - Inspection/maintenance of the Storm Water Conveyance System (catch basins, culverts and pipelines)
    - Post-Construction inspection/maintenance of storm water control measures/BMPs: Inspection and Cleaning of Structural Storm Water Controls (detention ponds, retention ponds, swales etc.)
    - Assist with tracing the source of illicit discharges (IDDE program)
- Utility Systems and Services
    - Mass gathering organization and cleaning
    - Management of dumpster and trash containers
- Transportation/Heavy Equipment Department
    - Cleaning of the Storm Water Conveyance System (catch basins, culverts and pipelines)
    - Material area cleaning, transporting and storing
    - Heavy Equipment storage area cleaning
    - Street and parking lot sweeping
    - Street and parking lot maintenance

    - Cold weather operations-streets and parking lots: plowing, sanding, application of deicing compounds, maintenance of snow disposal areas
- Buildings & Grounds (Landscape Maintenance)
    - Cold weather operations-sidewalks: plowing, sanding, application of deicing compounds, maintenance of snow disposal areas
    - Chemical use, storage and disposal
    - Parks and Open Space landscaping and maintenance: mowing, trimming
    - Washing maintenance equipment
- Technical Resources (HVAC)
    - Coolant collection and storage
- Fleet Services/Motor Pool
    - Vehicle maintenance and repair
    - Vehicle washing
- Facilities Management
    - Review and updating of the Campus Design Standards
    - Review and updating of the Campus Master Plan
- Planning, Design and Construction
    - Implementation of the Campus Design Standards
    - Construction project review
    - Long Term Flood control device installation inspection
- Facilities Support (GIS)
    - Mapping of outfalls, storm drain pipe and permanent structural controls
    - IDDE historical mapping
    - Retrofit plan mapping and prioritization

2.0 Programmatic

2.1 Pollutants of Concern

The University has evaluated the permit requirements for the six MCMs as required in the MS4 permit. Based on that review, the University has selected BMPs for each MCM that the University believes will accomplish the goal of reducing pollution from storm water runoff to the maximum extent practicable (See Appendix F). Given the unique nature of our academic and hospital campus, the following program elements represent the two greatest storm water pollution concerns at the University of Utah:

- Water Quality:

Pollutant of Concern/Impairment Indicator	Control strategies/BMPs (in order of priority)
Total Suspended Solids--sediment from construction activities and eroding slopes	Maintenance of sediment collection structures, appropriate construction sequencing, housekeeping practices, street sweeping, inspections, public education.
Oil & grease – from parking lots, material handling, spills and leaks, and illegal dumping	Housekeeping practices, spill control/response/Illicit Discharge Detection and Elimination, public education.

Total Organic Matter/Floatables: leaves, grass clippings, litter and other debris in gutters and landscaping	Street sweeping, housekeeping practices, maintenance of sediment collection structures, public education.
Nitrogen and Phosphorus (fertilizer, pet waste, etc.)	Housekeeping practices, inspections, public education.
E. Coli – From pet/animal/waterfowl waste etc.	Housekeeping practices, inspections, public education.
Benthic Invertebrate Assessment	Housekeeping practices, public education.

- Water Quantity: total volume of discharge – a function of the number of paved surfaces directly connected to storm drain inlets (The EPA has taken the view that water quantity and water quality are directly related, therefore measuring quantity is an indicator of quality. Therefore, measures taken to decrease quantity are also correlated to improving quality). Control strategies/BMPs used to control water quantity are retention and detention ponds, infiltration systems, impervious surface reduction and rain gardens.

The University has identified dates by which implementation of each BMP will begin, targeted completion dates for implementation of each BMP, and the measurable goals and responsible persons for each action. The SWMP provides the rationale for how and why each of the BMPs and measurable goals for the University's storm water management program were selected and are listed in the Appendices. The University does not have outdoor swimming pools on campus and has not deemed swimming pool water to be a pollutant of concern.

2.2 Discharges to Water Quality Impaired Waters

The Jordan River TMDL water quality study Phase 1 was published July 1, 2013 and identified Total Organic Matter as a pollutant of concern. This phase does not propose new means of managing Stormwater but recommends continuation and expansion of existing practices as well as targeting priority areas. Possible BMPs and structures for controlling Organic Matter in the Jordan River watershed include but are not limited to: retention and detention ponds, infiltration systems, impervious surface reduction, rain gardens, practices such as street sweeping, housekeeping practices, appropriate construction sequencing, maintenance of sediment collection structures, and public education.

The University of Utah directly discharges storm water into Red Butte Creek and the Salt Lake City MS4, which then eventually lead to the Jordan River. The University already employs some of the recommended BMPs listed in Phase 1 of the Jordan River TMDL and will continue to control the discharge of Total Organic Matter using the BMPs listed in the SWMP (see Appendix A Tables 1 through 6).

Campus Design Standards have provisions for low impact development encouragement which include but are not limited to water conservation, storm water infiltration rates, storm water runoff reduction, pervious concrete and asphalt designs, minimization of paved and impervious

surfaces, site grading to reduce the amount of directly connected impervious surfaces, onsite detention and roof runoff capture.

2.3 Nitrogen and Phosphorus Reduction

The University has targeted those Municipal Operation and Maintenance activities with the potential to result in the discharge of the identified pollutants of concern and developed Standard Operating Procedures (SOPs) for landscape maintenance that are designed to target and reduce the discharge of Nitrogen and Phosphorus as well as the other pollutants of concern listed in the SWMP section 2.1. Further information about good housekeeping and municipal maintenance SOPs can be found in Appendix B of the University's SWMP.

The Outreach and Education program is targeted at specific groups on Campus: Residents, MS4 Staff, Developers and Construction Contractors, and Institutions, Industrial and Commercial Facilities. Information includes preventing storm water runoff from becoming polluted and about the University's prohibition against illicit discharges. Outreach and Education efforts from section 4.2.1 of the MS4 Permit are incorporated into compliance with the Nitrogen and Phosphorus reduction directive; further information can be found in Appendix E of the University's SWMP.

2.4 Mapping and Location

Numerous electronic and hard copy drawings were gathered and compiled to develop the Geographic Information System (GIS) database and map of the University of Utah's storm drain system. Drawings were reviewed with University and Salt Lake City personnel to tap into their collective knowledge concerning facility locations (see Figure 1). The University's storm drain system includes catch basins, retention ponds, detention ponds; several outfalls and a bio-retention garden, among other structural storm water control measures inventoried in the SWMP appendices. Pipe slopes, elevations, and GPS coordinates were collected to improve the system mapping. Mapping was completed in 2003, and information was updated and placed in the University's GIS by the end of 2008. Updates to the GIS database and map are made on a continual basis as new information is made available; the Municipal map included in the SWMP is reviewed and/or updated at least annually.

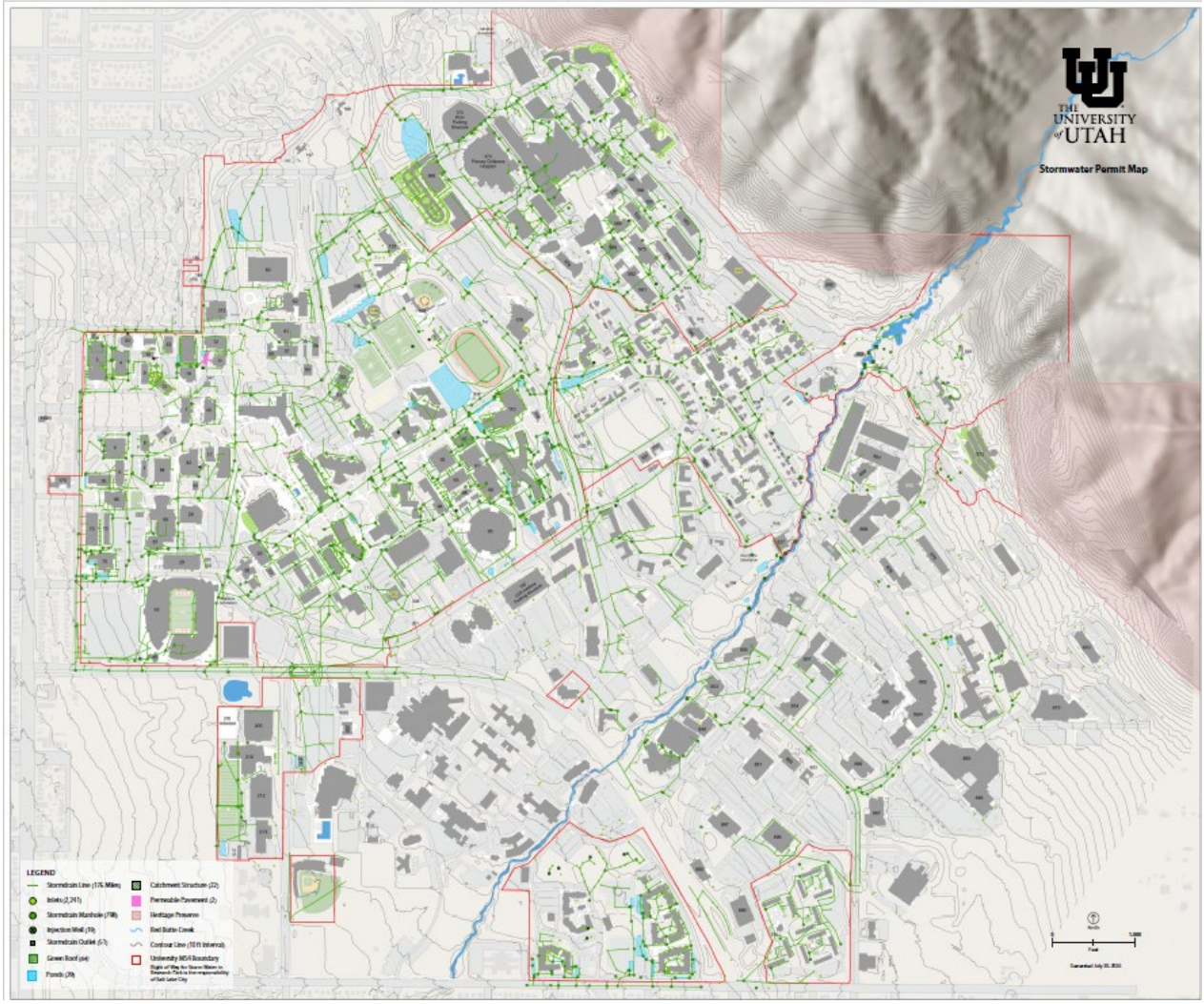
The University's municipality is composed of a total of 475 acres of impervious surfaces (roads, parking lots, and building footprint area) and 239 acres of vegetated space. In total, the 714 acres of the University municipal area is 67% impervious and 33% pervious.

Receiving Waters: The University of Utah discharges storm water directly into Red Butte Creek and the Salt Lake City MS4. The University has several outfalls that empty into Red Butte Creek. These outfalls are directly adjacent to the creek or are in the Red Butte Garden concert venue. The listed impairments of Red Butte Creek are Benthic Invertebrate Assessment and E. Coli. Most of the University's storm system is connected to the storm drain system of Salt Lake City. Eventually all the University's storm water is conveyed into the Jordan River.

Information on the location of floor drains in each building is included in the drawings for each building, so the drawings include all the plumbing for the building. The drawings are available as needed from

Facilities Management. The University does not have any floor drains that empty into the storm water system.

Figure 1.



3.0 SIX MINIMUM CONTROL MEASURES

3.1 Public Education and Outreach on Storm Water Impacts (MCM 1)

The University of Utah uses a variety of methods to educate the specific Permit identified audiences. The activities that the University is engaged in for each of the target audiences are described in detail in the BMP fact sheets found in Appendix E. Examples of education and outreach materials used by the University are also included in Appendix E.

The target audiences were selected based on their potential to impact storm water and the professional judgment of the storm water pollution prevention team. The target audiences are the following:

- Residents and General Public
- Developers and Contractors (Construction)
- MS4 Staff (Operations and Maintenance)

- Institutions, Industrial and Commercial

Appendix F includes the schedule of training sessions by University department. See Appendix A and Table 1, which identifies the reference to the UPDES permit requirement, measurable goals from the permit, action items/program response to each of the permit identified measurable goals, target pollutant(s), target audience(s), associated documentation in the SWMP, responsible department, initiation date, milestone date and measure of success/effectiveness for each measurable goal.

3.2 Public Involvement/Participation (MCM 2)

The University of Utah seeks public input on its Storm Water Management Program Plan through the following methods:

- Included in training sessions and in training materials.
- Advertised availability of Plan on the Environmental Health and Safety websites. Annual reports are also on the Environmental Health and Safety website.
- Listed contact information on printed materials (e.g. handouts, advertisements).
- Storm Water Advisory Management Team (SWAMT) discussion of received comments.

Public participation is an integral part of the University's planning process. The EHS website is used to solicit comments on the Storm Water Program Plan, and the Plan is updated as needed.

See Appendix A and Table 2 as well as Appendix E, which identifies the reference to the UPDES permit requirement, measurable goals from the permit, action items/program response to each of the permit identified measurable goals, target pollutant(s), target audience(s), associated documentation in the SWMP, responsible department, initiation date, milestone date and measure of success/effectiveness for each measurable goal.

3.3 Illicit Discharge, Detection and Elimination (MCM 3)

The University of Utah's Environmental Health and Safety (EHS) Policy 3-300 "…endorses programs which assure compliance with both the spirit and intent of national, state, and local regulations providing for environmental and safety and health." Any violation of the storm water regulations would be contrary to the University Policy. The University's Illicit Discharge Policy is also available in Appendix D of the SWMP.

Illegal dumping incidents (e.g., pouring motor vehicle fluids into the gutter or into storm drain catch basins, dumping gray water into the storm drainage system, etc.) reported to EHS or University Police (UPD) are initially investigated by Environmental Health and Safety (EHS). If warranted, EHS calls in the Salt Lake Valley Health Department to assist with investigation and possible criminal enforcement.

Contract violations on the part of vendors or contractors may be escalated to include stop work orders, taking over the work, monetary penalties and/or revocation of contracts as per the University's contract language:

As per the Construction General Conditions part 12.2.2: "*UNIVERSITY'S RIGHT TO CARRY OUT THE WORK: (1) If the Contractor defaults or neglects to carry out the Work in accordance with the Contract Documents*

and fails within a ten (10) day period (or longer if approved by the University in writing) after receipt of written notice from the University to cure such default or neglect, the University may without prejudice to other remedies the University may have, correct such deficiencies, including taking over the Work and prosecuting the same to completion, by contract or otherwise, and may take possession of, and utilize in completing the Work, such materials, appliances, and facilities as may be on the site of the Work as well as the site as necessary for its proper completion. In such case, the University shall offset from payments then or thereafter due to the Contractor the cost of correcting such deficiencies, including compensation for the A/E, the University's staff and legal counsel's additional services and expenses made necessary by such default, neglect or failure. If payments then or thereafter due the Contractor are not sufficient to cover such amounts, the Contractor shall pay the difference to the University. The Contractor shall continue performance of the Contract to the extent not terminated."

Leaks or spills from storage tanks or containers are cleaned up by EHS or by the party responsible for the tank(s) or container(s). Required repairs and the associated costs are the responsibility of the storage area operator.

The Illicit Discharge Detection and Elimination program has two components aimed at reducing and eliminating illicit discharges and spills and their effects. These components are:

1. Dry Weather Field Screening
2. Spill Prevention and Response

Procedures, logs and report forms for the IDDE program are included in Appendix D. See Appendix A and Table 3, which identifies the reference to the UPDES permit requirement, measurable goals from the permit, action items/program response to each of the permit identified measurable goals, target pollutant(s), target audience(s), associated documentation in the SWMP, responsible department, initiation date, milestone date and measure of success/effectiveness for each measurable goal.

Dry Weather Field Screening

The University maintains a storm sewer map that includes the fourteen outfalls to Red Butte Creek, all outfalls are inspected annually. Written procedures, a flow chart and a form included in Appendix D describe in detail how dry weather field screening is done.

Spill Prevention and Response

The University has a number of written procedures for responding to illicit discharges, tracing illicit discharges and removing illicit discharges. Some of these procedures are included in the University's "Hazardous Material Emergency Response Plan" and others, such as the University Police Department dispatch phone procedure, are included separately. See appendix D for all procedures, logs and report forms related to this program. EHS uses an online database incident reporting tool; a template example from the "EHS Report Manager" is included in the SWMP (Appendix D).

University facilities are designed and operated so as to minimize the chances that spills will occur. EHS staff distributes spill response materials (spill kits) to researchers and other facility operators on campus. EHS is often the first responder for spills on campus, and as such has a response truck stocked with

absorbents, PPE, and other spill response equipment. The spill program includes spill response and report forms (EHS "Hazardous Material Emergency Response Plan").

3.4 Construction Site Storm Water Runoff Control (MCM 4)

Decreasing suspended sediment loads from construction sites is the main goal of the University's construction site storm water runoff control program. In 2009 the University hired a full-time environmental specialist to conduct inspections and begin implementing the procedures described in the following paragraphs.

Most of the construction activity within the MS4 is under the direct control of the University (i.e., the University is the owner). Requirements for where building can occur on the campus are outlined in the Campus Master Plan and how construction should be done on campus is described in the Campus Design Standards. The 2008 Campus Master Plan designates areas for building and sustainability; describes mostly redevelopment; outlines land and tree preservation and identifies sensitive areas/priority areas. The Campus Design Standards include standards related to mitigating water quality impacts (i.e., not increasing storm water runoff) and low impact development (i.e., minimizing connected impervious surfaces, encouraging pervious surfaces), erosion control, site grading, and storm water controls, including structural and non-structural BMP requirements, and others. See Appendix C for excerpts from the Revised Campus Design Standards related to storm water.

Construction projects with costs greater than $10 million may be administered by the Division of Facilities Construction and Management (DFCM) (Utah Administrative Code R23-29-3). DFCM Design Manual University of Utah Supplement 5.0 (January 15, 2016) requires that all DFCM projects of $5 million or greater obtain Leadership in Energy and Environmental Design (LEED) v4 silver certification. Certain LEED points can be achieved by employing certain storm water pollution prevention practices and technologies.

The University's Supplemental General Conditions requires construction projects with disturbed area 1 acre or greater to prepare and implement a Storm Water Pollution Prevention Plan (SWPPP), make use of erosion and sediment control measures and obtain a UPDES construction discharge permit from the Utah Division of Water Quality. Sites one acre or larger must use the UDWQ's SWPPP template found on the Utah Division of Water Quality's website.

In emergency construction situations human life and the safety and operations of the facilities and infrastructure are of overall importance. In those cases, work will be performed to minimize any immediate danger and stabilize the situation, and sediment and erosion control actions will follow. This may require the use of an outside contractor to clean the storm water drainage system following the emergency to prevent or minimize sediment transport to the system's receiving waters.

Appendix C includes the procedures, logs and forms used in the construction program. See Appendix A and Table 4, which identifies the reference to the UPDES permit requirement, measurable goals from the permit, action items/program response to each of the permit identified measurable goals, target pollutant(s), target audience(s), associated documentation in the SWMP, responsible department, initiation date, milestone date and measure of success/effectiveness for each measurable goal.

3.5 Long-Term Storm Water Management in New Development and Redevelopment (Post-Construction Storm Water Management) (MCM 5)

The Campus Master Plan is one of the University's key tools for directing long-term growth and construction. The Campus Master Plan identifies areas for future build-out and considers the impacts of such future buildouts. Because the University is space-constrained nearly all projects are redevelopment projects. While projects are constructed by a third-party contractor, all aspects of the project development and operation and maintenance are the responsibility of the University. Therefore, the University enforces the requirements to implement and maintain structural and non-structural BMPs on their own projects.

While the Campus Master Plan is concerned with directing growth, it also limits growth; the University granted a conservation easement, the Heritage Preserve, which limits facility growth on the east side of campus to the existing campus footprint (e.g., no farther up on the east bench than the existing Huntsman Cancer Hospital and Institute). These growth limits include the Red Butte Creek area.

Water conservation measures are included in the campus design standards and are implemented on all new construction or substantial remodeling projects. No project is to increase the quantity of water consumed; indeed, water consumption should decrease with the completion of each new project or redevelopment project.

Projects which add impervious surfaces and storm water run-off must include storm-water control systems that will not increase flow into the University's storm-water system. The hydrology associated with new construction projects must mirror predevelopment hydrology of the previously undeveloped site; or the design must improve the hydrology of a redeveloped site and reduce the discharge of storm water. Specific retention design requirements for construction projects are provided in 3.2 Civil of the University design standards.

Appendix C includes the procedures, logs and forms used in the construction program. See Appendix A Table 5, which identifies the reference to the UPDES permit requirement, measurable goals from the permit, action items/program response to each of the permit identified measurable goals, target pollutant(s), target audience(s), associated documentation in the SWMP, responsible department, initiation date, milestone date and measure of success/effectiveness for each measurable goal.

3.6 Pollution Prevention and Good Housekeeping for Municipal Operations (MCM 6)

The University of Utah MS4 is unique in that almost all the facilities and operations are owned and operated by the MS4.

Section 1.6 identifies the departments involved with the Operation and Maintenance Program and the facilities/areas that they oversee. Appendix B includes an inventory, schedules, responsible persons, inspection forms and procedures for the Operation and Maintenance Program. The list below highlights some of the areas included in the Operation and Maintenance Program:

- Street and Parking Lot sweeping. The University contracts with a street sweeper; University streets and parking lots are swept quarterly. Streets affected by construction projects are swept by the construction contractor responsible for the site.

- Vehicle/Fleet Maintenance/Storage. Passenger and police vehicles are serviced in the Motor Pool Shop (Building 309). University vehicles are washed in either a wash bay inside the Motor Pool or outside (north) of the building; these wash bays drain to the sanitary sewer. Heavy equipment is serviced in Building 306.
- Waste Management (i.e., refuse and litter pickup). Staff are employed in picking up litter throughout campus. Trash receptacles are located throughout the campus and are emptied on a regular basis. Trash is handled appropriately and in a timely manner after mass gatherings, such as football games and concerts at Rice-Eccles Stadium.
- Hazardous waste pickup and offsite disposal. Waste generators throughout campus have access to an online waste disposal pickup request system managed by EHS. EHS picks up hazardous waste daily or as needed. Three full time environmental technicians are assigned to waste pickups. Waste is taken to Building 590 where it is stored awaiting offsite disposal. Building 590 complies with the RCRA regulations for less than 90-day hazardous waste storage in containers.
- Used oil recycling. Used oil generated on campus is sent offsite for recycling in compliance with the applicable RCRA regulations.
- Catch basins. Leaves are removed from catch basins quarterly or more often as needed. Storm drain lines are cleaned when plugged. Removed sediment, leaves, and litter are dried and then sent offsite for disposal as municipal solid waste.
- Material salt storage area. Loose materials are stored outside near Buildings 213 & 215. A plastic tank retention system / covered storage was created to prevent runoff from the salt pile and prevent pollution.

High Priority Facilities: Facilities with potential pollution sources were identified and reviewed by EHS and SWAMT to determine whether they meet the University's high-priority facility criteria. The following facilities were evaluated to determine whether they present a high, medium, or low potential to pollute storm water runoff. Facilities that were reviewed include:

- Bullpen area (near Bldg 215)
- Heavy Equipment Storage Area (next to bldg. 590)
- Plumbing storage
- Fuel Pump Station (near bldg 350)
- Heavy Equipment Storage (northwest of bldg 350)
- HVAC Shop (bldg. 305)
- Mower/Vehicle Wash Rack (bldg. 306)
- Motor Pool (bldg. 309)
- Bldg 644 and 676
- Moran Eye Center Loading Dock
- HCI and HCH loading dock areas
- School of Medicine/Hospital Loading Dock Area
- PCMC loading dock area
- Area around Art and Architecture
- RBG Greenhouse
- Campus Greenhouse
- “Boneyard” storage

- Shuttle Bus Storage Lot (east of Ft. Douglas Barracks)
- Grease traps (buildings 077, 053, 555, 556, 874, 575)
- Neilson Rehab Hospital Dock
- Acute Care Complex (ACC) loading dock area
- Building 590 (Hazardous Waste Storage Facility)
- Landscaping waste area (southeast side of Legacy Bridge)
- South chiller plant landscaping storage
- Building 587 (CMC)

More details on these evaluations are found in the Permittee Owned Facility Inventory Log in Appendix B, of these, only the 'Bullpen' near 215 was identified as a High Priority Facility.

Red Butte Canyon Road and the West Village Apartments/Red Butte Creek fence line were added as High Priority Facilities in December 2023 as part of the University's E. Coli TMDL compliance plan. They were removed from the High Priority Facility list in March 2026 after a state audit determined they did not need to be classified as such.

Appendix B includes the procedures, logs and forms used in the Pollution Prevention and Good Housekeeping program. See Appendix A Table 6, which identifies the reference to the UPDES permit requirement, measurable goals from the permit, action items/program response to each of the permit identified measurable goals, target pollutant(s), target audience(s), associated documentation in the SWMP, responsible department, initiation date, milestone date and measure of success/effectiveness for each measurable goal.

High Priority Areas: Red Butte Canyon Road and the West Village Apartments/Red Butte Creek Fence Line were re-classified as high priority areas after their removal from the high priority facilities list in March 2026 due to their susceptibility to E. coli contamination from pet waste.

Appendix A

MCM and BMP Tables

- **Amendments to the U of U SWMP Log**
- **Justification for Changes Form (template)**
- **MCM 1 Public Education and Outreach on Storm Water Impacts**
- **MCM 2 Public Involvement/Participation**
- **MCM 3 Illicit Discharge, Detection, Elimination (IDDE)**
- **MCM 4 Construction Site Storm Water Runoff Control**
- **MCM 5 Long-Term Storm Water Management in New Development and Redevelopment (Post-Construction Storm Water Management)**
- **MCM 6 Pollution Prevention and Good Housekeeping for Municipal Operations**
- **Compliance Calendar (Table 7)**
- **Overall Inspection Schedule**

JUSTIFICATION FOR CHANGES

Updating Storm Water Management Program: Updates to the Storm Water Management Program must be done in accordance with Section 4.4 of the MS4 Permit with the following information submitted to the State.

BMP Name: _____

BMP Description: _____

_____

Explanation of ineffectiveness or infeasibility: _____

Affected Goal:_____

_____

Replacement BMP Name: _____

Replacement BMP Description: _____

_____

Anticipated effectiveness/feasiblitiy:_____

_____

Analysis of Replacement BMP: _____

_____

See attachments:

- ☐ Old BMP Fact Sheets
- ☐ Effectiveness Data
- ☐ Replacement Fact Sheet
- ☐ Anticipated Effectiveness Data
- ☐ Analysis Information

***Certification and Signature*.** (6.8.3) (by Principal Executive Officer or Ranking Elected Official)
I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

_____
MS4 Name

_____
Print name

_____ _____
Signature Date

	Amendments to University of Utah Storm Water Management Program Plan			
Date	**Modification**	**Reason for change**	**Addition, deletion, replacement, or clarification?**	**Made by**
4.30.17	High Priority Area SWPPP and area map	Area priority annual check	replacement	Christian Buehler
5.4.17	SOP for Coolant Draining & Disposal (HVAC shop)	O&M SOP needed for work task	addition	Christian Buehler
5.9.17	MS4 Map Updated	Included USA east/west village	replacement	Christian Buehler
5.9.17	IDDE History Map Updated	Event added	replacement	Christian Buehler
5.9.17	Outfall map updated	Included 1 new outfall to RBC	replacement	Christian Buehler
5.9.17	Outreach Residents/GP update	Select University courses, iUtah, Ecological Plng Cntr	addition	Christian Buehler
6.1.17	IDDE/SWP2 Training for O&M online via Bridge program	Availability added	addition	Christian Buehler
6.29.18	Long term flood control devices inventory	8 green roofs added	addition	Christian Buehler
6.29.18	SOP Storm Water Structures	Language Clarity/Process specifics	replacement	Christian Buehler
6.29.18	SOP Power-Pressure Washing	Language Clarity/Process specifics	replacement	Christian Buehler
6.29.18	SOP Traicing the Source and Removal of Illicit Discharges	Language Clarity/Process specifics	replacement	Christian Buehler
6.29.18	SOP Coolant Draining, Storage & Disposal	Language Clarity/Process specifics	replacement	Christian Buehler
6.29.18	SOP Culvert and Pipe	Language Clarity/Process specifics	replacement	Christian Buehler
6.29.18	SOP Permeable Pavement Maintenance	Language Clarity/Process specifics	replacement	Christian Buehler
6.29.18	Hazardous Material Emergency Reponse Plan	personnel update	replacement	Christian Buehler
6.29.18	Permittee Owned Facility Evaluation SOP/log	process clarification/update log	replacement	Christian Buehler
1.2.20	AE postcon data submission form	Processes clarifications from CPD	replacement	Christian Buehler
1.27.20	Fireline SOP created	Process need	addition	Christian Buehler
2.14.20	HPA' SWPPP inspection frequency changed	Permit update from UDWQ	replacement	Christian Buehler
3.24.20	Updated MS4 Map / Long Term BMP inventory	Newer/better data from GIS	replacement	Christian Buehler
3.24.20	Updated Outfall Map / Outfall inventory	Newer/better data from GIS	replacement	Christian Buehler
3.24.20	Training Req. within 60 days of hire, SOP update	New guidelines from DWQ	replacement	Christian Buehler
9.15.20	U of U IDDE Prohibition Policy	Cost recovery langauge included	replacement	Christian Buehler
12.18.20	Construction Site SOP	Added CGP citations req.	replacement	Christian Buehler
1.7.21	O&M SOP updates	Clarified specific pollutants targeted	replacement	Christian Buehler

2.2.21	Outfall inventory log and map	outfalls updated to reflect ms4 outfalls to RBC	replacement	Christian Buehler
2.3.21	HPA SOPs Material storage/sweeping/catch basins/Utility yard	Clarified specific pollutants targeted	replacement	Christian Buehler
4.23.21	Facility Eval. SOP includes new facilities as per 4.2.6.1	Added facility types	replacement	Christian Buehler
4.14.21	Added refernce to policy 3-201 Community Impacts	Added Outreach Documentation	addition	Christian Buehler
5.11.21	Added CGP excerpts for enforcement citations	Added citations	addition	Christian Buehler
6.9.21	Added SOP for Graffiti Removal	Added process/documentation	addition	Christian Buehler
1/19/2024	General Permit effective/expiration date updated	Renewed Permit	Replacement	Tyler Fredsall
1/19/2024	Program contacts updated.	Personnel update	Replacement	Tyler Fredsall
1/19/2024	"One full time Env. Tech" changed to "Three"	Personnel update	Replacement	Tyler Fredsall
1/19/2024	"The U owns one street sweeper" changed to "contracts"	Heavy EQ update	Replacement	Tyler Fredsall
1/19/2024	High Priority Area List Updated	Two high priority areas added	Addition	Tyler Fredsall
1/19/2024	Long term flood control devices inventory	One pond removed	Deletion	Tyler Fredsall
1/19/2024	SW Handout to University Student Apts updated	Added a reference to E.coli, deleted reference to flushing pet waste	Addition/deletion	Tyler Fredsall
1/19/2024	Storm Water Pollution Prevention @the U article updated	Added a reference to E.coli.	Addition	Tyler Fredsall
1/19/2024	Permittee Owned Facility Evaluation SOP/log	Two high priority areas added	addition	Tyler Fredsall
1/19/2024	Biannual Comprehensive Inspection SOP For High Priority Facilities Updated	Two high priority areas added	addition	Tyler Fredsall
1/19/2024	Biannual Comprehensive Inspection Forms added for RBC Road and W. Vill/RBC fence line	Two high priority areas added	addition	Tyler Fredsall
1/24/2024	E. Coli TMDL Compliance Report added to Annual Report	State requirement	addition	Tyler Fredsall
11/19/2024	SWPPP Oversight Inspection and NOT Inspection Forms updated	State requirement	Replacement	Tyler Fredsall
12/16/2024	SWPPP Review Checklist Replaced With CGP SWPPP Evaluation Form	State requirement	Replacement	Tyler Fredsall
3/4/2026	Section 1.6 Program Contacts Updated and Consolidated with Program Organization	Personnell change	addition/deletion	Tyler Fredsall
7/29/2026	Section 2.2 Discharges to Water Quality Impaired Waters and section 2.4 Mapping and Location Updated, Red Butte Creek and SLC MS4 Identified as Receiving Water, Jordan River removed.	Audit Findings	Addition/deletion	Tyler Fredsall
7/29/2026	Section 2.1 Updated to match control strategies with pollutants of concern	Audit findings	Addition	Tyler Fredsall
9/24/2026	IDDE History Map Updated	New data points	replacement	Tyler Fredsall
9/24/2026	Update to SOP: Tracing and Removal of Illicit Discharges	Audit Findings	replacement	Tyler Fredsall
9/24/2026	New SOP: Responding to and Recording a Spill	Audit Findings	Addition	Tyler Fredsall
9/24/2026	IDDE Response Flow Chart added	Audit Findings	Addition	Tyler Fredsall

9/24/2026	SWMP Public Reporting Log added	Audit Findings	Addition	Tyler Fredsall
9/24/2026	Construction Site Inventory Updated	Audit Findings	replacement	Tyler Fredsall
9/25/2026	New SOP: MS4 Construction Oversight SWPPP Review and Inspection	Audit Findings	Addition	Tyler Fredsall
9/25/2026	BMP Inspection Forms Updated: Green Roof, Injection Well, Permeable Pavement, Ponds, Subsurface Vault	Audit Findings	Replacement	Tyler Fredsall
9/25/2026	U of U HEB N Tower Fume Hood Replacement Phase 2 letter removed	No longer relevant, dated 2/11/15	Removal	Tyler Fredsall
9/25/2026	Green Infrastructure Powerpoint Removed	Presentation is no longer used/relevant	Removal	Tyler Fredsall
9/25/2026	Monthly Bullpen Evaluation Form Updated	Audit Findings	Replacement	Tyler Fredsall
9/25/2026	Biannual Comprehensive Inspection Form Updated	Audit Findings	Replacement	Tyler Fredsall
9/25/2026	Biannual Comprehensive Inspection SOP For High Priority Facilities Updated	Audit Findings	Replacement	Tyler Fredsall
9/25/2026	Biannual Comprehensive Inspection Forms for E. Coli areas removed	Audit Findings	Removal	Tyler Fredsall
9/25/2026	SOP: Storm Water Structures: Detention Pond, Retention Pond and Swales Cleaning Updated	Audit Findings	Replacement	Tyler Fredsall
9/25/2026	SOP: Pet Waste Disposal added	Audit Findings	Addition	Tyler Fredsall

Table 1. MCM1 Public Education and Outreach on Storm Water Impacts

Reference Number from Permit	Measurable Goals (from the permit)	Action Items[2]	Target Pollutant(s)	Target Audience(s)	Documentation in SWMP	Responsible Department	Initiation Date (Year)	Milestone/ Completion Date (Month, Year)	Measure of Success (Effectiveness)
4.2.1.1	Target specific pollutants and pollutant sources determined by the Permittee to be impacting, or have the potential to impact, the beneficial uses of [the] receiving water. This includes providing information which describe the potential impacts from storm water discharges; methods for avoiding, minimizing and reducing, and/or eliminating the adverse impacts of storm water discharges; and the actions individuals can take to improve water quality, including encouraging participation in local environmental stewardship activities.	Identify targeted pollutants in the SWMP and for each MCM goal and BMP.	All pollutants of concern, Illicit Discharges, Nitrogen and Phosphorus, sediment, and hazardous wastes	Residents/General Public; Institutions, industrial, and commercial facilities; Developers and contractors (construction); and MS4-owned or operated facilities.	SWMP Section 2.0; Appendix E Fact Sheet 1-4	Environmental Health & Safety (EHS), SWAMT	2005	Dec-10	Successful if completed by milestone.
4.2.1.2	Provide and document education outreach given to the general public on the Permittee's prohibitions against illicit discharges and improper disposal of waste and the impacts to water quality associated with these types of discharges. The Permittee must at a minimum consider the following topics: maintenance of septic systems; effects of outdoor activities such as lawn care (use of pesticides, herbicides, and fertilizers); benefits of onsite infiltration of storm water; effects of automotive work and car washing on water quality; proper disposal of swimming pool water; and proper management of pet waste. These topics are not inclusive and the Permittee must focus on those topics most relevant to the community.	Provide targeted information to targeted audiences. See Appendix E Fact Sheets for more details.	All pollutants of concern, Illicit Discharges	General Public	Appendix E - Residents & General Public Fact Sheet	EHS, Sustainability, Civil Engineering Dept, University Student Apartments	2003 and 2005	Dec-10, Ongoing	Successful if completed by milestone. (See Appendix E Fact Sheets).
4.2.1.3	Provide and document education and outreach given to institutions, industrial, and commercial facilities on an annual basis of the Permittee's prohibitions against illicit discharges and improper disposal of waste and the impacts to water quality associated with these types of discharges. The Permittee must at a minimum consider the following topics: proper lawn maintenance (use of pesticides, herbicides and fertilizer); benefits of appropriate onsite infiltration of storm water; building and equipment maintenance (proper management of waste water); use of salt or other deicing materials (cover/prevent runoff to storm system and contamination to ground water); proper storage of materials (emphasize pollution prevention); proper management of waste materials and dumpsters (cover and pollution prevention); and proper management of parking lot surfaces (sweeping). These topics are not inclusive and the Permittee must focus on those topics most relevant to the community This education can also be a part of the Illicit Discharge Detection and Elimination measure detailed in Part 4.2.3.	Provide targeted information to targeted audiences. See Appendix E Fact Sheets for more details.	All pollutants of concern, Illicit Discharges	Primary Children's Hospital - Kevin Wilbur, kevin.wilbur@imail.com (Grounds Sup, PMC)	Appendix E - Institutions, Industrial and Commcercial Facilities Fact Sheet	EHS	2016	Dec-10, Ongoing	Successful if completed by milestone. (See Appendix E Fact Sheets).
4.2.1.4	Provide and document information given to engineers, construction contractors, developers, development review staff, and land use planners concerning the development of storm water pollution preventions plans (SWPPPs) and BMPs for reducing adverse impacts from storm water runoff from development sites. This education can also be a part of the Construction Site Strom Water Runoff minimum control measure details in Part 4.2.4.	Post the Design Standards for Project Designers on the Facilities Management website; Provide Design Standards for bid submission purposes.	All pollutants of concern, Illicit Discharges	Project Designers	Appendix E - Developers and Contractors Fact Sheet	Construction Project Delivery (CPD)	2010	Dec-10, Ongoing	Successful if the Design Standards are available for contractors.
		Hold pre-construction training with Contractors (of projects with sites 1 acre or larger).	All pollutants of concern, Illicit Discharges	Construction Contractors	Appendix E - Developers and Contractors Fact Sheet, Appendix F Training Schedule	EHS	2010	Dec-10, As needed	Successful if the trainings are entered into the EHS training database.

General Permit for Discharges from
Small Municipal Separate Storm Sewer Systems (MS4s)
Measurable Goals

Reference Number from Permit	Measurable Goals (from the permit)	Action Items[2]	Target Pollutant(s)	Target Audience(s)	Documentation in SWMP	Responsible Department	Initiation Date (Year)	Milestone/ Completion Date (Month, Year)	Measure of Success (Effectiveness)
4.2.1.5	Provide and document education and training given to employees of Permittee-owned or operated facilities concerning the Permittee's prohibition against illicit discharges and improper disposal of waste and the impacts to water quality associated with these types of discharges. The Permittee must at a minimum consider the following topics: equipment inspection to ensure timely maintenance; proper storage of industrial materials (emphasize pollution prevention); proper management and disposal of wastes; proper management of dumpsters; minimization of use of salt and other de-icing materials (cover/prevent runoff to MS4 and ground water contamination); benefits of appropriate onsite infiltration (areas with low exposure to industrial materials such as roofs or employee parking); and proper maintenance of parking lot surfaces (sweeping).	Deliver and track annual storm water pollution prevention and illicit discharge detection and elimination training for applicable MS4 Staff in conjunction with parts 4.2.3.11 and 4.2.6.10 of the Permit; Conduct annual refresher for applicable SOPs that could impact storm water discharges.	All pollutants of concern	MS4 Staff	Appendix E - MS4 Staff Fact Sheet, Appendix F Training Schedule	EHS	2010	Dec-10, Ongoing	Successful if the trainings are entered into the EHS training database.
4.2.1.6	Provide and document information and training given to MS4 engineers, development and plan review staff, land use planners and other parties as applicable to learn about Low Impact Development (LID) practices, green infrastructure practices, and to communicate the specific requirements for post-construction control and the associated BMPs chosen within the SWMP.	Develop and schedule a training to review what is covered in the Design Standards and additional information related to LID, Green infrastructure, and post-construction BMPs.	All pollutants of concern	MS4 Staff	Appendix E - MS4 Staff Fact Sheet, Appendix F Training Schedule	EHS	2010	Dec-11; ongoing	Successful if the EHS training database notes that Department employees have received the training.
4.2.1.7	An effective program must show evidence of focused messages and audiences as well as demonstration that the defined goal of the program has been achieved. The Permittee must define the specific messages for each audience. The Permittee must identify methods that will be used to evaluate the effectiveness of the educational messages and the overall education program. Any methods used to evaluate the effectiveness of the program must be tied to the defined goals of the program and the overall objective of changes in behavior and knowledge.	Employ evaluation methods for educational messages delivered to each target audience.	All pollutants of concern, Illicit Discharges	All Audiences	SWMP Section 3.0; Appendix E Factsheets(by audience)	EHS	2010	Dec-10	Successful if an evaluation methods are included in the SWMP.
4.2.1.8	The Permittee must include written documentation or rationale as to why particular BMPs were chosen for its public education and outreach program.	Include an explanation in the SWMP for why which opportinuties where chosen for each target group.	All pollutants of concern	All Audiences	SWMP Section 3.0; Appendix E Factsheets(by audience)	EHS	2005	Dec-10	Successful if documented rationale is included in the SWMP.

Table 2. MCM 2 Public Involvement/Participation

Reference Number from Permit	Measurable Goals (from the permit)	Action Items[2]	Target Pollutant(s)	Target Audience(s)	Documentation in SWMP	Responsible Department	Initiation Date (Year)	Milestone/ Completion Date (Month, Year)	Measure of Success (Effectiveness)
4.2.2	The Permittee must implement a program that complies with applicable State and Local public notice requirements. The SWMP shall include ongoing opportunities for public involvement and participation, but at a minimum two (2) times annually. Permittees can meet this requirement through advisory panels, public hearings, watershed committees, stewardship programs, environmental activities, volunteer opportunities, or other similar activities. The Permittee should involve potentially affected stakeholder groups, including but is not limited to, commercial and industrial businesses, trade associations, environmental groups, homeowners' associations, and education organizations.	The University Community Liason is tasked with hosting community outreach meetings that cover a variety of topics but usually feature new and ongoing construction project, road impacts, and sustainability issues. One is held in January/Spring with a formal agenda and presenters and another in the Fall. There is also an informal BBQ style event held during the summer months most years. The community may aslo sign up for a email mailing list that includes SLC and the Mayor's office, SLC Council members and chairs of the surrounding neighborhood councils. Community members are encouraged through this mailing list to contact the Community Liason with questions or concerns related to	All pollutants of concern	Salt Lake City, SLC Council Members, local Neighborhood Councils, as well as any who sign up for the email list which includes select project information and contact information for the Community Liason	Policy 3-201 Physical Facilities and Community Impact: https://regulations.utah.edu/administration/3-201.php, SWMP Appendix E	Marketing and Communication	2006	Ongoing	Successful when public comment meetings held/emailed newsletter sent out for the solicitation of public comments. Archive of meetings/newsletters available via https://attheu.utah.edu/community-forum-newsletter/
4.2.2.1	Permittees shall adopt a program or policy directive to create opportunities for the public to provide input during the decision making processes involving the development, implementation and update of the SWMP document including development and adoption of all required ordinances or regulatory mechanisms.	Post SWMP and annual reports on the EHS website, as well as a link on the Facilities Management website, and direct questions, comments or concerns to an email or phone number of an EHS staff member.	All pollutants of concern	General Public	Appendix E (website examples)	Environmental Health and Safety (EHS)	2005	Ongoing	Successful when the public comment procedure is in place.
		Form an advisory board, the Storm Water Advisory and Management Team (SWAMT), and meet annually to review the storm water program. Public comments will be given consideration by the team.	All pollutants of concern	MS4 Staff	SWMP Main: Section 1.5	EHS	2005	Ongoing	Successful if 1 (one) meeting is held annually with the board to review the storm water program.
4.2.2.2	Renewal Permittees shall make the revised SWMP document available to the public for review and input within 180 days from the effective date of this Permit.	Post SWMP on the EHS website and direct questions, comments or concerns to an email or phone number of an EHS staff member.	All pollutants of concern	General public	Appendix E (website examples)	EHS	2010	Dec-10	Successful when the SWMP is on the EHS website for public review.
4.2.2.3	A current version of the SWMP document shall remain available for public review and input for the life of the Permit. If the Permittee maintains a website, the latest version of the SWMP document shall be posted on the website within 120 days from the effective date of this Permit and shall clearly denote a specific contact person and phone number or email address to allow the public to review and provide input for the life of the Permit.	Post SWMP on the EHS website and direct questions, comments or concerns to an email or phone number of an EHS staff member.	All pollutants of concern	General public	Appendix E (website examples)	EHS	2010	Dec-10; ongoing	Successful when the SWMP is on the EHS website for public review.
4.2.2.4	The Permittee must at a minimum comply with State and Local public notice requirements when implementing a public involvement/participation program.	Post SWMP on the EHS website and direct questions, comments or concerns to an email or phone number of an EHS staff member.	All pollutants of concern	General public	Appendix E (website examples)	EHS	2010	Dec-10; ongoing	Successful when the SWMP is on the EHS website for public review.

Table 3. MCM 3 Illicit Discharge Detection and Elimination

Reference Number from Permit	Measurable Goals (from the permit)	Action Items[2]	Target Pollutant(s)	Target Audience(s)	Documentation in SWMP	Responsible Department	Initiation Date (Year)	Milestone/ Completion Date (Month, Year)	Measure of Success (Effectiveness)
4.2.3.1	Maintain a current storm sewer system map of the MS4, showing the location of all municipal storm sewer outfalls with the names and location of all State waters that receive discharges from those outfalls, storm drain pipe and other storm water conveyance structures with the MS4.	GIS maintains University storm water map.	N/A	Staff	SWMP Section 2.0, Figure 1. Storm Drain System Map, Appendix D	Environmental Health and Safety (EHS), Business Services-GIS	2003	Dec-10	Successful if the map is completed and a procedure is in place to update it.
		Map is updated on a continual basis as data is available.	N/A	Staff	SWMP Section 2.0, Figure 1. Storm Drain System Map, Appendix D	EHS, Business Services-GIS	-	Dec-10; ongoing	Successful if map update occurs annually.
4.2.3.2	Effectively prohibit, through ordinance or other regulatory mechanism, non-storm water discharges to the MS4, including spills, illicit connections, illegal dumping and sanitary sewer overflows ("SSOs") into the storm sewer system. The IDDE program shall require removal of such discharges consistent with Part 4.2.3.6. of this Permit and implement appropriate enforcement procedures and actions. The Permittee must have a variety of enforcement options in order to apply and escalate enforcement procedures as necessary based on the severity of violation and/or the failure of the violator to address the violation(s). Discharges pursuant to a separate UPDES Permit (other than the UPDES Permit for discharges from the MS4) and non-storm water discharges listed in Part 1.2.2.2. are exempt.	University Illicit Discharge Policy available at ehs.utah.edu/environmental-programs/storm-water-pollution-prevention/preventing-illicit-discharges-illegal-dumping	All Pollutants; Illicit Discharges	All Audiences	Appendix D Universtiy Illicit Discharge Policy	EHS, Facilities Management	2014	12/1/2014; ongoing	Successful if regulatory mechanism includes prohibitions and escalating enforcement resources.
4.2.3.2.1	The Permittee's IDDE program must have adequate legal authority to detect, investigate, eliminate and enforce against non-storm water discharges, including illegal dumping into the MS4. Adequate legal authority consists of an effective ordinance, by-law, or other regulatory mechanism. The documented IDDE program that is included in the Permittee's SWMP must include a reference or citation of the authority the Permittee will use to implement all aspects of the IDDE program.	Outline the legal authority of the University of Utah to detect, investigate, eliminate and enforce against non-storm water discharges. Include the legal authority in the Illicit Discharge Policy and Enforcement Procedures.	All Pollutants; Illicit Discharges	All Audiences	SWMP Section 1.0; Appendix D Illicit Discharge Policy & Enforcement Procedure	EHS, Facilities Management	2009	Dec-14	Successful if regulatory mechanism includes the legal authority.
4.2.3.3	Implement a written plan to detect and address non-storm water discharges to the MS4, including spills, illicit connections, sanitary sewer overflows and illegal dumping.	Develop, implement, and prepare in writing a plan to detect and address non-SW discharges.	All Pollutants; Illicit Discharges	All Audiences	Appendix D Spill Prevention and Response Program, including the Hazardous Material Emergency Response Plan	EHS, University Police Department (UPD)	2005	Dec-10	Successful if a procedure for detecting and addressing non-storm water discharges is implemented.
	The plan must include (as per 4.2.3.3) written systematic procedures for locating and listing the following priority areas likely to have illicit discharges (if applicable to the jurisdiction): areas of older infrastructure; industrial, commercial or mixed use areas; areas with a history of illicit	Develop, implement, and prepare in writing a plan to identify high priority areas.	All Pollutants; Illicit Discharges	All Audiences	Appendix B Facility Evaluation SOP	EHS, Pollution Prevention Team	2008	Dec-10	Successful if a procedure for identifying high priority areas is implemented.

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Separate Storm Sewer Systems (MS4s)
Measurable Goals

Reference Number from Permit	Measurable Goals (from the permit)	Action Items[2]	Target Pollutant(s)	Target Audience(s)	Documentation in SWMP	Responsible Department	Initiation Date (Year)	Milestone/ Completion Date (Month, Year)	Measure of Success (Effectiveness)
4.2.3.3.1	discharges; areas with a history of illegal dumping; areas with onsite sewage disposal systems; areas with older sewer lines or with a history of sewer overflows or cross-connections; areas upstream of sensitive waterbodies; and, other areas the Permittee determines to be likely to have illicit discharges. The Permittee must document the basis for its selection of each priority area and create a list of all priority areas identified in the system. This priority area list must be updated annually to reflect changing priorities.	Create a list of the high priority areas and document the basis for each area. Update list annually.	All Pollutants; Illicit Discharges	All Audiences	Appendix B Permittee Owned Facilities Inventory	EHS, Pollution Prevention Team	2010	Dec-10; ongoing	Successful if permittee owned facilities are prioritized and list is updated annually.
4.2.3.3.2	Field inspections of areas which are considered a priority area as identified in Permit Part 4.2.3.3.1. Compliance with this provision shall be achieved by inspecting each priority area annually at a minimum. All field assessment activities shall utilize an inspection form to document findings.	Develop quarterly inspection SOP and inspection form for HPAs; conduct semi-annual comprehensive inspections and document findings in SWMP in accordance with 4.2.6.5.2.	All Pollutants; Illicit Discharges	All Audiences	Appendix B Quarterly Comprehensive Inspection SOP, Quarterly Comprehensive Inspection Form	EHS	2008	Dec-10; ongoing	Successful if dry weather screening at outfalls to receiving waters occurs annually; and HPA areas are inspected quarterly in accordance with 4.2.6.5.2.
4.2.3.3.3	Dry weather screening (see definition 7.13) activities for the purpose of verifying outfall locations and detecting illicit discharges that discharge within the Permittee's jurisdiction to a receiving water. All outfalls shall be inspected at least once during the 5-year Permit term. Dry weather screening activities shall utilize an inspection form to document findings.	Establish a dry weather field screening program. Program to include: an outfall inventory and log, dry weather screening SOP, and annual dry weather visual monitoring inspection procedure.	All Pollutants; Illicit Discharges	All Audiences	Appendix D Dry Weather Field Screening SOP	EHS	2008	Dec-10; ongoing	Successful if dry weather screening at outfalls to receiving waters occurs annually.
4.2.3.3.4	If the Permittee discovers or suspects that a discharger may need a separate UPDES Permit (e.g. Industrial Storm Water Permit, Dewatering Permit), the Permittee shall notify the Director within 30 days.	The University controls nearly 100% of the facilities within the Municipality and directs all land development; therefore it is unlikely that any unpermitted dischargers would be discovered.	–	–	–	EHS	Mar-16	Ongoing	EHS will notify the Division if any such dischargers are identified within the University of Utah storm water municipality.
4.2.3.4	Implement standard operating procedures (SOPs) or similar types of documents for tracing the source of an illicit discharge. The document should include procedures such as: visual inspections, opening manholes when necessary, using mobile cameras, using field tests of selected chemical parameters as indicators of discharge sources, collecting and analyzing water samples for the purpose of determining sanctions or penalties, and/or other detailed inspection procedures.	Develop a SOP for tracing illicit discharges.	All Pollutants; Illicit Discharges	All Audiences	Appendix D Tracing the Source of the Illicit Discharge SOP	EHS, Plumbing Shop	2005	Dec-10	Successful if a SOP for tracing illicit discharges is implemented.

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Measurable Goals

Reference Number from Permit	Measurable Goals (from the permit)	Action Items[2]	Target Pollutant(s)	Target Audience(s)	Documentation in SWMP	Responsible Department	Initiation Date (Year)	Milestone/ Completion Date (Month, Year)	Measure of Success (Effectiveness)
4.2.3.5	Implement standard operating procedures (SOPs) or similar type of documents for characterizing the nature of, and the potential public or environmental threat posed by, any illicit discharges found or reported to the Permittee by the hotline developed in 4.2.3.9. These procedures shall include details instructions for evaluating how the discharge shall be immediately contained and steps to be taken for containment of the discharge. Compliance with this provision can be achieved by initiating an investigation immediately upon being alerted of a potential illicit discharge.	Develop a SOP for characterizing the nature of an illicit discharge, include instructions for evaluating how the discharge will be contained and investigated.	All Pollutants; Illicit Discharges	All Audiences	Appendix D Spill Prevention and Response Program, On-call procedures summary sheet	EHS, UPD	2005	Dec-10	Successful if SOPs for characterizing, evaluating and investigating illicit discharges are implemented.
4.2.3.5.1	When the source of a non-stormwater discharge is identified and confirmed, the Permittee must record the following information in an inspection report; the date the Permittee became aware of the discharge, the date the Permittee initiated an investigation, the date the discharge was observed, the location, a description, the method of discovery, date of removal, repair or enforcement action, and date and method of removal verification. Analytical monitoring may be necessary to aid in the identification of the potential sources of an illicit discharge and to characterize the nature of the illicit discharge. The decision process for utilizing analytical monitoring must be fully documented in the inspection report.	Develop an inspection report form.	All Pollutants; Illicit Discharges	All Audiences	Appendix D Hazardous Material Emergency Response Plan, EHS Incident Report	EHS	2008	Dec-10; ongoing	Successful if an inspection report form is developed and the EHS Incident Report Manager is updated with incidents.
4.2.3.6	Implement standard operating procedures (SOPs) or similar type of documents for ceasing the illicit discharge. Include notification of appropriate authorities and the property owner, technical assistance for removing or eliminating the source of the discharge, follow-up inspections, and escalating enforcement and legal actions if the discharge is not eliminated. Illicit discharges to the MS4 are prohibited and any such discharges violate this Permit and remain in violation until they are eliminated.	Develop a SOP for ceasing the illicit discharge.	All Pollutants; Illicit Discharges	All Audiences	Appendix D Hazardous Material Emergency Response Plan	EHS	2008	Dec-10	Successful if SOP for ceasing the illicit discharge is implemented.
4.2.3.6.1	Upon detection, the Permittee shall require immediate cessation of improper disposal practices upon confirmation of responsible parties in accordance with its enforceable legal authorities established pursuant to Part 4.2.3.2.1 of this Permit.	Legal authority of the University of Utah to detect, investigate, eliminate and enforce against non-storm water discharges is included in the University Illicit Discharge Policy and Enforcement Procedures. Upon detection illicit discharges require immediate cessation.	All Pollutants; Illicit Discharges	All Audiences	SWMP Section 1.0; Appendix D Illicit Discharge Policy & Enforcement Procedure	EHS	2020	1/3/19; ongoing	Successful if regulatory mechanism includes the legal authority.

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Separate Storm Sewer Systems (MS4s)
Measurable Goals

Reference Number from Permit	Measurable Goals (from the permit)	Action Items[2]	Target Pollutant(s)	Target Audience(s)	Documentation in SWMP	Responsible Department	Initiation Date (Year)	Milestone/ Completion Date (Month, Year)	Measure of Success (Effectiveness)
4.2.3.6.2	Although the Permittee is required to prohibit ilicit discharges within their boundaries and to take appropriate action to detect and address any violations, this Permit does not impose strict liability on the Permittee.	-	-	-	-	-	-	-	-
4.2.3.6.3	All IDDE investigations must be thoroughly documented and may be requested at any time by the Director. If a Permittee is unable to meet the minimum performance measures outlined in Parts 4.2.3.5 or 4.2.3.6, the Permittee must immediately submit to the Director written documentation or rationale describing the circumstances why compliance with the minimum performance measures was not possible. All IDDE documentation shall be retained by the Permittee as required by the SWMP document.	EHS uses a searchable intranet database system to track reporting on incidents such as spills and illicit discharges on campus.	All Pollutants; Illicit Discharges	All Audiences	Appendix D EHS Incident/Report System	EHS	2008	Dec-10; ongoing	Successful if a portion of the EHS Incident Report Manager is included in the SWMP.
4.2.3.7	Permittees shall inform public employees, businesses, and the general public of hazards associated with illicit discharges and improper disposal of waste.	Include information about illicit discharges and improper disposal of waste in the public education program.	All Pollutants; Illicit Discharges	Students, Faculty, Staff, Non-University Owned Facilities, General Public/Campus Visitors	Appendix A Table 1. MCM 1, Appendix E Education and Involvement Program	EHS	2003	various; Ongoing	Varies. See Appendix A Table 1. MCM 1 and Appendix E Education and Involvement Program measures of success.
4.2.3.8	Permittees shall promote or provide services for the collection of household hazardous waste.	Promote the household hazardous waste collection events. Promote link to household hazardous waste disposal facilities on EHS website and handouts. HHW information made available online on the EHS website and through @theU electronic articles.	Household Hazardous Waste	All Audiences	Appendix D, Website examples for University Recycling Program/"What Goes Around Comes Around"	EHS, Waste Management	2003	Ongoing	Successful if programs are offered at regular intervals, and links available on webpage.
4.2.3.9	Permittees shall publicly list and publicize a hotline or other telephone number for public reporting of spills and other illicit discharges. A written record shall be kept for all calls received, all follow-up actions taken, and any feedback received from public education efforts.	Put in place and advertise a hotline to contact EHS through hardcopy materials and the website.	All Pollutants; Illicit Discharges	All Audiences	Appendix A Table 1. MCM 1, Appendix E Education and Involvement Program; Appendix D Spill Prevention and Response Program	EHS	-	Dec-10; ongoing	Successful if hotline listed on the EHS website.
4.2.3.9.1	The Permittee must develop a written spill/dumping response SOP or similar type of document and a flow chart for internal use, that shows the procedures for responding to public referrals of illicit discharges, the various responsible agencies and their contacts, and who would be involved in illicit discharge incidence response, even if it is a different entity other than the Permittee. The procedure and list must be incorporated as part of the IDDE program and incorporated into the Permittee's SWMP document. The list must be maintained and updated as changes occur.	Develop a written spill/dumping response procedure and flow chart that shows how to respond to calls/reports and the responsible agencies/persons.	All Pollutants; Illicit Discharges	EHS, Plant Operations	Appendix D Hazardous Material Emergency Response Plan and University Police Department Dispatch SOP	EHS, UPD	-	Dec-10; ongoing	Successful if Plan includes the response procedures and flow chart.

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Separate Storm Sewer Systems (MS4s)
Measurable Goals

Reference Number from Permit	Measurable Goals (from the permit)	Action Items[2]	Target Pollutant(s)	Target Audience(s)	Documentation in SWMP	Responsible Department	Initiation Date (Year)	Milestone/ Completion Date (Month, Year)	Measure of Success (Effectiveness)
4.2.3.10	Permittees shall implement procedures for program evaluation and assessment which includes maintaining a database for mapping, tracking of the number and type of spills or illicit discharges identified; and inspections conducted.	Employ GIS for mapping and tracking of illicit discharges. EHS reporting system will be used to keep inspection records/update GIS map on an annual basis.	All Pollutants; Illicit Discharges	All Audiences	Appendix D, EHS Incident/Report System, IDDE database Map	EHS, Business Services GIS	Dec-15	Dec-17	Successful if methods evaluated by the milestone date.
4.2.3.11	Permittees shall at a minimum, ensure that all staff, contracted staff, or other responsible entities, that as part of their normal job responsibilities might come into contact with or otherwise observe and illicit discharge or illicit connection to the MS4 including office personnel who might recieve initial reports of illicit discharges, receives annual training in the IDDE program including identification, investigation, termination, cleanup, and reporting of illicit discharges including spills improper disposal, and illicit connections. All Permittees shall require that all new hires are trained within 60 days of hire date and annually thereafter, at a minimum. Follow-up training shall be provided as needed to address changes in procedures, methods or staffing. Training shall include how to identify a spill, an imporoper disposal, or an illicit connection to the MS4 and proper procedures for reporting the illicit discharge. Training records must be kept and shall include dates, activities or course descriptions, and names and positions of staff in attendance. The Permittee shall include a summary of such training in the annual report.	Train targeted employees on the IDDE program with training materials purchased from Excal Visual, "*Illicit Discharge Detection and Elimination: A Grate Concern* ".	All Pollutants; Illicit Discharges	Plant Operations[1]	Appendix F Training Schedule	EHS	Dec-11	Dec-11	Successful if the EHS training database notes that Department employees have received the training.
4.2.3.12	The Director reserves the right to request documentation or further study of a particular non-storm water discharge of concern to require a reasonable basis for allowing the non-storm water discharge and excluding the discharge from the Permittee's program, and the require the inclusion of the discharge in in the Permittee's program, if water quality concerns cannot otherwise be reasonably satisfied.	-	All Pollutants; Illicit Discharges	All Audiences	-	-	-	-	-

Table 4. MCM 4 Construction Site Storm Water Runoff Control

Reference Number from Permit	Measurable Goals (from the permit)	Action Items[2]	Target Pollutant(s)	Target Audience(s)	Documentation in SWMP	Responsible Department	Initiation Date (Year)	Milestone/ Completion Date (Month, Year)	Measure of Success (Effectiveness)
4.2.4.1	Revise as necessary and enforce an ordinance or other regulatory mechanism that requires the use of erosion and sediment control practices at construction sites. The ordinance or other regulatory mechanism shall, at a minimum, be equivalent with the requirements set forth in the most current UPDES Storm Water General Permits for Construction activities which can be found at http://www.deq.utah.gov/Permits/water/updes/stormwatercon.htm. The ordinance or other regulatory mechanism shall include sanctions to ensure compliance. The ordinance or other regulatory mechanism shall apply, at a minimum, to construction projects disturbing greater than or equal to one acre and to construction projects of less than one acre that are part of a larger common plan of development or sale. Existing local requirements to apply storm water controls at smaller sites shall be retained.	Include the requirement of erosion and sediment control in the University of Utah Supplemental General Conditions. (September 2011)	Sediment, Construction Site Debris, Hydrocarbons	Construction Contractors	Appendix C Construction Runoff Control Program SOP, Excerpts from the Campus Design Standards (revised June 2016)	Construction Project Delivery (CPD)	Dec-10	Dec-10	Successful if construction sites greater than or equal to 1 acre have erosion and sediment control practices.
		Include sanctions in the regulatory mechanism that requires the use of erosion and sediment control practices in future University of Utah General Conditions (August 2010).	Sediment, Construction Site Debris, Hydrocarbons	Construction Contractors	Appendix C Construction Enforcement SOP, Excerpts from the Campus Design Standards (revised June 2016)	CPD	Dec-10	Dec-14	Successful when included in the Campus Design Standards.
		Include in University contract documents, language that will stipulate that all sites 1 acre or larger will have a UPDES Construction Discharge Permit and SWPPP in place.	Sediment, Construction Site Debris, Hydrocarbons	Construction Contractors	Appendix C SWPPP Review for Project Sites =>1 acre SOP, Excerpts from the Campus Design Standards (revised June 2016)	CPD, Facilities Management	Dec-14	Dec-14	Successful when included in construction and development contract language.
4.2.4.1.1	The ordinance or other regulatory mechanism shall, at a minimum, require construction operators to prepare a Storm Water Pollution Prevention Plan (SWPPP) and apply sediment and erosion control BMPs as necessary to protect water quality, reduce the discharge of pollutants, and control waste such as, but not limited to, discarded building materials, concrete washout, chemicals, litter and sanitary waste at the construction site that may cause adverse impacts to water quality. The SWPPP requirements must be, at a minimum, equivalent with the SWPPP requirement set forth in the most current UPDES Storm Water General Permits for Construction Activities, which can be found at: http://www.deq.utah.gov/Permits/water/updes/stormwatercon.htm.	Include the requirement of erosion and sediment control in the University of Utah Supplemental General Conditions. (September 2011)	Sediment, Construction Site Debris, Hydrocarbons	Construction Contractors	Appendix C SWPPP Review checklist, Excerpts from the Campus Design Standards (revised June 2016)	CPD, Environmental Health and Safety (EHS)	Dec-10	Dec-10	Successful if construction sites greater than or equal to 1 acre have SWPPPs.
4.2.4.1.2	Permittees shall require construction operators obtain coverage under the current UPDES Storm Water General Permits for Construction Activities for the duration of the project. Coverage can be obtained by completing an NOI as well as renewed online at: https://secure.utah.gov.account/login.html?returnToUrl=https%3A//secure.utah.gov/stormwater/uii_authentication.	Include in University contract documents, language that will stipulate that all sites 1 acre or larger will have a UPDES Construction Discharge Permit and SWPPP in place.	Sediment, Construction Site Debris, Hydrocarbons	Construction Contractors	Revised Supplemental Conditions; Appendix C SWPPP Review checklist, and Construction Runoff Control Program SOP	CPD, Facilities Management	Dec-14	Dec-14	Successful when included in construction and development contract language.
4.2.4.1.3	The ordinance shall include a provision for access by qualified personnel to inspect construction storm water BMPs on private properties that discharge to the MS4.	Include the provision for personnel to inspect construction storm water BMPs in the University of Utah Contract Documents, General Conditions (August 2010). **General Conditions, section 9.1 'Tests and Inspections'**	Sediment, Construction Site Debris, Hydrocarbons	Construction Contractors	Appendix C Construction Inspection Program SOP, Excerpts from the Campus Design Standards (revised June 2016)	CPD, EHS	Dec-10	Dec-10	Successful if EHS staff inspect construction storm water BMPs at construction sites greater than or equal to 1 acre.
4.2.4.2	Develop a written enforcement strategy and implement the enforcement provisions of the ordinance or other regulatory mechanism which shall include: (4.2.4.2.1, 4.2.4.2.2)	Include a written enforcement strategy in University of Utah SWMP.	Sediment, Construction Site Debris, Hydrocarbons	Construction Contractors	Appendix C Construction Enforcement SOP	CPD, Facilities Management	Dec-10	Dec-14	Successful when Construction Enforcement process is included in the pre-construction training for contractors.

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Reference Number from Permit	Measurable Goals (from the permit)	Action Items[2]	Target Pollutant(s)	Target Audience(s)	Documentation in SWMP	Responsible Department	Initiation Date (Year)	Milestone/ Completion Date (Month, Year)	Measure of Success (Effectiveness)
4.2.4.2.1	Standard operating procedures (SOPs) or similar type of documents that include specific processes and sanctions to minimize the occurrence of, and obtain compliance from violators which shall include appropriate, escalating enforcement procedures and actions including an appeals process that is published in a publicaly accessable location.	Implement the enforcement strategy, appeals process included in the Enforcement SOP.	Sediment, Construction Site Debris, Hydrocarbons	Construction Contractors	Appendix C Construction Enforcement SOP, University General Conditions (sections 4.5.2, 8.2.4, 9.1.3, 12.2.2, 12.5)	EHS	Dec-10	Dec-14	Successful if enforcement strategy Is used in necessary situations.
4.2.4.2.2	Document and tracking of all enforcement actions.	Enforcement actions are documented and tracked in the EHS incident/report system.	Sediment, Construction Site Debris, Hydrocarbons	Construction Contractors	EHS incident/report system	EHS	Dec-12	Dec-12	Successful if active construction sites are recorded in the log.
4.2.4.3	Develop and implement SOPs or similar type of documents for pre-construction Storm Water Pollution Prevention Plan (SWPPP) review and keep records for, at a minimum, all construction sites that disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale, to ensure plans are complete and in compliance with State and Local regulations. Permittees shall keep records of these projects for five years or until construction is completed, whichever is longer. Prior to construction, the Permittee shall:	Develop and implement SOPs, use developed checklist begin to do preconstruction reviews of SWPPP and keep records.	Sediment, Construction Site Debris, Hydrocarbons	Construction Contractors	Appendix C SWPPP Review checklist	EHS	2007	Dec-10	Successful if the SWPPP SOP and Checklist have been developed.
4.2.4.3.1	Conduct a pre-construction SWPPP meeting which includes a review of the site design, the planned operations at the construction site, planned BMPs during the construction phase, and the planned BMPs to be used to manage runoff created after development.	Meet with operator(s) and review SWPPPs of all sites greater than 1 acre or as part of common plan of development.	Sediment, Construction Site Debris, Hydrocarbons	Construction Contractors	Appendix C SWPPP Review for Project Sites >=1 acre SOP	EHS	2007	Ongoing	Successful if SWPPP reviews are conducted on projects. Track number of completed reviews vs. the total number of SWPPPs vs. the number of active construction sites.
4.2.4.3.2	The Permittee must develop procedures for receiving and considering information and comments submitted by the public on proposed projects.	Policy 3-201 Physical Facilities and Community Impact: https://regulations.utah.edu/administration/3-201.php	Sediment, Construction Site Debris, Hydrocarbons, other pollutants of concern listed in the SWMP	Community Stake Holders, SLC, etc.	Policy 3-201 Section III, Sub-section D, SWMP Appendix E	Marketing and Communication	Jun-05	Ongoing	Successful if Community Outreach Meetings are held and newsletter continues to solicit for comments and suggestions
4.2.4.3.2	Identify priority construction sites considering the following factors at a minimum: soil erosion potential; site slope; project size and type; sensitivity of receiving waterbodies (impaired or high quality waters); proximity to receiving waterbodies; and, non-storm water discharges and past record of non-compliance by the operators of the construction site.	Include priority areas of the campus, in terms of proximity to receiving waters, and likely hood to discharge to these waters. Identify priority construction sites in the SWPPP review checklist.	Sediment, Construction Site Debris, Hydrocarbons	Construction Contractors	Appendix C Current Construction Projects database. SOP for SWPPP Reviews.	Facilities Management	2008	2008	

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Reference Number from Permit	Measurable Goals (from the permit)	Action Items[2]	Target Pollutant(s)	Target Audience(s)	Documentation in SWMP	Responsible Department	Initiation Date (Year)	Milestone/ Completion Date (Month, Year)	Measure of Success (Effectiveness)
4.2.4.4	All Permittees shall develop and implement SOPs or similar type of documents for construction site inspection and enforcement of construction storm water pollution control measures. The procedures must clearly define who is responsible for site inspections as well as who has authority to implement enforcement procedures. An individual or entity who prepares a SWPPP for a construction project may not perform the construction site inspections required of Part 4.2.4.4.1 and 4.2.4.4.3 on behalf of the Co-Permittee. The Permittee must have the authority to the extent authorized by law to impose sanctions to ensure compliance with the local program. These procedures and regulatory authorities must be written and documented in the SWMP.	Develop and implement SOPs for construction site inspection and enforcement.	Sediment, Construction Site Debris, Hydrocarbons	Construction Contractors	Appendix C Construction Inspection Program SOP, Construction Enforcement SOP, Contract Provisions for Enforcing SWPPP Compliance	EHS	2008	Ongoing	Successful if inspections at active construction sites greater than or equal to 1 acre are inspected with the Construction Program SOP.
4.2.4.4.1	At a minimum, monthly inspections of all new construction sites with a land disturbance of greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale at least monthly by qualified personnel using the Construction Storm Water Inspection Form (checklist) found on the Division's website at http://www.deq.utah.gov/Permits/water/updes/stormwatermun.htm.	Environmental Technician conducts monthly inspections of all applicable construction sites. Holds at least the following qualifications: RSI, ECS.	Sediment, Construction Site Debris, Hydrocarbons	Construction Contractors	Appendix C Inspection Checklist & Form, Construction Inspection Program SOP	EHS	2007	Ongoing	Successful if all active construction sites are inspected monthly.
4.2.4.4.2	The Permittee must inspect all phases of construction: prior to land disturbance, during active construction, and following active construction. The Permittee must document in its SWMP the procedures for being notified by construction operators/owners of their completion of active construction so that verification of final stabilization and removal of all temporary control measures may be conducted. This procedures must be provided to the construction operator/owner before active construction begins.	Develop a written Notice of Termination process for use within the MS4. Prior to land disturbance 'site analsys' follows DFCM Manual requirements (part 2.5) for Geologic surveys, soils investigation, site conditions, etc. NOT Procedure is provided to contractor during pre-con SWPPP meeting/review/training per 4.2.4.3.1	Sediment, Construction Site Debris, Hydrocarbons	Construction Contractors	Appendix C Notice Of Termination Process SOP	EHS	2007	Dec-10	Successful if active construction sites are terminated appropriately.
4.2.4.4.3	Inspections by the MS4 of priority construction sites defined in Part 7.36. must be conducted at least biweekly using the Construction Storm Water Inspection Form (Checklist) found on the Division's website at http://www.deq.utah.gov/Permits/water/updes/stormwatermun.htm.	Inspect high priority sites bi-monthly using the DWQ inspection checklist and Construction Inspection SOP.	Sediment, Construction Site Debris, Hydrocarbons	Construction Contractors	Appendix C Inspection Checklist & Form, Construction Inspection Program SOP	EHS	Dec-12	Dec-12	Successful if all high priority sites are inspected bi-weekly. Track the number of sites inspected vs. the number of active construction sites.
4.2.4.4.4	Co-Permittees may utilize an electronic site inspection tool in place of up to one-half of on-site MS4 inspections at a construction site provided the tool meets the requirements of Part 4.2.4.	-	-	-	-	-	-	-	-

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Reference Number from Permit	Measurable Goals (from the permit)	Action Items[2]	Target Pollutant(s)	Target Audience(s)	Documentation in SWMP	Responsible Department	Initiation Date (Year)	Milestone/ Completion Date (Month, Year)	Measure of Success (Effectiveness)
4.2.4.4.5	Based on site inspection findings, the permittee must take all necessary follow-up actons (i.e., reinspection, enforcement) to ensure compliance in accordance with the permittee's enforcement strategy. These follow-up and enforcement actions must be tracks and documented.	Develop enforcement procedures and documentation method.	Sediment, Construction Site Debris, Hydrocarbons	Construction Contractors	Appendix C Draft Construction Enforcement SOP, EHS incident/report system	EHS	Dec-14	Dec-14	Successful when draft Construction Enforcement SOP is finalized and included in the Campus Design Standards. Track number of deficiencies and if corrected.
4.2.4.5	The Permittee must ensure that all staff whose primary job duties are related to implementing the construction storm water program, including permitting, plan review, construction site inspections, and enforcement, are annually trained to conduct these activities. The training can be conducted by the MS4 or outside training can be attended. Such training must be extended to third-party inspectors and plan reviewers as well. The Permittee shall ensure that all new hires are trained within 60 days of hire date and annually thereafter, at a minimum. Follow-up training shall be provided as needed to address changes in procedures, methods, or staffing. Training records must be kept and contain, at a minimum, dates, activities or course descriptions, and names and positions of staff in attendance.	Train SWPPP inspectors and any personnel who are involved with permitting, plan review, construction site inspections, and enforcement.	Sediment, Construction Site Debris, Hydrocarbons	EHS, CPD, Plant Operations	Appendix F Training Schedule	EHS	Dec-11	Dec-11	Successful if the EHS training database notes that Department employees have received the training.
4.2.4.6	All Permittees shall maintain records of all projects disturbing greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale. Permittees shall keep records which include but are not limited to, site plan reviews, SWPPPs, inspections and enforcement actions including verbal warnings, stop work orders, warning letters, notices of violation, and other enforcement records. Permittees shall keep records of these projects for five years or until construction is completed, whichever is longer.	Establish a log and record management method.	Sediment, Construction Site Debris, Hydrocarbons	Construction Contractors	Appendix C Construction Site Inventory, EHS incident/report system	EHS	Dec-12	Dec-12	Successful if active construction sites are recorded in the log.

Table 5. MCM 5 Long-Term Storm Water Management in New Development and Redevelopment (Post-Construction Storm Water Management)

Reference Number from Permit	Measurable Goals (from the permit)	Action Items[2]	Target Pollutant(s)	Target Audience(s)	Documentation in SWMP	Responsible Department	Initiation Date (Year)	Milestone/ Completion Date (Month, Year)	Measure of Success (Effectiveness)
4.2.5.1	Post-construction Controls. The Permittee's new development/redevelopment program must have requirements or standards to ensure that any storm water controls or management practices for new development and redevelopment will prevent or minimize impacts to water quality. BMPs must be selected that address pollutants known to be discharged or anticipated to be discharged from the site.	Include a requirement for long-term post-construction storm water controls in new development and redevelopments sites in the University of Utah Campus Design Standards (revised December 2010). The long term post construction controls shall prevent or minimize impacts to water quality.	All Pollutants	Construction Contractors, 3rd Party Design Constultants	Appendix C Excerpts from the Campus Design Standards (revised December 2010)	CPD, EHS	Dec-10	Dec-10	Successful if long-term post-construction storm water controls (BMPs) are required in the University of Utah Campus Design Standards.
4.2.5.1.1	The Permittee's new development/redevelopment program should include non-structural BMPs such as requirements and standards to minimize development in areas susceptible to erosion and sediment loss; to minimize the disturbace of native soils and vegetation; to preserve areas that provide important water quality benefits; to implement measures for flood control; and to protect the integrity of natural resources and sensitive areas.	Include non-structural BMPs in the University of Utah Campus Design Standards (revised December 2010) aimed at minimizing disturbances, preventing impairments to water quality, and implementing flood control measures.	All Pollutants	Construction Contractors	Appendix C Excerpts from the Campus Design Standards (revised December 2010)	CPD, EHS	2008	Dec-10	Successful if non-structural BMPs are included in the Campus Design Standards.
4.2.5.1.2	**Retention Requirement**. The Permittee must develop and define a specific hydrologic method or methods for calculating runoff volumes and flow rates to ensure consistant sizing of structural BMPs in their jurisdiction and to facilitate plan review. By March 1, 2020, **new development projects** that disturb land greater than or equal to one acre, including projects that are part of a larger common plan of development or sale which collectively disturbs land greater than or equal to one acre must manage rainfall on-site, and prevent the off-site discharge of the precipitation from all rainfall events less than or equal to the 80th percentile rainfall event or a predevelopment hydrologic condition, whichever is less. This objective must be accomplished by the use of practices that are designed, constructed, and maintained to infiltrate, evapotranspire and/or harvest and reuse rainwater. The 80th percentile rainfall event is the event whose precipitation total is greater than or equal to 80 percent of all storm events over a given period of record. By March 1, 2020, **redevelopment projects** that disturb land greater than or equal to one acre, including projects that are part of a larger common plan of development or sale which collectively disturbs land greater than or equal to one acre mut provide a site-specific and project-specific plan aimed at net gain to onsite retention or a reduction to impervious surface to privide similar water quality benefits. If a redevelopment project increases the impervious surface by greater than 10%, the project shall manage rainfall on-site, and prevent the off-site dischargne of the net increase in the volume associated with the precipitation from all rainfall events less than or equal to the 80th percentile rainfall event. This objective must be accomplished by the use of practices that are designed, constructed, and maintained to infiltrate, evaporanspire and/or harvest and reuse rainwater.	New development are required by the University of Utah Campus Design Standards (revised December 2010) to mirror predevelopment hydrological conditions. New sites should therefore be managing rainfall on site at close to 100% of the rainfall volume. Specific retention/detention requirements are included in the General Conditions and Supplemental Conditions of the University Design Standards to which all projects must comply.	All Pollutants	3rd Party A/E Designers	Appendix C Excerpts from the Campus Design Standards (revised December 2010)	CPD, EHS	Jul-16	Nov-16	Successful if the requirement is included in the current Campus Design Standards.
4.2.5.1.3	Low Impact Development Approach. By March 1, 2020, the program shall include a process which **requires** the evaluation of a Low Impact Development (LID) approach for all projects subject to the requirements in 4.2.5.1.2. A LID approach promotes the implementation of BMPs that allow storm water to infilrate, evapotranspire or harvest and use storm water on site to reduce runoff from the site and protect water quality. Guidance for implementing LID can be found in DWQ's LID controls which are appropriate for use in the State of Utah can be found in Appendix C of the Guide. Permittees must allow for use of a minimum of five LID practices from the list in Appendix C of "A Guide to Low Impact Development within Utah." If a permittee has not adpoted specific LID guidelines, any LID approach that is described in DWQ's LID manual and feasible may be used to meet this requirement.	LID options are included in the University Design Standards, A/Es may make use of the State of Utah DWQ's "Guide to Low Impact Development within Utah" to meet the University's retention/detention requirement which has been calculated to exceed the 80th percentile requirement. A/Es must provide the Technical Basis for the LID measures selected to meet the University Design requirements.	All Pollutants	3rd Party A/E Designers	Appendix C Excerpts from the Campus Design Standards (revised December 2010); Project Stormwater Infrastructure Flow & Quality Design Basis form (central repository)	CPD, EHS	Jul-16	Nov-16	Successful if the requirement is included in the current Campus Design Standards.
4.2.5.1.4	Feasibility. If meeting the retention standards described in Part 4.2.5.1.2 is infeasible, a rationale shall be provided for the use of alternate design criteria. The new or redevelopment project must document and quantify that infiltration, evapotraspiration, and rainwater harvesting have been used to the maximum extent feasible and that full employment of these controls are infeasible due to constraints. LID infeasibility may be due to one or more of the following conditions: high groundwater, drinking water source protection areas, soil conditions, slopes, accessibility, excessive costs, or others. Guidance for assessing and documenting site conditions can be...located on the DWQ website...	University Design Documents provided to A/E designer's require an documentation of Univeristy approved variance from the design standards.	All Pollutants	CPD, A/E Designers	Appendix C - Project Stormwater Infrastructure Flow & Quality Design Basis form (example), U of U Central Repository for plans	Faciltiies Management	Jul-05	Ongoing	Successful if completed forms are loaded into the U of U Central Repository

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4.2.5.2	Regulatory Mechanism. Develop and adopt and ordinance or other regulatory mechanism that requires long-term post-construction storm water controls at new development and redevelopment sites. The ordinance or regulatory mechanism shall apply, at a minimum, to new development and redevelopment sites that discharge to the MS4 and that disturb greater than or equal to one acre. The ordinance or other regulatory mechanism shall require BMP selection, design, and installation, operation and maintenance standards necessary to protect water quality and reduce the discharge of pollutants to the MS4. The Permitee shall implement an enforcement strategy and implement the enforcement provisions of the ordinance or other regulatory mecahnism. The Permittee's ordinance or other regulatory mechanism must include an appeals process.	100% of construction within the U of U municipal (ms4) area is controled by the University itself. Project designs must meet the requirements set forth in the University design standards in order to be approved by University Campus Planning and Construction Project Delivery. Performance reviews of employees are structured to ensure job related tasks are completed in place of an 'enforcement strategy' and/or appeals process.	All Pollutants	Construction Contractors	Appendix C Excerpts from the Campus Design Standards (revised December 2010)	EHS, CPD	2007	Ongoing	Successful if project designers meet the requirements of the University Design Standards.
4.2.5.2.1	The Permittee must include enforcement provisions in the ordinance or other regulatory mechanism that must contain procedures for specific processes and sanctions to minimize the occurrences of violations and obtain compliance from chronic and recalcitrant violators. These processes and sanctions shall include appropriate, escalating enforcement procedures and actions. (see 4.2.5.2).	The University is responsible for the planning, implementing and maintenance of post-construction BMPs and as such internal write-up and performance reviews of employees are structured to ensure job related tasks are completed.	All Pollutants	Construction Project Delivery, Plant Operations	-	CPD, Plant Operations	Dec-14	Dec-14	Successful if a post-construction BMP enforcement strategy is completed by milestone.
4.2.5.2.2	The Permittee must maintain documentation on how the requirements of the ordinance or other regulatory mechanism will protect water quality and reduce the discharge of pollutants to the MS4. Documentation shall include: How long term BMPs were selected; the pollutant removal expected from the selected BMPs; and the technical basis which supports the performance claims for the selected BMPs. All Permittees shall adopt and implement SOPs or similar type of documents for site inspection and enforcement of post-construction storm water controls measures. These procedures must ensure adequate ongoing long-term operation and maintenance of approved storm water control measures.	Developers (A/Es) submit project documentation on the post-construction BMPs, pollutant removal expected from the BMP, and technical basis supporting performance claims as part of compliance with University bid and contract process.	All Pollutants	Construction Contractors	Appendix C Construction Run-Off Control Program SOP (part 4 and 5), Excerpts from the Campus Design Standards (revised December 2010), Appendix C Long-Term Inspection forms	CPD, EHS	Dec-10	Dec-10	Successful if projects have completed the BMP submittal worksheet.
4.2.5.2.3	The ordinance or other regulatory mechanism shall include provisions for post-construction access for Permittees to inspect storm water control measures on private properties that discharge to the MS4 to ensure that adequate maintenance is being performed. The ordinance or other regulatory mechanism may, in lieu of requiring that the Permittee's staff inspect and maintain storm water controls on private property, instead require private property owner/operators or qualified third parties to conduct maintenance and provide annual certification that adequate maintenance has been performed and the structural controls are operating as designed to protect water quality. In this case, the Permittee must require a maintenance agreement addressing maintenance requirements for any control measure installed on site. The agreement must allow the Permittee to conduct oversight inspection of the storm water control measures and also account for transfer of responsibility in leases and/or deeds. The corrective actions neglected by the property owner/operator, and bill or recoup costs from the property owner/operator as needed.	Included in University General Conditions Article 9.1.1 "Tests and Inspections", after construction is completed, University staff are responsible for maintenance activities.	All Pollutants	Construction Contractors, Non-University Owned Facilities, MS4	-	EHS	Dec-14	Dec-14	Successful if a regulatory mechanism is in place that allows inspection on all sites by the milestone date.
4.2.5.2.4	Permanent structural BMPs shall be inspected at least once during installation by qualified personnel. Upon completion, the Permittee must verify that post-construction BMPs were constructed as designed.	Projects are inspected regularly during construction by the University Project Managers (and/or A/Es) who verify proper constrution.	All Pollutants	Construction Contractors	Appendix C Storm Water Submittal Form and Punch List example, Supplemental General Conditions part 4.7 (inspections prior to backfill)	CPD	Dec-10	Dec-10	Successful if post-construction structural BMPs are inspected during and following installation.

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4.2.5.2.5	Inspections and any necessary maintenance must be conducted at least every other year or as necessary to maintain functionality of the control by either the Permittee or through a maintenance agreement, the property owner/operator. On sites where the property owner/operator is conducting maintenance, the Permittee shall inspect those storm water control measures at least once every five years or more frequently as determined by the Permittee to verify and ensure that adequate maintenance is being performed. The Permittee must document its finding in an inspection report which includes the following: inspection date; name and signature of inspector; project location; current ownership information; a description of the condition of the storm water control measure including the quality of: vegetation and soils; inlet and outlet channels and structures; catch basins; spillways; weirs, and other control structures; and sediment and debris accumulation in storage as well as in and around inlet and outlet structures; and specific maintenance issues or violations found that need to be corrected by property owner or operator along with deadlines and reinspection dates.	EHS will conduct inspections annually of post-construction BMPs including Drywells, Permeable Pavement, Storm Water Ponds, Green Roofs, and others (as needed) listed in the Long Term Flood Control Device Inventory.	All Pollutants	EHS	Appendix C Post Construction Program, Post-Con BMP Review Form, Appendix B Operation and Maintenance Program	EHS	Dec-11	Dec-11; Ongoing	Successful if post-construction BMP inspections are conducted on projects.
4.2.5.3	Plan Review. The Permittee Shall:	_	_	_	_	_	_	_	_
4.2.5.3.1	Adopt and implement procedures for site plan review which evaluate water quality impacts. The procedures shall apply through the life of the project from conceptual design to project closeout.	Implement a site plan review procedure that includes consideration of water quality impacts.	All Pollutants	Construction Contractors	Appendix C Excerpts from the Campus Design Standards (revised December 2010), CPD Substantial Completion Punchlist Example, A/E project 'drainage reports' Central Repository	CPD, EHS	Dec-10	Dec-10	Successful if the if design process procedure includes water quality impacts.
4.2.5.3.2	Review post construction plans for, at a minimum, all new development and redevelopment sites that disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale, to ensure that the plans include long-term storm water management measures that meet the requirements of this minimum control measure.	Project designs must meet the requirements set forth in the University design standards in order to be approved by University Campus Planning and Construction Project Delivery. A/E drainage reports and technical basis must meet these requirements for work to proceed on campus.	All Pollutants	Construction Contractors	Appendix C Excerpts from the Campus Design Standards (revised December 2010)	EHS, CPD	2007	Ongoing	Successful if project designers meet the requirements of the University Design Standards.
4.2.5.4	Inventory. The Permittee must maintain an inventory of all post-construction structural storm water control measures installed and implemented at new development and redevelopment sites that disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale. This inventory shall include both public and private sector sites located within the Permittee's service area.	Inventory post-construction BMPs in a log with all required information and update annually.	All Pollutants	MS4	Appendix C Post-Construction Structural Storm Water Control Measures/BMP Inventory	EHS, Plumbing Shop	Dec-10; Ongoing	Dec-10; Ongoing	Successful if post-construction BMPs are inventoried in a log.
4.2.5.4.1	Each entry to the inventory must include basic information on each project, such as project's name, owner's name and contact information, location, start/end date, etc. In addition, inventory entries must include the following for each project: short description of each storm water control measure (type, number, design or performance specifications); short description of maintenance requirements (frequency of required maintenance and inspections); and inspection information (date, finding, follow up activities, prioritization of follow-up activities, compliance status).	The University maintains an inventroy of all Post-Construction BMPs with related information and a campus wide map provided by GIS.	All Pollutants	MS4	Appendix C Post-Construction Structural Storm Water Control Measures/BMP Inventory and Map	EHS, Plumbing Shop, GIS	Dec-10; Ongoing	Dec-10; Ongoing	Successful if post-construction BMPs are inventoried in a log.
4.2.5.4.2	Based on inspections conducted pursuant to Part 4.2.5.2.5., the Permittee must update the inventory as appropriate when changes occur in property ownership or the specific control measures implemented at the site.	Inventory log updated annually.	All Pollutants	MS4	Appendix C Post-Construction Structural Storm Water Control Measures/BMPs Inventory	GIS, Plumbing Shop	Dec-11	Dec-11; Ongoing	Successful if log is updated annually.

Reference Number from Permit	Measurable Goals (from the permit)	Action Items[2]	Target Pollutant(s)	Target Audience(s)	Documentation in SWMP	Responsible Department	Initiation Date (Year)	Milestone/ Completion Date (Month, Year)	Measure of Success (Effectiveness)
4.2.5.5	Training. Permittees shall ensure that all staff involved in post-construction storm water management, including those that conduct plan review, annual maintenance inspections, and enforcement, receive appropriate training. Training shall be provided or made available for staff in the fundamentals of long-term storm water management through the use of structural and non-structural control methods. Training records must be kept and include, at a minimum, dates, activities or course descriptions, and names and positions of staff in attendance. The Permittee shall ensure that all new hires are trained within 60 days of hire and annually thereafter, at a minimum. Follow-up training shall be provided as needed to address changes in procedures, methods, or staffing.	Maintenance staff annual review of applicable SOPs	All Pollutants	Plumbing Shop, Landscape Maintenance, Heavy Equipment Dept., EHS	Appendix F Training Schedule	EHS	Dec-11	Dec-11	Successful if the EHS training database notes that Department employees have received the training.

Table 6. MCM 6 Pollution Prevention and Good Housekeeping for Municipal Operations

Reference Number from Permit	Measurable Goals (from the permit)	Action Items[2]	Target Pollutant(s)	Target Audience(s)	Documentation in SWMP	Responsible Department	Initiation Date (Year)	Milestone/ Completion Date (Month, Year)	Measure of Success (Effectiveness)
4.2.6.1	The Permittee shall develop and keep current a written inventory of all the below potential "high priority" facilities that are owned or operated by the Permittee and all the associated storm water controls, at a minimum. The Director maintains the authority to add additional facilities to the list, as needed. The inventory should include, but not limited to, the following facilities: Composting facilities; Equipment storage and maintenance facilities; Fuel farms; Hazardous waste disposal facilities; Hazardous waste handling and transfer facilities; Incinerators; Landfills; Landscape maintenance facilities on municipal property; Materials storage yards; Pesticide storage facilities; Public buildings, including libraries, police stations, fire stations, municipal buildings, restrooms, and similar Permittee-owned or operated buildings; Public parking lots; Public golf course maintenance facilities; Public swimming pool maintenance facilities; Public works yards; Public Marinas and Boat Launches; Recycling facilities; Salt storage facilities and de-icing storage facilities; Solid waste handling and transfer facilities; Street repair and maintenance facilities and or shed sites; Vehicle storage and maintenance yards; Airports; Animal control facilities; Vehicle salvage yards; Chemical storage facilities; and Transportation hubs, including bus stations	Develop a complete list of facilities and storm water controls.	All pollutants	MS4	Appendix B Permittee Owned Facility Inventory Log and Appendix C Post-Construction BMP Inventory form	Environmental Health and Safety (EHS), Pollution Prevention Team	Dec-10	Dec-10	Successful if inventory is completed by milestone date and updated as necessary.
4.2.6.2	All Permittees shall assess the written inventory of Permittee-owned or operated facilities, operations and storm water controls identified in Part 4.2.6.1 and make a list of common pollutants that may originate from these facilities and how to prevent them from entering the storm water system. A description of the assessment process and findings must be included in the SWMP document.	Complete assessments of facilities and storm water controls that have been inventoried.	All pollutants	MS4	Appendix B Permittee Owned Facility Inventory Log and Appendix C Post-Construction BMP Inventory form	EHS, Pollution Prevention Team	Dec-10	Dec-10	Successful if assessments are completed and documentation recorded in SWMP.
4.2.6.3	Based on the assessment required in Part 4.2.6.2., the Permittee must identify as "high-priority" those facilities or operations that have: 1. pollutants stored at the site, 2. the identification of improperly stored materials, 3. potential pollutant-generating activities that must be performed outside (e.g. changing automotive fluids), 4. close proximity upsteam to fresh water and water bodies, including but not limited to streams, canals, rivers, ponds, and lakes, 5. potiential discharge of pollutant(s) of concern to impaired water(s). The Permittee shall provide water quality control measures and BMPs at all high-priotiry sites designed to target the specific pollutants generated onsite, and/or the pollutants associated with the impaired waters. The Permittee shall monitor the control measures and BMPs regularly to verify that the BMPs are functioning. Control measures, BMPs, and monitoring schedules shall be specified in the Permittee's SWMP.	Identify "high priority" facilities and storm water controls. See also MCM 3.	All pollutants	MS4	Appendix B Permittee Owned Facility Inventory Log	EHS, Pollution Prevention Team	Dec-10	Dec-10	Successful if high priority facilities are identified.

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Reference Number from Permit	Measurable Goals (from the permit)	Action Items[2]	Target Pollutant(s)	Target Audience(s)	Documentation in SWMP	Responsible Department	Initiation Date (Year)	Milestone/ Completion Date (Month, Year)	Measure of Success (Effectiveness)
4.2.6.4	The Permittee shall update the SWMP to include a list of “high priority” facilities according to 4.2.6.3 and prepare a Storm Water Pollution Prevention Plan (SWPPP) for each facility within 180 days from the effective date of this permit. Each “high priority” facility shall implement a SWPPP outlining measures to prevent pollutants from entering the storm drain system from each of these facilities and contain an inspection schedule of the facility. The SWPPP shall include a site map showing the following information: Facility address; Staff/contact information for the facility; Property boundaries; Buildings and impervious surfaces; Directions of storm water flow (use arrows); Locations of structural control measures; Facility BMPs (non-structural); Location and name of the nearest defined drainage(s) which could receive runoff from the facility, whether it contains water or not; Locations of all storm water conveyances including ditches, pipes, basins, inlets, and swales; Locations where on-site activities may be exposed to storm water, including, but limited to the following: Fixed fueling operations; Vehicle and equipment maintenance and/or cleaning areas; Brine making areas; Loading/unloading areas; Waste storage or disposal areas; Liquid storage tanks; Process and equipment operating areas; Materials storage or disposal areas; Locations where significant spills or leaks have occurred; Locations of all visual storm water monitoring points; Locations of storm water inlets and outfalls, with a unique identification code for each outfall and an approximate outline of the areas draining to each outfall; Locations of all non-storm water discharges; and Locations of sources of run-on to your site from adjacent properties.	Develop facility-specific SWPPPs for the facilities ranked with a high priority level. Review, customize and update appropriate Standard Operating Procedures.	All pollutants	MS4	Appendix B HPA SWPPP, Bullpen Drainflow map, HPA SOPs Appendix B Operation and Maintenance Program, Salt Storage, Material Storage Area, and Utility Service Yard Management SOPs	EHS, Pollution Prevention Team, GIS, Plant Operations	Mar-16	Jul-16	Successful if SOPs are developed for the facilities ranked with a high priority level. Successful if SOPs are included in the HPA SWPPP.
4.2.6.5	The following inspections shall be conducted at "high priority" Permittee-owned or operated facilities:	–	–	–	–	–	–	–	–
4.2.6.5.1	Monthly visual inspections: The Permittee must perform monthly visual inspections of "high priority" facilities and related storm water outfalls in accordance with the developed SOPs to verify the performance of the BMPs and all other systems designed and placed to eliminate any pollutant discharge. The monthly inspections must be tracked in a log for every facility and records kept with the SWMP document. The inspection log should also include any identified deficiencies and the corrective actions taken to fix the deficiencies.	Develop monthly visual inspection log and include in HPA SWPPP.	All pollutants	MS4	Appendix B Operation and Maintenance Program, Material Storage Area, HPA SWPPP	Heavy Equipment	Dec-11	Dec-11	Successful if HPA monthly visual inspection log is included in the HPA SWPPP.
4.2.6.5.2	Semi-Annual comprehensive inspections: At least twice per year, a comprehensive inspection of "high priority" facilities, including all storm water controls, must be performed, with specific attention paid to waste storage areas, dumpsters, vehicle and equipment maintenance/fueling areas, material handling areas, and similar pollutant generating areas. The semi-annual inspection results must be documented and records kept with the SWMP document. This inspection must be done in accordance with developed SOPS. An inspection report must also include any identified deficiencies a and the corrective actions taken to remedy the deficiencies.	Develop semi-annual inspection SOP and inspection form for HPAs; conduct semi-annual comprehensive inspections and document findings in SWMP.	All pollutants	MS4	Appendix B Semi-Annual Comprehensive Inspection SOP, Semi-Annual Comprehensive Inspection Form and Semi-Annual Inspection Log	EHS	Dec-10	Dec-10	Successful if inspection form and log are completed by the milestone date.

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Reference Number from Permit	Measurable Goals (from the permit)	Action Items[2]	Target Pollutant(s)	Target Audience(s)	Documentation in SWMP	Responsible Department	Initiation Date (Year)	Milestone/ Completion Date (Month, Year)	Measure of Success (Effectiveness)
4.2.6.5.3	Annual visual observation of storm water discharges: At least once per year, the Permittee must visually observe the quality of the storm water discharges from the "high priority" facilities. Any observed problems (e.g., color, foam, sheen, turbidity) that can be associated with pollutant sources or controls must be remedied as soon as practicable, but at a minimum, before the next storm event. Remediation is required to prevent discharge to the storm drain system. Visual observations must be documented and records kept with the SWMP document. This inspection must be done in accordance with the developed SOPs. The inspection report must also include any identified deficiencies and the corrective actions taken to remedy the deficiencies.	Develop annual "wet weather" inspection SOP and inspection form for HPAs; conduct annual storm water discharge inspections and document findings in SWMP.	All pollutants	MS4	Appendix B Annual Wet Weather Screening SOP, Annual Wet Weather Visual Monitoring Inspection Form	EHS	Dec-10	Dec-10	Successful if annual visual monitoring inspections of high priority facilities are logged and reports available in SWMP.
4.2.6.6	Permittees shall develop and implement SOPs to protect water quality at each of the facilities owned or operated by the Permittee and/or activities conducted by the Permittee including but not limed to those listed below: Buildings and Facilities; Material storage areas, heavy equipment storage areas and maintenance areas; parks and open space; vehicle and equipment; roads, highways, and parking lots; and storm water collection and conveyance systems.	Review, customize and update appropriate SOPs	All pollutants	Plant Operations	Appendix B, Operation & Maintenance Programs	Heavy Equipment, Plumbing, Landscape Maintenance, Carpentry Shop, Waste Management, Motorpool	Dec-10; Ongoing	Dec-10; Ongoing	Successful if SOPs are updated and current by milestone date.
4.2.6.6.1	SOPs shall address the following practices to ensure they are protective of water quality: Use, storage and disposal of chemicals; Storage of salt, sand, gravel, landscaping materials, asphalt and other materials; Waste and trash management; Cleaning, washing, painting and maintenance activities including: cleaning of maintenance equipment, building exteriors, and trash containers; Sweeping roads and parking lots; Proper application, storage, and disposal of fertilizer, pesticides, and herbicides and minimizing their use; Lawn maintenance and landscaping activities including: proper disposal of lawn clipping and vegetation; Green waste deposited in the street; Proper disposal of pet wastes; Vehicle maintenance and repair activities including: use of drip pans and absorbents under or around leaky vehicles and equipment; Vehicle/equipment storage including storing indoors where feasible; Vehicle fueling including placing fueling areas under cover in order to minimize exposure where feasible; Road and parking lot maintenance, including: pothole repair, pavement marking, sealing, and repaving; Cold weather operations, including: plowing, sanding, application of deicing compounds, and maintenance of snow disposal areas; Right-of-way maintenance, including: mowing, herbicide and pesticide application; Municipally-sponsored events such as large outdoor festivals, parades, or street fairs and the clean-up following these events; Regular inspection, cleaning, and repair of storm water conveyance and structural storm water controls; Graffiti removal; and Any activities or operations not listed above that would reasonably be expected to discharge contaminated runoff.	Review, customize and update appropriate SOPs	All pollutants	Plant Operations	Appendix B, Operation & Maintenance Programs	Heavy Equipment, Plumbing, Landscape Maintenance, Carpentry Shop, Waste Management, Motorpool	Dec-10; Ongoing	Dec-10; Ongoing	Successful if SOPs are updated and current by milestone date.

General Permit for Discharges from Small Municipal
Separate Storm Sewer Systems (MS4s)
Measurable Goals

Reference Number from Permit	Measurable Goals (from the permit)	Action Items[2]	Target Pollutant(s)	Target Audience(s)	Documentation in SWMP	Responsible Department	Initiation Date (Year)	Milestone/ Completion Date (Month, Year)	Measure of Success (Effectiveness)
4.2.6.6.2	SOPs must include a schedule for Permittee owned road and parking lot sweeping and storm drain system maintenance including regular inspection, cleaning, and repair of catch basins, stormwater conveyance pipes, ditches and irrigation canals, culverts, structural storm water controls, and structural runoff treatment and/or flow control facilities. Permitees must prioritize sweeping and storm sewer system maintenance, with the highest priority areas being maintained at the greatest frequency. Priorities should be driven by water quality concerns, the condition of the recieving water, the amount and type of material that typically accumulates in an area, or other location-specific factors.	Review, customize and update appropriate SOPs	All pollutants	Plant Operations	Appendix B, Operation & Maintenance Programs	Heavy Equipment, Plumbing, Landscape Maintenance, Carpentry Shop, Waste Management, Motorpool	Dec-10; Ongoing	Dec-10; Ongoing	Successful if SOPs are updated and current by milestone date.
4.2.6.6.3	Permittees must ensure and document proper disposal methods of all waste and wastewater removed during cleaning and maintenance of the storm water conveyance system. These disposal methods apply to, but are not limited to, street sweeping and catch basin cleaning. Materials removed from the MS4 should be dewatered in a contained area and discharged to the local sanitary sewer (with approval of local authorities) where feasible. The solid material will need to be stored and disposed of properly to avoid discharge during a storm event. Any other treatment and disposal measures shall be reviewed and approved by the Director. Some materials removed from storm drains and open channels may require special handling and disposal, and may not be authorized to be disposed of in a landfill. The solid material shall be stored and disposed of in accordance to federal, state and local laws.	Material removed is disposed of via the landfill after being dewatered if needed.	Sediments, landscaping debris and floatables	Plant Operations	Appendix B, Culvert and Pipe SOP	Heavy Equipment	Dec-10; Ongoing	Dec-10; Ongoing	Successful if SOPs are updated and current by milestone date.
4.2.6.6.4	Permittees must ensure that vechile, equipment and other wash waters are not discharged to the MS4 or waters of the state. This Permit strictly prohibits such discharges. The Permittee must minimize discharges to all waters of the state that are associated with snow disposal and melt.	Wash rack outside building 309 (Landscaping) is plumbed to the sanitary sewer. Larger vehicles are washed off campus at commercial car washes. Snow is pushed up onto landscaping where possible and streets/sidewalks are swept after salt is no longer needed (time permitting).	Road salt/Wash water	Plant Operations	Appendix B, Vehicle Washing SOP, Snow Removal and Deicing SOP, Sidewalk Deicing SOP	Landscape Maintenance, Heavy Equipment Group	Dec-10; Ongoing	Dec-10; Ongoing	Successful if SOPs are updated and current by milestone date.
4.2.6.6.5	The Permittee shall develop a spill prevention plan in coordination with the local fire department.	Conditions for contacting the SLC Fire Dept. Hazardous Material Response team included in Emergency Response Plan	Chemicals requiring Haz Mat response	EHS	Appendix D, U of U Hazardous Material Emergency Response Plan	EHS	Dec-10; Ongoing	Dec-10; Ongoing	Successful if Emergency Response Plan is kept up to date.
4.2.6.6.6	All Permittees must maintain an inventory of all floor drains inside Permittee-owned or operated buildings. The inventory shall be kepty current. The Permittee shall ensure that all floor drains discharge to appropriate locations.	International plumbing code requires that interior drains must be piped to the sanitary sewer.	Illicit Discharges	–	Central Repository for building plans	Facilities Management	Dec-10; Ongoing	Dec-10; Ongoing	Successful if plans are available in the Central Repository
4.2.6.7	The Permittee shall be responsible for ensuring, through contractually-required documentation and/or periodic site visits that contractors performing O&M activities for the Permittee are using appropriate storm water controls and following the standard operating procedures, storm water control measures, and good housekeeping practices of the Permittee.	The University controls nearly 100% of the facilities within the MS4 Permit area and directs all land development; there are no 3rd party owned long term BMPs. University entities and 3rd party hires outside the MS4 area are contractually required to 'follow all laws', etc. (section 4.1)	All pollutants	Non-University Facilities	–	–	–	–	–

General Permit for Discharges from Small Municipal
Separate Storm Sewer Systems (MS4s)
Measurable Goals

Reference Number from Permit	Measurable Goals (from the permit)	Action Items[2]	Target Pollutant(s)	Target Audience(s)	Documentation in SWMP	Responsible Department	Initiation Date (Year)	Milestone/ Completion Date (Month, Year)	Measure of Success (Effectiveness)
4.2.6.8	The Permittee must develop and implement a process to assess the water quality impacts in the design of all new flood management structural controls that are associated with the Permittee or that discharge to the MS4. This process shall include consideraton of controls that can be used to minimize the impacts to site water quality and hydrology while still meeting project objectives. A description of this process shall be included in the SWMP document.	Include a requirement for long-term post-construction storm water controls in new development and redevelopments sites in the University of Utah Campus Design Standards (revised December 2010). The long term post construction controls shall prevent or minimize impacts to water quality (as per MS4 part 4.2.5.3).	All pollutants	Plant Operations	Appendix C Excerpts from the Campus Design Standards (revised December 2010)	Construction Project Delivery (CPD), EHS, Plant Operations	Dec-14	Dec-16	Successful if plan is prepared and ready for internal review process by milestone date.
4.2.6.8.1	Existing flood management structural controls must be assessed to determine whether changes or additions should be made to improve water quality. A description of this process and determinations should be included in the SWMP document.	Flood management structural controls are part of the redevelopment program as included in the University of Utah Campus Design Standards (revised December 2010). Structural storm water control assessments and inspections are included in the O&M SOPs.	All pollutants	MS4	Appendix B Storm Water Collection and Conveyance System SOPs, Appendix C Excerpts from the Campus Design Standards (revised December 2010)	EHS, CPD, Plant Operations	Dec-10	Dec-10	Successful if flood management structural controls are assessed.
4.2.6.9	The Permittee must develop a plan to retrofit existing developed sites that the Permittee owns or operates that are adversely impacting water quality. The retrofit plan must be developed to emphasize controls that infiltrate evapotranspire or harvest and use storm water discharges. The plan must include a ranking of retrofit sites based on the following criteria: proximity to waterbody, status of waterbody to improve impaired waterbodies and protect unimpaired waterbodies, hydrologic condition of the receiving waterbody, proximity to sensitive ecosystem or protected area, any upcoming sites that could be further enhanced by retrofitting storm water controls.	Evaluate campus for deficiencies (areas where sites are potentially adversely impacting water quality) and areas that need retrofitting. Make this information available to site designers and project managers for use with development/redevelopment projects.	All Pollutants	EHS, GIS	Appendix C Storm Drain Flow Analysis Map	Business Services-GIS, EHS	Dec-10	Dec-11; Ongoing	Successful if map is updated and evaluated for retrofitting needs by milestone.
4.2.6.10	The Permittee shall require that all employees, contracted staff, and other responsible entities that have primary operation, or maintenance job functions that are likely to impact storm water quality receive annual training that shall address the importance of protecting water quality, the requirements of this permit, operation and maintenance requirements, inspection procedures, ways to perform their job activities to prevent or minimize impacts to water quality, SOPs and SWPPPs for the various Permittee-owned or operated facilities and procedures for reporting water quality concerns, including potential illicit discharges. Training records must be kept and shall include dates, activities or course descriptions, and names and positions of staff in attendance. The Permittee shall document and maintain records of the training provided and the staff in attendance. The Permittees must ensure that all new hires are trained within 60 days of hire and annually thereafter, at a minimum. Follow-up training shall be provided as needed changes in procedures, methods or staffing.	Develop training materials and schedule. Conduct time of hire and annual recurring training according to schedule.	All pollutants	Plant Operations[1]	Appendix F Training Schedule	EHS	Dec-11; Ongoing	Dec-11; Ongoing	Successful if a training schedule is developed by milestone. Successful if the EHS training database notes that Department employees have received the training.

[1]Plant Operations: Motor Pool, Campus Services, Landscape Maintenance, Plumbing Shop, Heavy Equipment, and Others as Necessary. [2] *Action items in red and italics indicate action items that are not yet complete. As of 6.14.16 there are no incomplete action items.*

MS4 Permit Compliance Calendar

(This summarizes the University program to comply with repeating MS4 Permit requirements as stated by the six Minimum Control Measures (MCMs listed in part 4.2 of the permit)

Six Minimum Control Measures:

MCM 1 / 4.2.1: Public Education and Outreach
MCM 2 / 4.2.2: Public Involvement/Participation
MCM 3 / 4.2.3: Illicit Discharge Detection and Elimination
MCM 4 / 4.2.4: Construction Site Storm Water Runoff Control
MCM 5 / 4.2.5: Long-Term Storm Water Management in New Development and Redevelopment (Post-Construction Storm Water Management)
MCM 6 / 4.2.6: Pollution Prevention and Good Housekeeping for Municipal Operations

Monthly

- Document and track (sometimes bimonthly or as needed for enforcement) construction inspections and any enforcement actions (MCM 4: 4.2.4.2.2, 4.2.4.4.2)
- "High Priority Area" Monthly visual inspection (MCM 6: 4.2.6.4.1)

Biannual

- Comprehensive inspections of "High Priority Areas" (MCM 6: 4.2.6.4.2)

Annually

- Wet weather screenings of "High Priority Areas" (MCM 6: 4.2.6.4.3)
- University Student Apartments - RA Training/Handouts (MCM 1: 4.2.1.2)
- College guest lecture course (MCM 1: 4.2.1.2)
- "@TheU" Mass Mailing (MCM 1: 4.2.1.2)
- Provide O&M SOPs electronically to PMC along with solicitation for questions concerning pollution prevention (MCM 1: 4.2.1.3)
- Provide IDDE and Stormwater P2 training to targeted MS4 Employees (MCM 1, 3 and 6: 4.2.1.4, 4.2.3.6, 4.2.6.10)
- Provide LID information to MS4 planners and designers (MCM 5: 4.2.5.6)
- Conduct SWAMT meetings annually and update SWMP as needed, update to website (MCM 2: 4.2.2.1)
- Update "High Priority Area" list (MCM 3: 4.2.3.3.1)
- Dry Weather Field Screening of outfalls (MCM 3: 4.2.3.3.3)
- Update IDDE History map (MCM 3: 4.2.3.4.5)
- Update Post-Con BMP inventory (MCM 5: 4.2.5.5)
- Train SWPPP inspector/reviewer to conduct these activities (MCM 4: 4.2.4.5)
- Post-Con BMP structure inspections and maintenance (Grounds/Plumbing) (MCM 5: 4.2.5.4)
- Shop supervisors review applicable SOPs (MCM 6: 4.2.6.10)

- OCTOBER: Pay annual DEQ Municipal Stormwater Permit Fee (this will be received in the mail/email in late September) (PERMIT MANAGEMENT)

<u>As needed</u>

- Pre-construction training/enforcement actions with construction contractors (MCM 1: 4.2.1.4)
- Pre-Construction SWPPP Review & Meeting (MCM 4: 4.2.4.3)
- Notice of Termination inspections (MCM 4: 4.2.4.4.4)
- Permanent BMP structures inspected at least once during construction (PMs) to verify that they are installed as designed. (MCM 5: 4.2.5.4.1)

OVERALL INSPECTION SCHEDULE

Permit condition	Requirement	Responsible Department	Documentation Required	Frequency
4.2.3.3.3	Dry weather screening	Plumbing Shop and EHS	Inspection form	Annually
4.2.3.4 & 4.2.3.5.1	Illicit discharge investigation	Plumbing Shop and EHS	SOP EHS report	As needed
4.2.4.2.2, 4.2.4.4	Active construction inspections and enforcement actions	EHS	SOP Inspection form/EHS report database	Monthly or Bi-monthly (as needed)
4.2.4.3.1	Pre-construction SWPPP Meeting/Review	EHS	SOP Checklist/EHS report database	As needed
4.2.5.2.4	Permanent structural BMPs during installation	Project Manager (CPD)	Punch list	Once (minimum)
4.2.5.2.5	Site inspection of post-construction BMPs	GIS EHS	Inventory/database Long Term BMP inspection forms	Annually
4.2.6.5.1	Visual inspections of "high priority" potential pollution sources	Heavy Equipment	Log kept with SWMP document	Monthly
4.2.6.5.2	Comprehensive inspections of "high priority" potential pollution sources	EHS	SOP, inspection form and report	Biannually
4.2.6.5.3	Visual wet weather observation of storm water discharges from areas that are high "priority" potential pollution sources	EHS	SOP, inspection form and report	Annually

Appendix B

Operation and Maintenance Program (MCM 6):

- **Overall SOP list**
- **Floor Drain Memorandum**
- **Standard Operating Procedures**
  - **Fire System Flushing/Draining**
  - **Culvert and Storm Water Pipe Cleaning**
  - **Coolant Draining, Storage, and Disposal**
  - **Permeable Pavement**
  - **Storm Water Structures: Detention Pond, Retention Pond and Swales Cleaning**
  - **Sumps and Injection Wells (includes Underground Storm Water Detention Structures)**
  - **Pressure Washing**
  - **In-house Painting**
  - **Heavy Equipment Storage**
  - **Vehicle Washing**
  - **Vehicle and Equipment Maintenance**
  - **In-house Concrete Work**
  - **Waste Management**
  - **Special Events**
  - **Chemical Use, Storage and Disposal**
  - **Sidewalk Deicing**
  - **Mowing, Trimming, and Fertilizing**
  - **Planting Vegetation**
  - **Seeding**
  - **Cleaning Equipment**
  - **Transporting Equipment**
  - **Parking Lot/Street Maintenance**
  - **Snow Removal and De-icing**

- **Earthwork (less than 1 acre)**
- **Graffiti Removal**

- **Permittee Owned Facilities**
  - **Permittee Owned Facility Evaluation SOP**
  - **Permittee Owned Facility Inventory Log**

- **HPA SWPPP Summary**
  - **“Bullpen” Area and Drain Flow Map**
  - **Utility Service Yard Management SOP**
  - **Material Area Storage SOP**
  - **Catch Basins and Storm Drain Manholes**
  - **Parking Lot/Street Sweeping**
  - **Monthly Visual Inspection SOP**
  - **Monthly Visual Inspection Form**
  - **Biannual Comprehensive Inspection SOP**
  - **Biannual Comprehensive Inspection Form**
  - **Annual Wet Weather Screening SOP**
  - **Annual Wet Weather Visual Monitoring Inspection Form**

STANDARD OPERATING PROCEDURES

List of Standard Operating Procedures, Responsible Department, Permit Reference and Name of SOP

Name of SOP in SWMP	Responsible Department	Permit Reference	Standard Operating Procedure (Permit Reference)
Appendix B: Buildings and Facilities			
Graffiti Removal	Carpentry Shop	4.2.6.6.1	
In-house Painting	Carpentry Shop	4.2.6.6.1	
Appendix B: Material Storage Areas, Heavy Equipment and Maintenance			
Heavy Equipment Storage SOP	Heavy Equipment	4.2.6.6.1	Heavy equipment storage area use
Appendix B: Parks and Open Spaces			
Chemical Use, Storage and Disposal SOP	Landscape Maintenance, USA	4.2.6.6.1	Chemical use, storage, disposal of pesticides, herbicides, fertilizers: minimize use, use only in accordance with manufacturer's instruction
Mowing & Trimming SOP, Planting Vegetation SOP, Seeding SOP	Landscape Maintenance, USA	4.2.6.6.3	Parks/Open Space - Mowing and trimming; lawn maintenance & landscaping: proper disposal of lawn clippings & vegetation and use of alternative landscaping, and fertlizer application
Waste Management SOP	Waste Mngmt, USA	4.2.6.6.1	Management of trash containers at parks & open spaces-SOP, cleaning schedule, sufficient # of containers
Cleaning Equipment SOP and Transporting Equipment SOP	Landscape Maintenance, USA	4.2.6.6.3	Proper cleaning of park maintenance equipment
Pet Waste Disposal SOP	Landscape Maintenance, USA	4.2.6.6.1	Proper pickup and disposal of pet waste.
Appendix B: Vehicles and Equipment			
Vehicle Washing SOP	Motor Pool, Landscaping, Heavy EQ, USA	4.2.6.6.4	Vehicle washing
Vehicle and Equipment Maintenance SOP	Motor Pool	4.2.6.6.1	Vehicle maintenace and repair: drip pans, absorbents
Appendix B: Roads, Highways and Parking Lots			
Parking Lot/Street Maintenance SOP	Heavy Equipment	4.2.6.6.1	Street/Road Maintenance SOP & Schedule: pothole repair, pavement marking, sealing & repaving
Parking Lot/Street Sweeping SOP	Heavy Equipment	4.2.6.6.1	Street/Road Sweeping SOP & Schedule: reduce road & parking lot debris
Special Events SOP	Waste Mngmt	4.2.6.6.1	Special events/Mass Gatherings
Sidewalk Deicing SOP	Landscape Maintenance, USA	4.2.6.6.1	Cold Weather operations: plowing, sanding, application of deicing compounds, maintenance of snow disposal areas
Snow Removal and Deicing SOP	Heavy Equipment, USA	4.2.6.6.1	Cold Weather operations: plowing, sanding, application of deicing compounds, maintenance of snow disposal areas
Appendix B: Storm water Collection & Conveyance			
Catch Basisn and Storm Drain Manholes SOP	Plumbing Shop/Heavy EQ	4.2.6.6.1	Catch basins
Culvert and Storm Water Pipe Cleaning SOP	Plumbing Shop	4.2.6.6.2	Culverts and Storm water conveyance pipes
Storm Water Structures SOP	Landscaping/Plumbing/Heavy EQ	4.2.6.6.3	Inspection and maintenance of long term flood control BMPs
Sumps and Injection Facilities (includes Underground Storm Water Detention Structures) SOP	Plumbing Shop/Heavy EQ	4.2.6.6.3	Structural storm water control BMPs: Swales, retention ponds, detention ponds, or other structures--annual inspection
Permeable Pavement Maintenance	Heavy EQ	4.2.6.6.1	Cleaning of permeable pavement surface at the Sutton buidling
Appendix B: Other Facilities and Operations			
Fire System Flushing/Draining	Fire Prevention	4.2.6.6	
Coolant Draining, Storage & Disposal	HVAC		
In-House Concrete Work SOP	Carpentry Shop	4.2.6.6.1	In-house Concrete Work
Power-Pressure Washing	Carpentry Shop	4.2.6.6.1	Washing of concrete surfaces
Earthwork SOP	Heavy Equipment	4.2.6.6.1	Small scope projects that require digging
Appendix B: High Priority Facilities			
Weekly Visual Inspection SOP	EHS	4.2.6.5.1	High priority facilities (BMP's, LID, Good house keeping): weekly inspections, quarterly visual monitoring
Quarterly Wet Weather Screening SOP	EHS	4.2.6.5.2	Outfall inspections at High Priority Facilities
Wet Weather Screening SOP	EHS	4.2.6.5.3	Quarterhly storm water runoff observations for High Priority Facilities
Utility Service Yard Management SOP	Heavy Equipment	4.2.6.6.2	Bullpen area operations and pollution prevention
Material Area Storage SOP	Heavy Equipment	4.2.6.6.2	Material area storage and use
Appendix C: Construction Program			
SWPPP Review for Project Sites Greater than 1 acre SOP	EHS	4.2.4.3.1, 4.2.4.3.2, 4.2.4.3.3	Pre-construction storm water prevention plan review
Construction Runoff Control Program SOP	EHS	4.2.4.4	Construction progam overview

Name of SOP in SWMP	Responsible Department	Permit Reference	Standard Operating Procedure (Permit Reference)
Construction Enforcement SOP	EHS	4.2.4.2, 4.2.4.2.1-4.2.4.2.2	Construction enforcement
Construction Inspection Procedures SOP	EHS	4.2.4.4.1, 4.2.4.4.3	Site inspection of construction phase storm water control measures
Notice of Termination Process SOP	EHS	4.2.4.4.2	Project Close out and NOI termination process
Appendix D: IDDE Program			
Tracing and Removal of Illicit Discharges SOP	Plumbing Shop	4.2.3.4	Tracing the source of illicit discharges
Spill Response Program SOP	EHS	4.2.3.5	Response procedure to spills/leaks/illicit discharges
Dry Weather Field Screening SOP	EHS/Plumbing Shop	4.2.3.3.3	Annual inspection of outfalls to RBC
Hazardous Material Emergency Response Plan/UPD Dispatch SOP	EHS	4.2.3.5.1, 4.2.3.6, 4.2.3.9.1	Characterizing Nature of and ceasing/removal of illicit discharges/phone call procedures
Stormwater Management Plan - 2026-2031, Appendix B, Updated 9/29/26			

THE UNIVERSITY OF UTAH

Environmental Health and Safety Department

125 South Fort Douglas Blvd Bldg 605 SLC, UT 84113 (801)581-6590

To: Whom it may concern

FR: Christian Buehler, RSI, RSW

DATE: October 18, 2019

RE: Stormwater compliance / Floor drain inventory

MS4 4.2.6.6.6 "Buildings and Facilities" – *"…All Permittees must maintain an inventory of all floor drains inside all Permittee-owned or operated buildings. The inventory must be kept current. The Permittee must ensure that all floor drains discharge to appropriate locations."*

Chapter 7 of the International Plumbing Code (IPC) dictates that all interior plumbing and drainage shall be connected to the sanitary sewer, all the buildings built on campus must legally comply with this code. To bear that out the University of Utah possesses As-Built plans for most, if not all, of the buildings on campus that are kept within an electronic 'central repository' for ease of access. This data may be accessed either by the uBox system or through facilities management staff.

The only 'interior' maintenance yard type storm drains are within buildings 306 and 309 respectively. These facilities are left over from the 1940's Ft. Douglas activities. Presently they are used by the landscape maintenance group and the fleet services group as storage and/or interior work yards. These drains were all dye tested by James Staples (Water Master for the Plumbing group on campus) and Darren Blaisdale (GIS supervisor) around 2009. These floor drains were found to discharge to the sanitary sewer and **not** the storm drain system.

THE UNIVERSITY OF UTAH

Environmental Health and Safety Department

125 South Fort Douglas Blvd Bldg 605 SLC, UT 84113 (801)581-6590

To: Whom it may concern

FR: Christian Buehler, RSI, RSW

DATE: February 13, 2020

RE: Stormwater compliance / Retrofit Plan

MS4 4.2.6.9 *"The Permittee must develop a plan to retrofit existing developed sites that the Permittee owns or operates that are adversely impacting water quality. The retrofit plan must be developed to emphasize controls that infiltrate evapotranspire or harvest and use storm water discharges. The plan must include a ranking of retrofit sites based on the following criteria: proximity to waterbody, status of waterbody to improve impaired waterbodies and protect unimpaired waterbodies, hydrologic condition of the receiving waterbody, proximity to sensitive ecosystem or protected area, any upcoming sites that could be further enhanced by retrofitting storm water controls."*

The Flow Analysis map included in the University SWMP makes a determination regarding areas of the campus storm water system that may be subject to flooding, standing water, and/or landscaping disruption that could cause pollutants to be discharged into the storm sewer system.

This map was created, and is updated by, the University GIS group and reflects information provided to campus planners and project managers for the purpose of informing them how alterations to the system can be affected by new development/redevelopment projects.

Areas marked red take the highest concentration of water, more than the inlets were likely sized for. While none of these sites have direct proximity to a waterbody they are ultimately discharged to the Jordan River through their connection to the SLC MS4.

The University has no know currently 'failing' long term BMP systems.

Standard Operating Procedures:
Chemical (pesticides, herbicides and others) Use, Storage, and Disposal

Responsibility: Landscape Maintenance

Frequency and Duration: Ongoing

Description: This section contains information on the application of Pesticides, Herbicides and Fertilizers in the landscape; including preparation, use and disposal of chemical products.

Applicability: Using chemicals in the landscape.

1. Preparation

    a. Make sure your state non-commercial applicator certification is complete and up-to-date before handling any chemicals.

    b. Calibrate fertilizer and pesticide application equipment to avoid excessive application.

    c. Use pesticides only if there is an actual pest problem.

    d. Time and apply the application of fertilizers, herbicides or pesticides to coincide with the manufacturer's recommendation for best results ("Read the Label").

    e. Know the weather conditions. Do not use pesticides if rain is expected. Apply pesticides or herbicides only when wind speeds are low (less than 5 mph).

2. Process

    a. Always follow the manufacturer's recommendations for mixing, application and disposal ("Read the Label").

    b. Do not mix or prepare pesticides for application near storm drains.

    c. Employ techniques to minimize off-target application (e.g. spray drift, over broadcasting) of pesticides and fertilizers.

3. Clean-up

    a. Sweep excess fertilizer or other solid chemicals onto the grass, or back into the container it came from before applying irrigation water.

    b. Triple rinse containers, and use rinse water as product. Dispose of unused pesticide as hazardous waste if required.

c. Always follow all federal and state regulations governing use, storage and disposal of fertilizers, herbicides or pesticides and their containers ("Read the Label").

4. Documentation

a. Copies of Material Safety Data Sheets (MSDS) for all pesticides, fertilizers and other hazardous products used are kept at the Grounds/Transportation offices.

b. Records of fertilizing and pesticide application activities, including date, individual who did the application, amount of product used and approximate area covered are kept electronically.

c. Electronic spreadsheet/personnel files are up to date with all full-time employees that mix and handle chemicals. These employees are certified non-commercial applicator through the Department of Agriculture and renew their certification every three years.

5. Training

a. Responsible department supervisor will provide training on *this procedure* during new employee orientation (or within 60 days of hire). Employees who perform the included activities will review this SOP on an annual basis via the University's online training system.

Standard Operating Procedures:
Coolant (Antifreeze, Freon and/or others) Draining, Storage, and Disposal

Responsibility: HVAC Shop

Frequency and Duration: Ongoing

Description: This section contains information on facilities and operations that would reasonably be expected to discharge contaminated runoff, and develop, implement, and document the appropriate BMPs and SWPPP to protect water quality from discharges from these sites.

Applicability: Draining chemicals from refrigerator units or other equipment.

1. Process

    a. Dropped off equipment has fluid tanks removed and taken inside.

    b. Drain tank contents into sealed disposal container over secondary containment. When full place disposal container in chemical storage shed.

    c. Schedule pickup with EHS staff of all materials in chemical storage shed before it is full to prevent overflow materials from being stored outside and or in an exposed manner.

    d. EHS disposes of material in accordance with RCRA and retains documentation of disposal costs as part of building 590 operations.

2. Housekeeping & Spill Response

    a. Paved surfaces outside and around equipment storage area are to be kept clean and free of drips, leaks or spills that may occur. Spill cleanup materials are located in the HVAC shop.

    b. Spot check equipment drop off area, chemical storage shed, and surrounding area for leaks or spills regularly during work hours.

    c. Any outdoor spills on paved surfaces should be cleaned up as soon as possible to prevent rainwater or other precipitation from discharging pollutants into the storm drain system.

3. Training

   a. Responsible department supervisor will provide training on *this procedure* during new employee orientation (or within 60 days of hire). Employees who perform the included activities will review this SOP on an annual basis via the University's online training system.

Standard Operating Procedures:

Culvert and Storm Water Pipe Cleaning

Responsibility: Plumbing Shop, Heavy Equipment

Frequency and Duration (scheduling): Ongoing; as needed

Description: This section contains information on the cleaning of storm drain culverts and pipes. This also includes what methods to use to remove sediment and debris from the structure. A record keeping procedure is also outlined for tracking the cleaning process.

Applicability: Cleaning of Culverts and Pipes.

1. Preparation:
    a. Visual inspection to determine areas that need cleaning.
    b. Clean sediment and trash off inlet to culvert/storm water pipe.
    c. If possible perform visual inspection of inside of culvert/storm water pipe.
    d. Look for cracks, missing or broken pieces in the walls/sides of structure.
2. Process:
    a. For manual cleaning:
        i. Place removed material in a location protected from potential runoff – truck bed, dumpster, trash can or a lined/sealed pan, etc.
        ii. Dispose of spoil and/or trash in a dumpster or in the sealed roll off containers available at the 590 yard for dewatering if necessary.
    b. For mechanical cleaning:
        i. Clean using a high powered vac truck, cleaning the sides of the structure and sucking out sediment on the bottom.
        ii. Send high powered hose down culvert and pull back any sediment.
        iii. Clean inlets and outlets.
        iv. Move truck down to next storm drain.
        v. If vac truck is not able to sufficiently clean the pipe and/or culvert, use a vendor with jetting capabilities to clean the pipe and/or culvert.

3. Clean-up:

    a. When vac truck is full of sediment take it to the 590 material area to dry material in roll off containers.

    b. When evaporates are dry, remove with a backhoe, put it into a dump truck and take it to the landfill.

4. Documentation:

    a. Logs of culverts/storm water pipe cleaning work orders are kept in the AIM program.

    b. Amount of waste disposal of at landfill (paid for by weight) is recorded in the AIM program.

    c. Notes/comments recorded in the AIM program.

5. Training:

    a. Responsible department supervisor will provide training on *this procedure* during new employee orientation (or within 60 days of hire). Employees who perform the included activities will review this SOP on an annual basis via the University's online training system.

Standard Operating Procedures:
Earthwork (less than 1 acre)

Responsibility: Heavy Equipment

Frequency and Duration: As needed

Description: Best management practices for digging activities to reduce or eliminate the discharge of pollutants into the storm sewer system.

Applicability: Small scale work or repairs that require digging.

1. Procedures
    a. Inlet protection and barrier BMPs (i.e. inlet bags, straw waddle or rock bags, etc.) will be employed as is appropriate around storm drain inlets to prevent discharge. Temporary BMPs are stored in the shed between buildings 306 and 309.
    b. Soil piles will be stored on pervious surfaces first and on impervious surface only when unavoidable
    c. Work should be performed on dry days whenever possible
    d. Excavated areas should be backfilled and stabilized on the same day, or as soon as possible once work has been completed

2. Housekeeping and Clean up
    a. Any equipment leaks will be cleaned up following the Vehicle Maintenance SOP.
    b. All work areas will be kept clean and swept, as needed, during the course of the work to prevent discharge.

3. Documentation
    a. Record work orders using the AIM system.

4. Training
    a. Responsible department supervisor will provide training on *this procedure* during new employee orientation (or within 60 days of hire). Employees who perform the included activities will review this SOP on an annual basis via the University's online training system.

Standard Operating Procedures:
Fire System Flushing/Draining

Responsibility: Fire Prevention / Fire Systems

Frequency and Duration: Quarterly; as needed

Description: Best management practices for fire system maintenance activities to reduce or eliminate the discharge of pollutants into the storm sewer system.

Applicability: This SOP concerns the management of discharge coming from fire sprinkler systems that need to be emptied ("flushed"). The SOP is intended to prevent polluted water from being discharged into the storm sewer system, or such discharge from causing floatable litter from being washed into the storm system.

1. Preparation
    - Identify where fire line water drains to (Sanitary Sewer, Landscaping, Sealed Tank, Paved Surface/Storm Drain, or other)
    - If any fire lines are discovered to be piped directly into storm drains EHS and Facilities Management must be notified so they can be removed to prevent illicit discharges

2. Procedures (depending on where fire lines discharge ends up)
    - **Sanitary Sewer**: observe discharge and ensure that the entire volume reaches the sanitary sewer as intended. Overflows or spills should be cleaned up and disposed of with liquid put into the sanitary sewer and/or solids put into a dumpster.
    - **Landscaping**: observe discharge and ensure that the entire volume reaches the landscaping as intended. Overflows that reach paved surfaces should be treated to prevent discharge into local storm drains. Coordinate with landscaping crews to retrofit discharges to avoid or minimize erosional damage as needed.
    - **Paved Surfaces/Storm Drain**: Sweep area first and install temporary Best Management Practices (BMPs) such as sandbags, inlet protection (Dandy Bags), etc. around storm drain in order to capture sediment or other floatable debris, and allow discharge water to overtop.

3. Housekeeping and Clean up
    - After discharge has completed from the fire system use a shovel/broom to collect sediment and other debris from around BMPs, and dispose in a solid waste dumpster, or on suitable landscaping.
    - Remove temporary BMPs for reuse or disposal.

4. Documentation
    - Record drainage location, date of flush, and reason for flush.

5. Training
    - University Stormwater Pollution Prevention / IDDE Training, and SOP 'Fire System Flushing/Draining' within 60 days of hire and annually thereafter.

Standard Operating Procedures:
Heavy Equipment Storage

Responsibility: Heavy Equipment

Frequency and Duration: Ongoing

Description: Best management practices guiding the maintenance and storage of heavy equipment to reduce or eliminate the contact with runoff.

Applicability: Heavy equipment storage.

1. Procedures
    a. Whenever possible vehicles should be stored inside where floor drains have been connected to the sanitary sewer system. When this is not possible vehicles and equipment should be stored /parked in approved areas.
    b. Maintain vehicles to prevent leaks.
    c. Address leaks as soon as possible, spot cleaning them and terminating the source. When leak is detected a drip pan will be placed under vehicle or equipment, and repairs will be scheduled immediately.
    d. Parking and storage areas will be visually checked for leaks on a regular basis.

2. Housekeeping and Clean up
    a. All leaks will be cleaned up using dry absorbent. The absorbent will then be disposed of in the garbage.
    b. All storage areas will be swept quarterly along with regular street sweeping activities.

3. Documentation
    a. Record sweeping using the AIM system.
    b. In the event of a leak: record location, vehicle/equipment identification and maintenance actions taken.
    c. Include comments on any ongoing or continual issues.

4. Training
    a. Responsible department supervisor will provide training on *this procedure* during new employee orientation (or within 60 days of hire). Employees who perform the included activities will review this SOP on an annual basis via the University's online training system.

THE UNIVERSITY OF UTAH

Standard Operating Procedures:
In-House Concrete Work

Responsibility: Carpentry Shop

Frequency and Duration: As needed

Description: Concrete Work

Applicability: Concrete work (form work, mixing, pouring, and finishing) done by Carpentry shop employees.

1. Concrete rinsate is never discharged to a gutter, storm or sewer drain, landscaping or other paved surfaces.
2. Excess, solidified concrete without free-flowing liquid will be collected for disposal at the 590 material area in the roll off containers.
3. If a cement truck is utilized the driver will minimize overspray when rinsing the chute back into the mixer. No rinsate is allowed on any impermeable surface or landscaping.
4. Hand equipment, if needed, will be rinsed into buckets or into the sealed roll off containers located at the 590 material area.
5. If the small mixer is used rather than contracting with a cement mixer truck, the following cleanup procedures will be used:
    1. Excess concrete with or without free-flowing liquid may be placed into the roll off containers at the 590 material area.
    2. No liquid, semi-solid, or solid waste concrete material will be disposed of by any other method.
6. Concrete cutting is done in house with the use of a chainsaw blade for short cuts only. The slurry is left to dry on the pavement and then shoveled/swept up and then the remains are placed in the roll off containers in the 590 material area.
7. Documentation: Work orders recorded in AIM system.
8. Training
    a. Responsible department supervisor will provide training on *this procedure* during new employee orientation (or within 60 days of hire). Employees who perform the included activities will review this SOP on an annual basis via the University's online training system.

THE UNIVERSITY OF UTAH

Standard Operating Procedures:
In-House Painting

Responsibility: Carpentry Shop

Frequency and Duration: As needed

Description: External or Internal painting jobs.

Applicability: Painting done by Carpentry shop employees.

1. Area around surface to be painted is prepared before any paint is applied to it.
    - **a.** Drop cloths, taping, plastic wrap or tarps are used as appropriate.
    - **b.** Drops cloths and tarps are shaken out into a dumpster after the painting is done.
    - **c.** Disposable plastic wrap and tape are thrown out after drying.

2. Brushes and other tools are washed out over a deep sink, which drains to the sanitary sewer.
    - **a.** Sink drain contains a P-trap for hard chunks of dried paint which are then disposed of in the trash/dumpster.
    - **b.** As needed paint brushes are wrapped in tin foil and stored instead of washed, if they are to be used in the same color the next day.

3. Waste paint is dumped into a 55 gallon drum and picked up by EHS personnel for disposal when it is full.
    - **a.** Oil and Latex paint are not mixed but are kept instead in separate 55 gal. drums.
    - **b.** Left over paint thinner is put into a separate 5 gal. before being picked up by EHS.

4. Left over paint is stored inside the shop; some buildings upon request will keep additional paint for touch ups in interior “attic storage”.

5. Empty paint buckets are washed out into the deep sink, the left over paint watered down before being sent into the sanitary sewer.

6. Open paint cans are never left unattended; if everyone must leave the work area for any reason they are sealed closed to prevent spills.

Training:

a. Responsible department supervisor will provide training on *this procedure* during new employee orientation (or within 60 days of hire). Employees who perform the included activities will review this SOP on an annual basis via the University’s online training system.

3. Clean-up

   a. Remove inlet protection if they were installed.

   b. Scrape and brush mowers at the shop, and sweep dry spoils and dispose into dumpster.

   c. Wash equipment at the approved wash station behind building 309.

4. Training

   a. Responsible department supervisor will provide training on *this procedure* during new employee orientation (or within 60 days of hire). Employees who perform the included activities will review this SOP on an annual basis via the University's online training system.

Standard Operating Procedures:

Landscaping Maintenance – Planting Vegetation

Responsibility: Landscape Maintenance

Frequency and Duration: As needed

Description: This section contains information on planting within the landscape of the University of Utah campus. This also includes cleaning of the area and how to dispose of excess soil.

Applicability: Planting.

1. Preparation

    a. Call Campus Utilities and/or Blue Stakes Center of Utah at least 1 week before any digging will be performed, to reveal the location of any underground utilities.

    b. Dial Campus utilities 581-7221 or 811 or 1-800-662-4111 (Blue Stakes).

    c. Determine where any spoils, if any, will be taken. Spoils may be used at other landscaping locations as is practical, or hauled away as needed.

2. Process

    a. Dig holes; place spoils near the hole where they may easily be placed back around roots. Avoid placing spoils on impermeable surfaces or areas that may drain into storm drains.

    b. Bring each plant near the edge of the hole dug for it.

    c. Check the depth of the hole, and adjust the depth if necessary. The depth of the hole for a tree should be as deep as the root ball, so that the top of the root ball is level with the top of the hole.

    d. Carefully remove pot or burlap.

    e. Place the plant in the hole.

    f. Backfill the hole with existing spoils, compost, and fertilize if needed and in sparse amounts.

    g. Water the plant.

    h. Stake the plant, if necessary, to stabilize it.

3. Clean-up

   a. Move any extra spoils into truck or trailer. Place the spoils on a tarp if there is likelihood that some of the dirt would be lost through openings in the bed.

   b. Sweep dirt from surrounding pavement(s) into the planter area

   c. Transport spoils to their designated fill or disposal area.

4. Training

   a. Responsible department supervisor will provide training on *this procedure* during new employee orientation (or within 60 days of hire). Employees who perform the included activities will review this SOP on an annual basis via the University's online training system.

Standard Operating Procedures:

Landscaping Maintenance – Seeding

Responsibility: Landscape Maintenance

Frequency and Duration: As needed

Description: This section contains information on the seeding of areas on the University of Utah campus. This also includes cleaning of the area and how to dispose of excess soil.

Applicability: Seeding.

1. Preparation

    a. Dial Campus utilities 581-7221 or 1-800-662-4111 (Blue Stakes) at least 7 working days before any digging or grading will be done, to reveal the location of any underground utilities.

    b. Decide on the application rate, method, water source, and ensure adequate materials are in possession.

    c. Grade and prepare the soil to receive the seed. Place any extra soil in a convenient location to collect.

2. Process

    a. Place the seed and any cover using the pre-determined application method (and rate).

    b. Lightly moisten the seed.

    c. Adjust watering rates to minimize runoff from seeded area.

    d. Monitor site for erosion. Correct as needed.

3. Clean-up

    a. Move any extra spoils into truck or trailer. Place the spoils on a tarp if there is a likely hood that some of the dirt would be lost through openings in the bed.

    b. Sweep dirt, seed, and any cover material from surrounding pavement(s) into the planter area.

    c. Transport spoils to their designated fill or disposal area.

4. Training

   a. Responsible department supervisor will provide training on *this procedure* during new employee orientation (or within 60 days of hire). Employees who perform the included activities will review this SOP on an annual basis via the University's online training system.

Standard Operating Procedures:

Landscaping Maintenance – Cleaning Equipment

Responsibility: Landscape Maintenance

Frequency and Duration: Ongoing

Description: This section contains information on cleaning equipment used in landscape maintenance.

Applicability: Cleaning.

1. Preparation:
    a. Review process with all Landscape Maintenance employees.
2. Process:
    a. Wipe off dirt, dust and fluids with disposable towel.
    b. Wash equipment only in the approved wash station at building 309.
3. Clean-up:
    a. Dispose of towels in proper trash receptacle.
    b. Sweep floor and dispose of debris in trash can or dumpster.
4. Training
    a. Responsible department supervisor will provide training on *this procedure* during new employee orientation (or within 60 days of hire). Employees who perform the included activities will review this SOP on an annual basis via the University's online training system.

Standard Operating Procedures:
Landscaping Maintenance – Transporting Equipment

Responsibility: Landscape Maintenance

Frequency and Duration: Ongoing

Description: This section contains information on transporting equipment used in landscape maintenance.

Applicability: Transportation.

1. Preparation:
    a. Determine equipment needed for transport and method (trailer, truck bed) needed to transport equipment.
    b. Conduct pre- trip inspection of equipment and fuel containers, checking for leaks or evidence of spills.
2. Process:
    a. Load and secure equipment on trailer or truck.
    b. Load and secure fuel containers for equipment usage.
3. Clean-up:
    a. Return equipment to storage.
    c. Conduct post-trip inspection of equipment.
    d. Wash equipment, if needed, according to the associated Standard Operating Procedures.
4. Documentation:
    a. Fill out a service check sheet on equipment before and after each use.
5. Training
    a. Responsible department supervisor will provide training on *this procedure* during new employee orientation (or within 60 days of hire). Employees who perform the included activities will review this SOP on an annual basis via the University's online training system.

THE UNIVERSITY OF UTAH

Standard Operating Procedures:
Parking Lot/Street Maintenance

Responsibility: Heavy Equipment

Frequency and Duration: Ongoing

Description: Best management practices to protect and minimize the affect of street construction; such as crack, chip, and slurry sealing or overlay and patching to the runoff and storm drain system.

Applicability: Maintenance of parking lots and streets including crack sealing, chip sealing, slurry sealing, and overlays and patching.

Crack Sealing

1. Procedures
   - Cover manholes and catch basins as needed to prevent oil and materials from entering the inside of structures and polluting the system.
   - Clean and dry areas to be sealed.
   - Place material in cracks.
   - Keep sealing equipment on asphalt away from curb and drain areas as to minimize possibility of spill.

2. Housekeeping and Clean up
   - Remove excessive sealant, loose debris, or spills from asphalt.
   - Clean up equipment.
   - Remove manhole catch basin covers.
   - Dispose of all clean up material in the landfill.

3. Documentation
   - Date project started and any manholes/catch basins covered are recorded in the AIM program.
   - Date complete and the final inspection of area are recorded in the AIM program.

4. Training

   - Responsible department supervisor will provide training on *this procedure* during new employee orientation (or within 60 days of hire). Employees who perform the included activities will review this SOP on an annual basis via the University's online training system.

Chip Sealing

1. Procedures
   - Cover manholes and catch basins as needed to prevent oil and materials from entering the inside of structures and polluting the system.
   - Clean and dry areas to be sealed.
   - Apply emulsion and calibrate spreader and slowly spread chips closely behind emulsion distributor to reduce chips tumbling into curb areas.
   - Roll chips twice at 5 mph.

2. Housekeeping and Clean up
   - Sweep and dispose of loose aggregate as per street sweeping procedure.
   - Remove excessive asphalt and spills dispose of in land fill.
   - Remove manhole and catch basin covers, cleaning up and disposing of any loose material that may have entered the inlet boxes.

3. Documentation
   - Dates of project start and completion are recorded in the AIM program.
   - Dates protection materials if installed and removed are recorded in the AIM program.

4. Training

   a. Responsible department supervisor will provide training on *this procedure* during new employee orientation (or within 60 days of hire). Employees who perform the included activities will review this SOP on an annual basis via the University's online training system.

Slurry Sealing

1. Procedures
   a. Cover manholes and catch basins as needed to prevent any materials from entering the inside of structures and polluting the system.
   b. Clean and dry areas to be sealed.
   c. Apply Slurry in a smooth and uniform manner.

2. Housekeeping and Clean up
   d. Clean up any excess material.
   e. Remove manhole and catch basin covers if installed, cleaning out any excess material that may have gotten onto the basin cover. Dispose of clean up materials in the landfill.

3. Documentation
   f. Dates of project start and completion are recorded in the AIM program.
   g. Dates protection materials were installed and removed are recorded in the AIM program, if used.
   h. Dates and result of final inspection are recorded in the AIM program.

4. Training

   a. Responsible department supervisor will provide training on *this procedure* during new employee orientation (or within 60 days of hire). Employees who perform the included activities will review this SOP on an annual basis via the University's online training system.

Overlays and Patching

1. Procedures
   b. Cover manholes and catch basins as needed to prevent any materials from entering the inside of structures and polluting the system.
   c. Measure and mark locations of manholes, covers and valves on the curb. Correct any drainage issues.
   d. Clean and dry areas.
   e. Seal cracks, fill potholes, repair soft spots, milling preformed for rutting.
   f. Apply tack coat and allow curing, check asphalt mixture, raise manhole lids and valves as needed using riser rings. Roll to achieve proper in place air void specification.

2. Housekeeping and Clean up
   g. Allow pavement to cool then sweep gutters and remove all excess aggregate and debris.
   h. Remove manhole and catch basin covers if installed, cleaning out any excess material. Dispose of clean up materials in the landfill.

3. Documentation
   i. Dates of project start and completion are recorded in the AIM program.
   j. Dates protection materials installed and removed (if installed) are recorded in the AIM program.
   k. Date and result of final inspection are recorded in the AIM program.

4. Training

   a. Responsible department supervisor will provide training on *this procedure* during new employee orientation (or within 60 days of hire). Employees who perform the included activities will review this SOP on an annual basis via the University's online training system.

Standard Operating Procedures:
Permeable Pavement Maintenance

Responsibility: Heavy Equipment

Frequency and Duration: Quarterly

Description: Permeable pavement allows for storm water to infiltrate before reaching University controlled storm inlets thus reducing the runoff volume, rate and pollutants that enters the storm drain system.

Applicability: Permeable surfaces installed at the Sutton building, the Natural History Museum, and the Gardner Commons.

Use and Maintenance

1. Winter Procedures
   - Salt for deicing; the amount should be limited to only what is necessary.
   - Snow plowing over permeable pavement should be done with a rubber plow blade, or with a metal blade set higher than usual to avoid scratching or grinding the pavement surface.

2. Housekeeping and Clean up
   - Quarterly use of a vacuum sweeper truck to remove sediment and debris.
   - Street cleaning activities and debris amounts collected are recorded in the AIM program.

3. Documentation
   - Recordkeeping of quarterly sweep/vacuum cleaning maintenance in AIM program as part of Parking lot and Street sweeping SOP.

4. Training
   - Responsible department supervisor will provide training on *this procedure* during new employee orientation (or within 60 days of hire). Employees who perform the included activities will review this SOP on an annual basis via the University's online training system.

Standard Operating Procedure for Power/Pressure Washing

Responsibility: Carpentry Shop

Frequency and Duration: As needed

Description: Best management practices to minimize storm water pollution when cleaning impervious surfaces/building exteriors with pressurized water.

Applicability: Carpentry shop employees preforming pressure washing.

1. Procedures
    a. Survey the area to be washed for storm drain structures (inlets, manholes, etc.); take note of the slope of the ground.
    b. Use as little water as possible to mobilize dirt/animal waste/oily residue/other detritus; scrub affected area with a broom to help remove dirt/animal waste/oily residue/etc.
    c. Direct wash water into grass, gravel, or other permeable areas; do not direct wash water into storm drain inlets, gutters, streets, or any other impervious (impermeable) surface.

2. Personal protective equipment (PPE) – the following may be necessary depending on the type and amount of material being removed and the surface being cleaned. Check with a Safety Specialist/Industrial Hygienist in EHS for guidance
    a. Respirator
    b. Goggles
    c. Gloves

3. Documentation
    a. Work orders recording in AIM system.

4. Training
    a. Responsible department supervisor will provide training on *this procedure* during new employee orientation (or within 60 days of hire). Employees who perform the included activities will review this SOP on an annual basis via the University's online training system.

Standard Operating Procedures:

Sidewalk De-icing – Snow Removal

Responsibility: Landscape Maintenance

Frequency and Duration: As needed, storm response

Description: This section contains information on proper storage and use of de-icing material in order to prevent materials from entering into a storm drain system.

Applicability: Snow removal or application of de-icing materials.

1. Preparation

    a. Store de-icing material in bags under a covered storage area or in plastic container with a lid. Store materials on impervious surfaces only.

    b. Wash out vehicles (if necessary) in approved washout rack at Motor Pool (building 309) before preparing them for snow removal.

    c. Calibrate spreaders to minimize amount of de-icing material used and still be effective.

2. Process

    a. Load material into carts while minimizing spillage.

    b. Distribute the minimum amount of de-icing material to be effective on sidewalks or stairs either by applying the de-icing material by hand or by using a truck or utility cart mount salter spreader.

    c. Park carts loaded with de-icing material inside when possible.

3. Clean-up

    a. Sweep up all spilled de-icing material around loading area.

    b. Clean out trucks after snow removal duty in approved washout rack at Motor Pool (building 309).

    c. After a storm has passed, any residual de-icing material is to be removed by sweeping.

4. Documentation

   a. Deicer that is applied to concrete sidewalks, steps and other surfaces is recorded electronically and documented after each storm by quadrant applied to and amount used.

5. Training

   a. Responsible department supervisor will provide training on *this procedure* during new employee orientation (or within 60 days of hire). Employees who perform the included activities will review this SOP on an annual basis via the University's online training system.

Standard Operating Procedures:
Snow Removal and De-Icing

Responsibility: Heavy Equipment

Frequency and Duration: As needed; storm response

Description: Best management practices to reduce the affect of snow removal operations and de-icing on the storm runoff system.

Applicability: Snow removal and de-icing of parking lots and streets.

1. Procedures
   - Volume and type of salt used is gaged on air and ground temperatures, duration of storm, time of day, and location on campus.
   - Less salt is used on straight and flat roads than on hills or in intersections. Each operator is assigned to a specific area so they can learn where more salt is required and where less will be adequate according to storm conditions.
   - Spreaders should be calibrated to minimize de-icing materials used and still be effective. Do not allow spreaders to run while vehicle is idling.
   - Plowed snow piles are put on up landscaping whenever possible for infiltration/evaporation. Extreme excess snow is hauled to the baseball lot for storage when storm volume is high.

2. Housekeeping and Clean up
   - Maintain de-icing equipment in a covered location and provide dry clean up kits for vehicle fluid leaks.
   - Stored materials are on an impervious surface. All runoff from location is directed into a storage tank.
   - Salt residue is swept back into the loading and adjacent areas after loading is complete and as weather permits.
   - After storm has passed, residual salt is swept off roadways with vac truck.

3. Documentation
   - Log for annual salt use (about 2500 tons), and use per storm are recorded and tracked in the AIM system. Materials are dispersed by quadrant system to record where the materials are being used and in what amounts.
   - Spills and spill cleanup are recorded in the AIM system notes section.

4. Training

   a. Responsible department supervisor will provide training on *this procedure* during new employee orientation (or within 60 days of hire). Employees who perform the included activities will review this SOP on an annual basis via the University's online training system.

Standard Operating Procedures:
Special Events

Responsibility: Waste Management

Frequency and Duration: As needed

Description: For special events involving masses of people.

Applicability: Clean-up and waste management from special/mass events.

1. Procedures
    a. Sufficient trash receptacles are provided and located in noticeable locations around the event area/facility.
    b. Recycling is to be encouraged through the use of announcements and placement of well-marked containers throughout the event area.
    c. A sufficient number of dumpsters and roll offs are provided for the collection of waste produced by the event. These are located as to comply with the waste collection procedure. All collection containers are removed to the landfill no later than 24 hours following the event.
    d. Dumpsters must have lids and/or other covers (such as tarps) that should be in place when the dumpster is not currently in use.

2. Housekeeping/Clean up
    a. Collection and clean-up of the event area commences directly following the event and is finished 24 hours after the event to reduce the effect on runoff.
    b. Recycling containers are collected and items processed no later than 48 hours following event.
    c. Walkways, roadways, and grounds areas affected by the event have all debris picked up 24 hours following the event.

3. Documentation
    a. Electronic spreadsheet records are kept of all recycled materials collected at the event.
    b. Electronic spreadsheet records of all charges associated with the cleanup for each event are kept.
    c. Spills or other emergency situations that could affect storm water are reported to EHS staff at event or on call personnel via campus dispatch.

4. Training
    a. Responsible department supervisor will provide training on *this procedure* during new employee orientation (or within 60 days of hire). Employees who perform the included activities will review this SOP on an annual basis via the University's online training system.

Standard Operating Procedures:

Storm Water Structures: Detention Pond, Retention Pond and Swales Cleaning

Responsibility: Landscape Maintenance, Plumbing Shop, and Heavy Equipment

Frequency and Duration: Ongoing; as needed

Description: This section contains information on the maintenance and cleaning of storm drain detention ponds and structures. This also includes what methods to use to remove sediment and debris from the structure. A record keeping process is also outlined for maintenance.

Priority Areas: The storm water structures on campus are inspected/evaluated annually and none have been identified as priority areas in need of more frequent cleaning.

Applicability: Maintenance of detention structures.

1. Preparation:
    a. Schedule the Pond cleaning work for a time when dry weather is expected.
    b. Remove any sediment, leaves, trash, or other debris from grates, placing it in a truck for disposal. Heavy Equipment is responsible for removing sediment from the inside inlets.
    c. Do a visual inspection to make sure any grates, structures, manholes, boxes, and pipes are now clean and in good working order.
    d. Pull manhole covers and grates, inspect inside of structures/boxes/pipes. The plumbing shop is responsible for the piping and the replacement of the boxes.
2. Process
    a. If necessary, clean ponds by using backhoe to remove debris, silt and sediment off the bottom.
    b. Continue cleaning structures and pond bottom as necessary by sweeping and shoveling.
    c. Place all material into a dump truck.
    d. Clean structures as described in cleaning catch basins SOP.
    e. Mow grass swales as part of regular mowing activities on campus as described in Landscaping Maintenance SOP.

3. Clean-up

   a. After cleaning the ponds, clean off any nearby concrete pads using dry methods (sweeping and shoveling).

   b. When vac truck is full of sediment take it to the bull pen area to dry.

   c. After drying, put it into a dump truck and take it to the landfill.

4. Documentation

   a. Keep records of discovered issues or maintenance in the AIM system.

   b. Keep a log of each detention basin/pond cleaned including date, estimated quantity of sediment removed by truck load, and a description of the type of debris removed.

5. Training

   a. Responsible department supervisor will provide training on *this procedure* during new employee orientation (or within 60 days of hire). Employees who perform the included activities will review this SOP on an annual basis via the University's online training system.

Standard Operating Procedures:

Sumps and Injection Wells (Includes Underground Storm Water Detention Structures)

Responsibility: Heavy Equipment

Frequency and Duration: Ongoing; Annually

Description: This section contains information on the cleaning of storm drain sumps and injection wells. This also includes what methods to use to remove sediment and debris from the structures. A record keeping procedure is also outlined for tracking the cleaning process.

Applicability: Cleaning of Sumps and Injection Wells.

1. Preparation:
    a. Clean sediment and trash off inlet.
    b. Do visual inspection of inside of sump/injection well if possible.
    c. Look for cracks, missing or broken pieces in the walls/sides of structure.
2. Process
    a. Clean using a high powered vac truck, cleaning the sides of the structure and sucking out sediment on the bottom.
    b. Remove fine sediments, leaves and other debris that might inhibit the drainage of water if the structure is designed such that the water drains out the bottom.
    c. Clean those places where to water drains if the structure is designed to drain out the sides of the sump/injection well.
    d. Clean inlets and overflow outlets.
3. Clean-up
    a. When vac truck is full of sediment take the material to the bull pen area to dry in the roll off containers at the 590 material areas.
    b. When evaporates are dry, remove with a backhoe, put it into a dump truck and take it to the landfill.

4. Documentation

   a. Keep logs of culverts/storm water pipes wells cleaned in the AIM program.

   b. Records of the amount of waste collected are kept in the AIM program.

   c. Any notes or comments of any problems are kept in the AIM program.

5. Training

   a. Responsible department supervisor will provide training on *this procedure* during new employee orientation (or within 60 days of hire). Employees who perform the included activities will review this SOP on an annual basis via the University's online training system.

Standard Operating Procedures:
Vehicle and Equipment Maintenance

Responsibility: Motor Pool

Frequency and Duration: Ongoing; As needed

Description: Procedure for the storage and maintenance of vehicles.

Applicability: Passenger vehicles and light trucks.

1. Preparation
    a. Inspect parking areas for stains/leaks on a regular basis.
    b. Provide drip pans or absorbents for leaking vehicles.
2. Process
    a. Whenever possible, store vehicles inside where floor drains have been connected to a sanitary sewer system.
    b. When inside storage is not available, vehicles and equipment will be parked in the approved designated areas.
    c. Maintain vehicles to prevent leaks.
    d. Address any known leaks or drips as soon as possible, a drip pan will be used to collect the fluids and the vehicle will be scheduled for repairs.
    g. Clean up all spills as soon as possible using dry methods.
    h. Never store leaking vehicles over a storm drain.
3. Clean Up
    a. Any leaks that are spilled on the asphalt will be cleaned up with dry absorbent; the dry absorbent will be swept up and disposed of in the garbage.
4. Training
    a. Responsible department supervisor will provide training on *this procedure* during new employee orientation (or within 60 days of hire). Employees who perform the included activities will review this SOP on an annual basis via the University's online training system.

Standard Operating Procedures:
Vehicle Washing

Responsibility: Motor Pool, Landscape Maintenance, Heavy Equipment

Frequency and Duration: Ongoing

Description: Procedure describing vehicle washing.

Applicability: Campus vehicles washed at motor pool.

1. Preparation
    a. Use either the wash racks at building 309, which is plumbed to the sanitary sewer system.

    b. No vehicle washing will be done where the drain system is connected to the storm drain system.

2. Process
    a. Minimize water and soap use as much as possible when washing vehicles.

    b. Make sure all wash water is contained on the wash pad to prevent discharge to the storm drain.

3. Clean Up
    a. Sweep wash areas after every washing to collect what solids can be collected to prevent them from washing down the drain system.

    b. Clean solids from the settling pits on an as needed basis.

4. Training
    a. Responsible department supervisor will provide training on *this procedure* during new employee orientation (or within 60 days of hire). Employees who perform the included activities will review this SOP on an annual basis via the University's online training system.

THE UNIVERSITY OF UTAH

Standard Operating Procedures:
Waste Management

Responsibility: Waste Management

Frequency and Duration: Ongoing

Description: Best management practices for the reduction or elimination of runoff contact with waste and waste receptacles.

Applicability: Trash removal and waste management throughout campus.

1. Procedures
    a. Reduction in the amount of waste collected and stored through recycling programs and placement of properly marked recycle bins in appropriate areas.
    b. Trash receptacles are located in convenient and easily observable areas. Receptacles are inspected at least annually and repaired or replaced as needed.
    c. Whenever possible dumpsters are located beneath covered structures. These areas are also not to be located near storm water drains whenever possible.
    d. All Dumpsters have lids that are to be left closed when the dumpster is not in use. Drain holes are to be sealed with rubber plugs.

2. Housekeeping/Clean up
    a. Areas around Dumpsters are clean and free of debris and trash.
    b. Garbage bins and dumpsters are emptied regularly to keep from overfilling.
    c. Lids to trash receptacles are washed on an as needed basis at the "wash rack" at Motor Pool, building 309.
    d. Issues requiring repairs are to be submitted immediately.

3. Documentation
    a. Record annual inspections, track reported issues and repairs.
    b. Document recurring problems/locations, issues, or needs.

4. Training
    a. Responsible department supervisor will provide training on *this procedure* during new employee orientation (or within 60 days of hire). Employees who perform the included activities will review this SOP on an annual basis via the University's online training system.

Standard Operating Procedures:
Graffiti Removal

Responsibility: Carpentry Shop

Frequency and Duration: As needed

Description: Removal of unwanted paint and other substances from surfaces (graffiti)

Applicability: Removal work (2 different processes) done by Carpentry shop employees.

Process for Taginator/Pressure Washer:

1. Roll on 'taginator' product on work area (https://www.taginator.com/Taginator-Graffiti-Remover-5-GAL-p/cpcp-204750.htm)
    a. This product is biodegradable and non-toxic when water makes contact with it
2. Use a minimal amount of product, just enough to get the paint off
3. Rinse into a grassy area or flower beds when available

Process for Graffiti Removal Machine/Sandblaster:

1. Uses a sealed system with very little to no waste (https://www.tornadoacs.com/graffiti-removal/). Machine uses a combination medium of crushed nut shells, silicate sand, and/or other abrasives
2. Ensure suction cup is tight to the surface before spraying surface with wand
    a. Suction cup style approx. 10in by 10in seals against surface and a wand is used to spray the medium and a vacuum sucks the medium back into the sealed system and is recycled and sent back into the system.
3. When finished check work area for any lost medium and clean up as is appropriate.
    a. Return medium into machine if possible, or dispose of medium in a dumpster

Documentation: Work orders recorded in AIM system.

Training: Responsible department supervisor will provide training on *this procedure* during new employee orientation (or within 60 days of hire). Employees who perform the included activities will review this SOP on an annual basis via the University's online training system.

Standard Operating Procedures:
Pet Waste Disposal

Responsibility: Landscape Maintenance, University Student Apartments Maintenance

Frequency and Duration: Ongoing

Description: This section contains information on the proper pickup and disposal of pet waste. Pets are, for the most part, not allowed in university spaces, with the exception of service animals. Two areas within the University MS4 have been identified as frequent dog-walking areas. Red Butte Canyon Road is an area where many members of the public may take their dogs. In addition, students may live with their service animals in the West Village Apartments and may take them out in the grassy areas outside.

Applicability: Removing and disposing of pet waste.

1. Preparation

    a) Wherever practical, install signage instructing pet owners to pick up after their pet, dispensers for pet-waste bags and provide covered, leak proof waste containers to dispose of pet waste in.

2. Process

    a) Scan the area for pet waste, especially before mowing.

    b) Pick up the pet waste and put it in a bag, take care not to touch the pet waste by either wearing disposable gloves, using a tool or putting your hand inside the bag, picking up the waste with the bag and turning the bag inside out. Tie the bag off once it is full.

3. Clean-up

    a) Dispose of the bag in a covered, leak proof waste container. If you wore gloves, dispose of them as well.

    b) Sanitize your hands immediately and wash your hands thoroughly using soap and warm water as soon as possible.

4. Documentation

    a) Document at-risk areas for possible increased inspection, signage, disposal bags and waste containers.

Current at-risk areas: Red Butte Canyon Road, West Village Apartments/Red Butte Creek fence line.

5. Training

a. Responsible department supervisor will provide training on *this procedure* during new employee orientation (or within 60 days of hire). Employees who perform the included activities will review this SOP on an annual basis via the University's online training system.

Standard Operating Procedures:
Permittee Owned Facilities Evaluation (4.2.3.3.1, 4.2.6.1, 4.2.6.2)

Responsibility: EHS and Pollution Prevention Team

Frequency and Duration: Ongoing; Annual review

Description: This section contains information on the procedure to evaluate and rate facilities and areas for their potential to contribute pollutants into the storm sewer system. The evaluated areas include but are not limited to:

- Areas with older infrastructure that are more likely to have illicit connections;
- Industrial, commercial, or mixed use areas;
- Areas with a history of past illicit discharges;
- Areas with a history of illegal dumping;
- Areas with onsite sewage disposal systems;
- Areas with older sewer lines or with a history of sewer overflows or cross-connections; and
- Areas upstream of sensitive waterbodies.
- Composting facilities
- Equipment storage and maintenance facilities
- Fuel farms
- Hazardous waste disposal facilities, waste handling and transfer facilities
- Incinerators
- Landfills
- Landscape maintenance on municipal property
- Materials storage yards
- Pesticide storage facilities
- Public parking lots
- Public golf courses
- Public swimming pools
- Public works yards
- Recycling facilities
- Salt storage facilities
- Solid waste handling and transfer facilities
- Street repair and maintenance sites
- Vehicle storage and maintenance yards
- Airports;
- Animal control facilities;
- Vehicle salvage yards;
- Chemical storage facilities; and
- Transportation hubs, including bus stations
- Permittee-owned and/or maintained structural storm water controls

Applicability: Procedure to evaluate and rate facilities.

1. Using the Permittee Owned Facility Inventory Log evaluate each facility or area. Note: The Permittee Owned Facility Inventory Log was developed by the Pollution Prevention Team (P2 Team). The facilities/areas listed in the inventory are reevaluated annually or on an as needed as part of the SWMT meeting.
    a. Note the Facility Name, Control Description, Location and Date of Evaluation.
    b. Are any of the following present and in what quantity?
        i. Sediments
        ii. Nutrients
        iii. Metals
        iv. Hydrocarbons
        v. Pesticides
        vi. Chlorides
        vii. Trash
        viii. Bacteria
        ix. Nitrogen and/or Phosphorus
        x. History of illegal dumping, illicit connects, or sewer overflows
        xi. Others
2. Based on the Evaluation, assign a rating or priority level to the facility or area. Use a high, medium or low priority level rating system based on the potential for impairment of water quality at the facility or area. Deciding factors should include (however not limited to):
    - Pollutants stored at the site (amounts, type, etc.)
    - Improperly stored materials
    - Potential pollutant-generating activities preformed outside?
    - Close proximity to water bodies (RBC)
    - Potential to discharge pollutants of concern
    - History of spills at the location (reference IDDE database as needed)
3. For those facilities or areas with a “high” priority level monthly, biannual and, annual monitoring will need to be done. Use the forms and logs found in Appendix B of the High Priority Facilities Program.

PERMITTEE OWNED FACILITY INVENTORY LOG (4.2.6.1, 4.2.6.2)

Potential Priority Facilities: Potential to Generate Storm Water Pollutants

Section 4.2.6.3 requires that the "Permittee must identify as "high-priority" those facilities or operations that have a high potential to generate storm water pollutants."

Facility Name and Location	Control Description	Priority Level (High, Medium, Low)	History of Spills, Illicit Discharge, or Illegal Dumping	Stored Pollutants Onsite	Outdoor Maintanence Activities	Close Waterbody Proximity	Common Pollutants *possibly* located onsite
Bullpen (west building 212 and 213)	Jersey barriers, covered de-icing salt storage, runoff piped to enclosed storage tanks.	H	N	Y	Y	N	Road salt, sediment
Red Butte Canyon Road	Pet waste from the public walking dogs could be an E. Coli risk	M	N	N	N	Y	E. Coli
West Village Apartments/Red Butte Creek Fenceline	Pet waste from residents walking service dogs could be an E. Coli risk	M	N	N	Y	Y	E. Coli
590 Heavy EQ. storage area	Fenced gravel yard underlined with filter fabric, sealed roll off containers.	M	N	Y	N	N	Sediments, roll off containers
Plumbing Storage (old shop)	Materials stored inside, metal and some equipment stored outside.	L	N	N	N	N	Rust flakes
Fuel Pump Station (near building 350)	Fuel stored in underground tanks, spill kits available on site.	M	N	Y	N	N	Gas/Diesel spills
Heavy Equipment Storage (parking, northwest side of 350)	Snow plows parked along with other large vecholes/misc. equipment.	L	N	N	N	N	Drips from equipment
HVAC shop (305)	Covered chemical storage, spill kit materials onsite. Work preformed inside building.	L	N	Y	N	N	Coolant, rust flakes
Mower/vechile wash rack (306)	Uncovered vehicle wash area sloped towards and into sanitary sewer system	L	N	N	Y	N	Clippings, sediment, grease or fuel drips
Motor Pool (309)	Indoor car maintenance, no outdoor activity.	L	N	Y	N	N	Oil spills, drips, etc.
Building 676	Equipment storage and small wood shop, no outdoor activitiy.	L	N	N	N	N	None
Moran Eye Center loading dock	Enclosed biohazard disposal unit at dock.	L	N	N	N	N	Drips from vehicles

water pollutants."

Facility Name and Location	Control Description	Priority Level (High, Medium, Low)	History of Spills, Illicit Discharge, or Illegal Dumping	Stored Pollutants Onsite	Outdoor Maintanence Activities	Close Waterbody Proximity	Common Pollutants *possibly* located onsite
HCI and HCH loading dock areas (east side of building)	Covered and underground, biohazard unit.	L	N	N	N	N	Drips from vehicles
SOM/Hospital Loading dock area (west side of building)	Covered and underground, biohazard unit.	L	N	N	N	N	Drips from vehicles
PCMC loading dock area (east side of building)	Dock covered.	L	N	N	N	N	Drips from vehicles
Area around art and architecture (south side of building)	No local drains, area surrounded by grass.	L	N	N	N	N	None
RBG Greenhouse (west of RBG concert venue)	Materials and work areas covered, locked cabinets or on spill trays. Spill kits on site.	M	N	Y	N	Y	Fertilizer, sediments
Campus Greenhouse (south of sage point and west of RBG Greenhouse)	Green house enclousure, fertilizer/pesticides kept in chemical cabinet.	M	N	Y	N	Y	Fertilizer, sediments
"Boneyard" storage	Signs, gates and barricades stored on site.	L	N	N	N	Y	Rust flakes
Shuttle Bus Storage lot (east of Ft. Douglas Barricks)	Spill kits available for use.	M	N	N	N	Y	Drips from vehicles
Neilsen Rehab Hospital Dock	Covered dock.	L	N	N	N	N	Drips from vehicles
Acute Care Complex (ACC) Dock	Covered dock, underground.	L	N	N	N	N	Drips from vehicles
590 (haz. waste storage facility)	Covered dock, spill clean up material on truck and in building.	M	N	Y	N	N	Haz Waste spills, drips
Landscaping waste area (southeast side of legacy bridge)	Short term storage of green (brances, rocks, etc.) waste before disposal. Vegetation/Jersey barriers	L	N	Y	N	N	Leaves, branches
South Chiller Plant Landscaping Storage	Surrounded by Jersey barriers, nearby SD has filter fabric installed, some tarps used to cover.	M	N	Y	N	N	Sediment, salt
Building 587 (CMC)	Research animal storage/labs - all interior	L	N	N	N	N	Animal Waste

University of Utah

Bullpen Stormwater Pollution Prevention Plan

2026-2031

University of Utah
"Bullpen"
High Priority Area SWPPP Summary

Description of site and possible pollutants and sources of pollution that could result in discharge:

- Salt pile and seasonal salt storage (salt)
- Material Storage piles (sediments, gravel)
- Dewatering sealed containers (excess phosphorus, nitrogen, or sediments from road debris)
- Utility Service Yard (scrap metal rust, oil/chemical residue, or coolants)

SOPs to prevent pollutant discharge:

- Material Storage Areas SOP
- Utility Service Yard Management SOP
- Parking Lot and Street Sweeping SOP
- Catch Basin and Manhole Maintenance SOP

Activity/Inspection Schedule:

- Biannual Comprehensive Inspection 1 (Jan-June)
- Biannual Comprehensive Inspection 2 (July-Dec)
- Annual wet weather (as needed/as weather permits)
- Monthly visual inspection log (monthly)
- Annual employee review of SOPs included in the HPA SWPPP

Onsite:

This document shall be tailored and retained at the "Bullpen", 710 E Guardsman's Way Salt Lake City, UT 84108. Facility contact is Todd Ryan, the Transportation/Heavy EQ Supervisor, (801)581-5359 or tryan@fm.utah.edu

The SWPPP includes a site map showing the following information:

- Property boundaries; buildings and impervious surfaces and directions of storm water flow
- Locations of structural control measures and location of nearest defined drainage(s) which could receive runoff from facility
- Locations of all storm water conveyances including ditches, pipes, basins, inlets and swales locations where the following activities are exposed to storm water
- Loading/unloading areas, waste storage or disposal areas
- Materials storage or disposal areas
- Locations where significant spills or leaks have occurred
- Locations of storm water inlets and outfalls and an approximate outline of the areas draining to each outfall
- Locations of sources of run-on to your site from adjacent property

Storm Drain Flow: Bull Pen Area



- Storm Inlets
- SLC Managed Storm Drains
- High Storm Flow Pathway
- Contours (1m)
- Buildings
- Roads
- Sidewalks
- Vegetation

0 0.0125 0.025 0.05 Miles

N

1 inch = 0.02 miles

Map Project: UTM 12N

Created By: Facilities Management, GIS

Date: 4/14/2016

Standard Operating Procedures:
Catch Basins and Storm Drain Manholes

Responsibility: Plumbing Shop for Inspection and Heavy Equipment for Maintenance

Frequency and Duration: Annually

Description: This section contains information on the cleaning of catch basins in the storm drain system in order to prevent the discharge of oils, grease, floatable trash, and other pollutants. This SOP includes the processes for the disposal of waste and the record keeping of the amounts collected (4.2.6.6.1).

Applicability: Cleaning catch basins or storm drains.

1. Preparation
    a. Clean off sediment and trash off grate.
    b. Do visual inspection on outside of grate.
    c. Make sure nothing needs to be replaced.
2. Process
    a. Clean catch basin using manual or mechanical means.
    b. For manual cleaning:
        i. Place removed material in a location protected from potential runoff.
        ii. Place spoils in vehicle for transport to disposal area.
        iii. Place spoils in material storage area of the Bullpen for dewatering if necessary before disposal.
    c. For mechanical cleaning:
        i. Use a high powered vac truck to remove sediment.
        ii. When sediment is removed use a high pressure washer to clean any other sediment out of catch basin.
        iii. After catch basin is clean, send the rodder of the vac truck downstream to clean pipe and pull back sediment that might have moved down stream of the catch basin.

3. Clean-up

   a. When vac truck is full of sediment take it to the bull pen area to dry.

   b. Material will be left to dry in a designated pan container. After drying, put it into a dump truck and take it to the landfill.

4. Documentation:

   a. Keep logs of the date and number of catch basins cleaned in AIM work orders.

   b. Record the estimated amount of waste disposed of.

   c. Keep any notes or comments of any problems as needed.

5. Training

   Responsible department supervisor will provide training (Bridge Online) on this procedure during new employee orientation (or within 60 days). This SOP will be reviewed on an annual basis as well by applicable employees (Bridge).

Standard Operating Procedure for Management of the Utility Services Yard

Responsibility: Heavy Equipment Dept.

Frequency and Duration: Ongoing

Description: Best management practices to minimize storm water pollution (4.2.6.6.1) at the "Bullpen" area.

Applicability: Storage of equipment, scrap metal, drums awaiting pickup for recycling, etc. This SOP is intended to prevent or minimize the discharge of associated stormwater pollutants such as oils, coolants, pesticides, or other constituents such as rest, sediment, etc.

1. Procedures
    a. Whenever possible stored materials are covered and/or enclosed to prevent contact with storm water.
    b. All machinery that is to be stored in this area for eventual scrap or sale shall have fuels, coolants, oil, and refrigerant removed prior to placement in this area. Materials and equipment placed in the yard are tagged with date, the fact that all fluids have been removed and reason for retention in the yard.
    c. Materials and scrap are stacked /stored in a manner to minimize surface area exposed to precipitation.
    d. Materials and scrap are free of oil/chemical residue before being placed in the yard for storage. Materials that cannot be rendered residue-free are stored indoors or under cover.
    e. Drums awaiting pickup for recycling are triple-rinsed IAW the requirements of the drum recycler, and will be marked or tagged as empty.
    f. Scrap metal is hauled away for recycling as expeditiously as possible.

2. Housekeeping and Clean-up
    a. Monthly spot check inspections by Heavy Equipment Department.
    b. Disposal of debris, waste, and accumulated garbage as needed.
    c. Street sweeping as needed to remove debris as needed.
    d. Spills are cleaned up using dry methods. Used absorbent is swept up by the end of the work day.

3. Documentation
    a. Record housekeeping and materials delivered to/removed from site via AIM work orders.
    b. Monthly spot check inspection form completed by Heavy Equipment Supervisor and kept in the "High Priority Area" SWPPP.

4. Training
    a. Responsible department supervisor will provide training (Bridge Online) on this procedure during new employee orientation (or within 60 days). This SOP will be reviewed on an annual basis as well by applicable employees (Bridge).

Standard Operating Procedures:
Material Storage Area

Responsibility: Heavy Equipment

Frequency and Duration: Ongoing

Description: Best management practices to minimize, treat, or eliminate the contact of runoff in material storage areas (4.2.6.6.1).

Applicability: Storage of materials such as sand, salt, gravel, mulch and soil at the "Bullpen" area with the intention of preventing or minimizing the discharge of these materials into the nearby storm drains.

1. Procedures
    a. Whenever possible stored materials should be covered and/or enclosed to prevent contact with storm water.
    b. When equipment or drums are stored they should be off the ground on pallets and always covered, either in a shed or with tarps. Impervious surface should be installed beneath all materials with runoff being directed away from storage areas when possible.
    c. Aggregate should be stored with same size and type being stored separately in three sided containment. Stockpiles should be maintained at a height so as not to overflow.
    d. Salt storage is located so storm water is diverted to a closed storage tank system, and the materials should be stored in a manner to minimize surface area exposed to precipitation.
    e. Temporary Salt Pile storage in the Ft. Douglas Museum Parking lot is to be maintained only during winter months (Oct-Mar) and is contained impervious berms to prevent discharge. Temporary salt pile is subject to weekly HPA inspections while in use.
    f. All storage areas should be paved to allow easy clean up and runoff control.

2. Housekeeping and Clean-up
    a. Monthly spot check inspections by Heavy Equipment Department.
    b. Disposal of debris, waste, and accumulated garbage as needed.
    c. Street sweeping as needed to remove debris.
    d. Salt pile runoff tanks are to be emptied before becoming totally full; on an as needed basis.
    e. Spills are cleaned up using dry methods. Used absorbent is swept up by the end of the work day.

3. Documentation
    a. Record housekeeping and materials delivered to/removed from site via AIM work orders.
    b. Monthly spot check inspection form completed by Heavy Equipment Supervisor and kept in the "High Priority Area" SWPPP.

4. Training
    a. Responsible department supervisor will provide training (Bridge Online) on this procedure during new employee orientation (or within 60 days). This SOP will be reviewed on an annual basis as well by applicable employees (Bridge).

Standard Operating Procedures:
Parking Lot/Street Sweeping

Responsibility: Heavy Equipment

Frequency and Duration: Quarterly, as needed after salt application

Description: Best management practices to maximize efforts in sweeping parking lots and streets as to minimize the effects of debris, sediments, and salt on stormwater runoff (4.2.6.6.1).

Applicability: Street sweeping of parking lots and streets.

1. Procedures
   - Street and Campus maps will be utilized to ensure all streets and lots are typically swept once per quarter to remove sediment, leaves, and other debris from pavement areas.
   - Sweeping of parking areas to be performed in hours or times of lowest occupancy.
   - Increase frequency of sweeping during fall months to reduce affect of leaves on runoff.
   - Utilize all safety equipment available while driving the sweeper.

2. Housekeeping and Clean up
   - Material will be dried out in a designated eco pan type container, after drying out solids will be taken to landfill.
   - Clean out areas should be swept up and kept free of debris.
   - Inspections should be performed before and after utilizing the sweeper. Maintenance will be performed as needed.

3. Documentation
   - Street cleaning activities and debris amounts collected are recorded in the AIM program.

4. Training
   - Responsible department supervisor will provide training (Bridge Online) on this procedure during new employee orientation (or within 60 days). This SOP will be reviewed on an annual basis as well by applicable employees (Bridge).

Biannual COMPREHENSIVE INSPECTION SOP
For High Priority Facilities

Responsibility: Environmental Health and Safety, Heavy Equipment Department

Frequency and Duration: Twice yearly, follow ups as needed

Description: Comprehensive reporting procedure to inspect facilities/area that have been identified as having a high potential to discharge pollutants in storm water runoff (4.2.6.5.2).

Applicability: Bullpen service yard and storage area.

PREPARATION

- ☐ Review the Bullpen Area SWPPP, take note of the following items.
  - Identify limits of area to be inspected, drains (storm and sewer), and other storm water runoff conveyance infrastructure
  - Map of location
  - Become familiar with potential pollutants at the site
- ☐ Review monthly inspection log kept by the Heavy Equipment Department.

PROCESS

- ☐ Equipment: clipboard and paper or notebook, pen, camera
- ☐ Photograph suspected and actual spills, leaks, and problem areas
- ☐ At Bullpen: Check around tanks, containers and dumpsters for spills and leaks
- ☐ Check drains and storm water conveyance structures for evidence of pollutant discharges
- ☐ Look for evidence of spills and leaks at the site
- ☐ Follow up with Heavy Equipment department for any corrective action needs
  - Corrective actions stemming from inspection must be remedied as soon as is practicable but at a minimum must be done before the next storm water event (rain fall, snow melt, etc.)
- ☐ Review the High Priority Area list annually and update when necessary.

DOCUMENTATION

- ☐ Fill out a Comprehensive Inspection form for facility
- ☐ Document the inspection was complete on the SWMP, document all corrective actions taken and dates
  - Period 1 (Jan-June): EHS
  - Period 2 (July-December): EHS

Biannual COMPREHENSIVE INSPECTION FORM (4.2.6.5.2)

For High Priority Facilities

Personnel shall conduct biannual comprehensive inspections at "High Priority Areas" as specified in the Biannual Inspection SOP in Appendix B of the SWMP. Corrective actions stemming from this inspection must be remedied as soon as practicable but at a minimum before the next stormwater event (rain, snow melt, etc.).

Facility Name: Bullpen service yard Evaluation date:_____ Corrective Action Deadline: _____

Checklist:	Y/N	Comments or corrective actions taken:	Corrective action date
Salt Pile well contained and properly stored?			
Storm drains clean and free of debris?			
Material piles neat and properly stored?			
Is the area free of visible leaks or spills?			
Is waste properly disposed of in dumpster?			
Are the dumpsters in good repair?			
Is the area free of unidentified materials?			
Is salt runoff tank in good repair and free of leaks?			
Is the general housekeeping acceptable?			
SWPPP and monthly inspections reviewed?			

This report shall be made and retained as part of the Storm Water Pollution Prevention Plan.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name of Examiner_____ Title_____

Signature_____ Date_____

Monthly VISUAL INSPECTION SOP
For High Priority Facilities

Responsibility: Heavy Equipment Department

Frequency and Duration: Ongoing; Monthly

Description: Monthly inspection procedure to spot check the Bullpen service yard and storage area which has been identified as having a high potential to discharge pollutants in storm water runoff (4.2.6.3).

Location: West of building 213.

Applicability: Bullpen service yard and storage area

PROCESS

- Check around tanks, containers and dumpsters and equipment for spills and leaks
- Check drains and storm water conveyance structures for evidence of pollutant discharges and/or litter
- Check salt pile to ensure adequate containment
- Check salt tanks for overflow or other non-containment
- Be observant for other pollutants that might affect the storm sewer system

DOCUMENTATION

- Fill out High Priority Facilities Monthly Inspection Log for facility.
- If a deficiency is found make note on the High Priority Facilities Monthly Inspection Log and contact Environmental Health and Safety for assistance with spill abetment and follow up as needed.
    - Corrective actions stemming from inspection must be remedied as soon as is practicable but at a minimum must be done before the next storm water event (rain fall, snow melt, etc.)
- Provide EHS with electronic copy of Monthly Inspection Log annually by email.

Monthly Utility Service Yard (Bullpen) Evaluation

The Heavy Equipment Department conducts a comprehensive visual storm water pollution prevention evaluation of University Bullpen service yard and storage area monthly (4.2.6.4.1). Corrective actions stemming from this inspection must be remedied as soon as practicable but at a minimum before the next stormwater event (rain, snow melt, etc.).

Date: **Inspector Name:**

Item Evaluated	Y or N	Deficiencies/Comments	Corrective Actions taken + completion date
Containers and dumpsters in good repair?			
Is waste disposed of properly?			
Are storm drains free of debris?			
Is the area well swept and clean?			
Is the salt pile adequately contained?			
Is area free of other spills or leaks?			
Is salt runoff tank in good condition and free of leaks?			

Date: **Inspector Name:**

Item Evaluated	Y or N	Deficiencies/Comments	Corrective Actions taken + completion date
Containers and dumpsters in good repair?			
Is waste disposed of properly?			
Are storm drains free of debris?			
Is the area well swept and clean?			
Is the salt pile adequately contained?			
Is area free of other spills or leaks?			
Is salt runoff tank in good condition and free of leaks?			

ANNUAL WET WEATHER SCREENING SOP
For High Priority Facilities

Responsibility: Environmental Health and Safety

Frequency and Duration: Annually

Description: Wet weather screening procedure (4.2.6.5.3).

Applicability: Bullpen service yard and storage area, West Village Apartments fence line, Red Butte Canyon Road.

Pre-inspection Items

- ☐ Map Outfalls
- ☐ Develop outfall inspection priority schedule
- ☐ Equipment:
  - Clear sampling jar
  - Map showing location
  - Visual monitoring report form
  - Camera

Inspection

- ☐ Check for wet weather discharge
- ☐ If discharge is present – pull sample
- ☐ Follow procedures on visual monitoring form
- ☐ Photo document findings if needed
- ☐ If there is cause for concern move to inspection follow up procedures

Inspection Follow-Up Procedures

- ☐ File any Photos
- ☐ Call health department and report findings
- ☐ Find last manhole with any evidence of illicit discharge
- ☐ Inspect area for spills/possible sources or suspects
- ☐ If determination cannot be made from the surface investigations contact plumbing shop for possible drain system inspection

Annual WET WEATHER VISUAL STORM WATER DISCHARGE MONITORING INSPECTION FORM (4.2.6.5.3)

Date of Examination: _____ Permit No. UTR : 090024_____

Outfall location: Bullpen service yard and storage area

Nature of Discharge (i.e., runoff, land drain, irrigation or snowmelt): _____

Type of Monitoring:

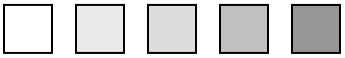
Wet Weather Screening (Annual Min.)
☐ Rainfall Event
Date of Rainfall Event:_____
Time of Event:_____
Precipitation:_____
☐ Unable to collect sample due to adverse conditions or inadequate runoff.

Visual Quality of Storm Water Discharge: (circle response)

At Time of Sampling:

Color: clear brown green rust other: _____

Odor: Yes / No

Clarity: 

Floating Solids: Yes / No

Foam: Yes / No

After One Hour of Settling:

Settled Solids: Yes / No

Suspended Solids: Yes / No

Oil Sheen: Yes / No

Other obvious indicators of storm water pollution: _____

_____

Probable sources of any observed storm water contamination: _____

_____

Identified Deficiencies: _____

_____

Corrective Actions: _____

_____

Name of Examiner_____ Title_____

Signature_____Date_____

Appendix C

Construction and Post-Construction Program:

- **Construction Site Storm Water Runoff Control (MCM 4)**
  - **Construction Site Inventory Example**
  - **Construction Run-Off Control Program SOP**
  - **SWPPP Review for Project Sites >or =1 acre SOP**
  - **SWPPP Review Checklist Example**
  - **Construction Site Inspection SOP**
  - **Inspection Form (Template)**
  - **Construction Enforcement SOP**
  - **CGP Excerpts for Construction Site Enforcement**
  - **Contract Provision Excepts for Escalating Enforcement**
  - **Notice of Termination Process SOP**
  - **Campus Master Plan Example**

- **Long-Term Storm Water Management (MCM5)**
  - **Campus Design Standards (Website Example)**
  - **Campus Design Standards - Stormwater Excerpts**
  - **A/E Technical Basis data template form**
  - **Project Manager PostCon data template form**
  - **Long Term Flood Control Device Inventory**
  - **Long Term Flood Control Device Inspection Forms**
  - **Substantial Completion Punch-list Example**

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
1							Construction Site Inventory												
2																			
3	**Projects Greater than 1 acre**																		
4	**Project Name**	**Adequate Compliance History? (Y or N)**	**Frozen Conditions? (Y or N)**	**Permit Start Date**	**Permit End Date**	**NOT**	**Acreage**	**Prioity Site**	**Frequency**	**Project Number**	**Project Manager**	**office #**	**Contractor**	**SWPPP review**	**SWPPP Training**	**SWPPP Access**	**Contact onsite**	**phone #**	**email**
5																			
6	Interdisciplinary Computing Building	Y	N	5/4/2024	4/29/2027		Greater than	n	Annually	UTRC08745	Brett Petersen	801-581-8083	Okland	5/6/2024		https://app.compliancego.com/site/dc868f31-6f70-489d-b935-	Adam Douglass	801-386-3979	adam.douglass@okland.com
7	HCH Proton Therapy Vault 2	Y	N	5/11/2026	5/10/2027		1	n	Annually	UTRC12811	Nils Eddy	801-585-9368	Jacobsen	5/15/2026		https://app.compliancego.com/site/8105acdb-0c09-40ec-af84-	Justin Giles	801-381-4621	justin@jbuild.com
8	College Town Magic South Campus Parking Garage	Y	N	8/14/2026	8/13/2027		5.42	n	Annually	UTRC13389	Jonathan Miller	801-213-7144	Okland	8/14/2026		https://app.compliancego.com/site/04f8eb7b-9f5d-4a16-8192	Alex Schreyer	801-440-3547	alex.schreyer@okland.com
9	U Health Main Hospital ED Expansion	Y	N	9/11/2026	9/10/2027		2	n	Annually	UTRC13540	Joseph Cronin	801-699-6055	Jacobsen	9/22/2026		https://app.compliancego.com/site/aa98422b-8977-4d51-95b	Cory Hawke	801-971-1544	chawke@jbuild.com

Standard Operating Procedures:
Construction Run-Off Control Program

Responsibility: Environmental Health and Safety Department (EHS), Construction Project Delivery (CPD) – Project Manager

Frequency and Duration: Ongoing, as needed

Description: Construction site permitting process

Applicability: Construction sites 1 acre or larger

Sites Larger than 1 acre

1. Projects must file a Notice of Intent (NOI) with the Utah Department of Water Quality and submit a Storm Water Pollution Prevention Plan using the State SWPPP template to the University of Utah, Environmental Health and Safety Department for review and approval. Construction operators obtain and maintain coverage under the current UPDES Storm Water Permits for Construction Activities for the duration of the project.
2. After the SWPPP has been submitted to EHS staff will schedule Pre-Construction training with the site superintendent and any other required contractor staff.
3. Monthly site inspections (bi-monthly if site is identified as a priority site), plus any follow up inspections will be conducted as needed. Inspections are electronically recorded and archived via the EHS L: drive server in PDF format with a picture log, and email receipt confirmations included in a single file.
4. Post-construction plan review and approval (requires both review for goals/intent and engineering calculation review) conduction by the Construction Project Delivery Project Manager as per the design requirements, Civil 3.2 “Storm Drainage”. Project A/E designer must fill out and submit ‘Project Stormwater Infrastructure Flow & Quality Design Basis’ form to CPD.
5. Inspection of permanent structural BMPs done during installation by Construction Project Delivery Project Manager using the “Project Punch-list”, notation only made if installation done incorrectly or a change order is required.
6. Notice of Termination (NOT) must be filed by the Operator (contractor) online with the DWQ. A post-construction inspection will be conducted by EHS staff and then the NOT will be confirmed electronically.
7. Document all reviews, inspections, corrective actions and enforcement actions in the EHS report system.

Standard Operating Procedures:
Storm Water Pollution Prevention Review
For Project Sites Disturbing Greater Than or Equal to (1) Acre

Responsibility: Environmental Health and Safety Department

Frequency and Duration: As needed

Description: Procedure for reviewing SWPPPs (4.2.4.3, 4.2.4.3.1, 4.2.4.3.2, 4.2.4.3.3).

Applicability: SWPPP review at construction sites greater than 1 acre in size.

1. Projects must use the Storm Water Pollution Prevention Plan (SWPPP) template found at the Utah Division of Water Quality (DWQ) website. SWPPP will be reviewed using the University's SWPPP review checklist.

2. Submit the project SWPPP to the Environmental Specialist. via tyler.fredsall@ehs.utah.edu, EHS will respond within one week to let the contractor know if it is approved, or if they need to make changes before receiving approval. Once approved (and certified as received by the State office) the contractor can apply for the construction permit from the DWQ using the online Notice of Intent (NOI) system.
http://www.deq.utah.gov/Permits/water/updes/stormwatercon.htm

3. Schedule a time with the EHS Environmental System Admin., at 801-581-4264, for the superintendent and the personnel responsible for inspections and maintenance of BMPs for a preconstruction meeting, review of the SWPPP, and training session. The personnel responsible for BMPs are to be identified in the SWPPP.

4. Contractors must have SWPPP approved by EHS and install the BMPs listed in the SWPPP on the site before breaking ground.

5. Most construction sites 1 acre or larger will be inspected at least once each month (bi-monthly if site is identified as a priority site as per 4.2.4.3.2). Verbal and written feedback will be given when the inspector observes a release or an imminent release of pollutants from the construction site. An electronic copy of the inspection report will be sent to the construction contractor and the University Project Manager (if there is a corrective action notice) within one working day of the inspection.

6. Priority construction sites will be identified in consideration of the following factors at a minimum: soil erosion potential; site slope; project size and type; sensitivity of receiving waterbodies (impaired or high quality waters); proximity to receiving waterbodies; and, non-storm water discharges and past record of non-compliance by the operators of the construction site. *Sites adjacent to Red Butte Creek are the highest concern*.

Additional Information: http://www.deq.utah.gov/Permits/water/updes/stormwatercon.htm

- State SWPPP Template
- Notice of Intent form (NOI) and Notice of Termination form (NOT)
- Stormwater menu of BMPS
- UPDES Storm Water General Permit for Construction Activities

EHS Construction Project Checklist – SWPPP

Projects Larger than 1 Acre of Disturbance (to be initiated before breaking ground)

- Project Contractor must file a Notice of Intent (NOI) with the Utah DEQ using the DEQ-supplied template. Contractor will be signing the NOI as the Operator, and the University Project Manager will be signing as the Owner.
- Before filing with UDEQ, Contractor must provide a Draft SWPPP to EHS (Tyler.Fredsall@EHS.Utah.edu) for a completeness review. This will be done in the form of an EHS-generated checklist.
- With that step completed, Contractor may proceed to upload their NOI documentation for UDEQ approval.
- Once the Contractor has successfully uploaded their documentation to UDEQ, the Contractor must contact EHS to schedule trainings and site walk through.
- General Contractor and relevant SW subcontract staff must then take the EHS pre-construction SWPPP training provided by EHS.
- This training will be coordinated with EHS, who will provide a link to the training, and who must receive an attendance and completeness record from the Contractor team.
- Contractor must then schedule a pre-construction site walk with EHS to review installed BMPs before construction starts.

Projects Smaller than 1 Acre of Disturbance

- No NOI or SWPPP reviews are required, HOWEVER
- Discharge of pollutants is still prohibited by State and Federal law
- Project should have a pollution prevention plan and installed BMPs as needed

A more detailed description of this process is provided in EHS SOP "Storm Water Pollution Prevention Review for Project Sites Disturbing Greater Than or Equal to (1) Acre", Appendix C, of the University's Storm Water Management Plan 2026-2031

STORM WATER POLLUTION PREVENTION PLAN (SWPPP) COMPLIANCE EVALUATION FORM for UPDES CONSTRUCTION GENERAL PERMIT (CGP) UTRC00000

Site Name: _____ UPDES Permit #: _____

SECTION 1: Instructions for SWPPP Evaluations

1) The SWPPPs being reviewed with this document are evaluated for their compliance with the corresponding UPDES construction storm water discharge permit; for additional information on those permits, go to the DWQ construction storm water permitting webpage: https://deq.utah.gov/water-quality/general-construction-storm-water-updes-permits.
2) The appropriate permit is identified by the applicant during permitting but must be confirmed by evaluation in Section 2 of this form (see below), to demonstrate applicability of coverage under either of the UPDES construction storm water permits:
   a) Construction General Permit (CGP), UTRC00000 (viewable through this link)
   b) Common Plan Permit (CPP), UTRH00000 (viewable through this link)
3) If the appropriate UPDES permit has been selected for coverage and the SWPPP has been submitted for review with a complete application, then the SWPPP evaluation must move forward; use the "SWPPP Review #" field to document whether it is the 1st, 2nd (or more) evaluation, and use the "Review Start Date" and "Review Complete Date" fields in Section 3 to document the timeliness of reviews.
4) Per Utah Code Title19-Chapter5-Section108.3(6)(b), the SWPPP reviewer shall complete the first review of the SWPPP within 14 business days after the day on which the applicant submits a complete SWPPP and application for local storm water permit coverage (if local permit coverage is required).
5) A "No" answer for any questions in the following SWPPP Evaluation will amount to an incomplete SWPPP and will be returned for modification. UPDES Permit citations are provided in (**parenthesis**). Questions answered "N/A" (not applicable) do not affect the approval of the SWPPP. The final question on both forms is an internal question for MS4s and does not affect approval.
6) Per Utah Code Title19-Chapter5-Section108.3(6)(c), any non-compliance in the SWPPP (which requires modification to bring the SWPPP into compliance) requires a specific request for modification to be provided to the applicant; such requests must be thorough such that they will bring the SWPPP into compliance upon correction, and must include citations to local ordinances or state/federal law that require the modification. Furthermore, these requested modifications must be logged in an index of requested modifications. Space is provided for listing modifications or can be attached separately.
7) Per Utah Code Title19-Chapter5-Section108.3(6)(d), the SWPPP reviewer has 5 business days after the day on which the operator submits the modified SWPPP to complete the review of the SWPPP. Once the review of the plan is complete, the reviewer must notify the applicant, in writing, whether the authorization to discharge is granted.

NOTE: Pre-Construction SWPPP Review Checklists are a requirement of all UPDES MS4 Permits (Part 4.2.4.3). As such, utilizing these SWPPP Evaluation forms will meet that requirement. Operators and SWPPP Developers can utilize these forms to ensure compliance prior to submitting.

SECTION 2: Confirmation of Appropriate UPDES Construction Storm Water Permit Coverage

1) Will the project disturb at least 1-acre of land? **(CGP Part 1.1.2 and CPP Part 1.1)** **Yes** ☐ | **No** ☐

2) Is the project part of a Common Plan of Development or Sale (CPoD) that will collectively disturb at least 1-acre of land? **(CGP Part 1.1.2 and CPP Part 1.1)** **Yes** ☐ | **No** ☐

3) If CPoD, is the lot a single residential lot no more than 1-acre of disturbance? **(CPP Part 1.1)** **Yes** ☐ | **No** ☐ **N/A** ☐

How to determine appropriate UPDES construction storm water permit coverage:

- If "**No**" to both questions **#1** and **#2,** then **no UPDES construction storm water permit is required.**
- If "**Yes**" to question **#1** and "**No**" to question **#2**, then the project **must obtain CGP (UTRC00000) coverage** and **Section 3** of this evaluation form would be applicable for SWPPP review.
- If "**Yes**" to both questions **#1** and **#2,** and "**No**" to question **#3,** then the project **must obtain CGP (UTRC00000) coverage** and **Section 3** of this evaluation form would be most applicable for SWPPP review.
- If "**Yes**" or "**No**" to question **#1** (the threshold for **CPP** coverage is 1-acre or less) and "**Yes**" to both questions **#2** and **#3**, then the project **may obtain CPP (UTRH00000) coverage** and the **CPP SWPPP Evaluation form** would be applicable for SWPPP review; **however** the CPP allows only one lot per permit, so if multiple lots in the CPoD will be developed, the operator **may choose to obtain separate CPP coverage for each lot or cover multiple lots under one CGP (UTRC00000) permit,** in which case **Section 3** of this form would be applicable for SWPPP review.
  - **NOTE: Commercial Common Plans of Development or Sale must be covered under the CGP (UTRC00000).**
- As such, if "**No**" to question **#1**, "**Yes**" to question **#2,** and "**No**" to question **#3** (**or the project desires to cover multiple 1-acre or less residential lots under a single permit**), then the **CPP (UTRH00000) is not valid** and the project **must obtain CGP (UTRC00000) coverage** and **Section 3** of this evaluation form would be applicable for SWPPP review.

4) At the completion of Section 2, has the appropriate UPDES Construction Storm Water Permit coverage been verified? **NOTE:** If "**No**", then the SWPPP must be resubmitted with the appropriate permit coverage selected, incorporated into the plan, and obtained (unless reviewing prior to obtaining permit coverage, in which case coverage must be obtained prior to beginning land disturbance). **Yes** ☐ | **No** ☐

If "**Yes**" to question **#4, complete the review of the submitted SWPPP for the appropriate UPDES Construction Storm Water Permit coverage** using the **Section 3 of this evaluation form (for CGP)** or **the CPP Evaluation form (for CPP), respectively. Always fill out a new form for each review cycle, and retain previous forms to document progression.**

Signatures fields are included in the respective SWPPP review sections of this document; always sign and date to ensure timeliness of reviews.

UPDES CONSTRUCTION GENERAL PERMIT (CGP) UTRC00000
STORM WATER POLLUTION PREVENTION PLAN (SWPPP) EVALUATION FORM
SECTION 3

SWPPP Review # (1st, 2nd, 3rd, etc.): _____ Review Start Date: _____ Review End Date: _____

Site Name: _____ UPDES Permit #: _____

Site Address: _____

Local Jurisdiction or County: _____ Total Project Area (acres): _____ Total Disturbed Area (acres): _____

Permit Effective Date: _____ Permit Expiration Date: _____

Project Type: Residential/Subdivision ☐ Commercial ☐ Industrial ☐ Linear (Road/Pipe/Power) ☐ Land Disturbance ☐

OPERATOR CONTACT INFORMATION

Operator: _____ Phone: _____ E-mail: _____

On-site Facility Contact: _____ Phone: _____ E-mail: _____

Important Contact: _____ Phone: _____ E-mail: _____

Owner: _____ Phone: _____ E-mail: _____

CONSTRUCTION GENERAL PERMIT (CGP) SWPPP EVALUATION (with Citations)

1) Is the Storm Water Team (including other site Operators) identified by name and position in the SWPPP, including their SWPPP responsibilities and trainings? (**CGP Part 7.3.1**) **NOTE:** Storm Water Team responsibilities that must be included (CGP Part 6.1): **(1)** design, installation, maintenance, and/or repair of storm water controls (including pollution prevention controls); **(2)** application and storage of treatment chemicals (if applicable); **(3)** conducting inspections (CGP Part 4.1); and **(4)** taking corrective actions (CGP Part 5) — **Yes** ☐ **No** ☐

2) For any Storm Water Team member identified as being responsible for conducting inspections (CGP Part 4), has the SWPPP detailed their training/qualifications for conducting inspections in compliance with CGP Part 6.3? (**CGP Part 7.3.1**) — **Yes** ☐ **No** ☐

3) Are estimates provided for the size of the property (in acres, or length in miles if a linear site) and the total area to be disturbed by construction (including on-site and off-site support activity areas) to the nearest 1/4 acre (or 1/4 mile if linear)? (**CGP Part 7.3.2.b-c**) — **Yes** ☐ **No** ☐ **N/A** ☐

4) Does the plan describe the nature of construction activities, including the age or dates of past renovations for structures undergoing demolition (CGP Part 7.3.2.a) — **Yes** ☐ **No** ☐

5) Does the plan describe any on-site and off-site construction support activities areas (CGP Part 1.2.1.b)? (**CGP Part 7.3.2.d**) — **Yes** ☐ **No** ☐ **N/A** ☐

6) Is there a description of the construction schedule for: **(1)** commencement of activities, **(2)** temporary/permanent cessation of construction activities, **(3)** temporary/final stabilization of exposed areas of the site, and **(4)** removal of temporary storm water controls and construction equipment or vehicles and the cessation of construction related pollutant-generating activities. (**CGP Part 7.3.2.e(1-4)**) — **Yes** ☐ **No** ☐

7) Are the business days and hours for the project identified in the SWPPP? (**CGP Part 7.3.2.g**) — **Yes** ☐ **No** ☐

8) Is a legible Site Map (or maps) included (in an attachment of the SWPPP) which shows the permit-required features of the site? (**CGP Part 7.3.3.a-i**) **NOTE**: Required map features include: (**a**) boundaries of the property; (**b**) locations where construction activities will occur, including: **i)** earth-disturbing and demolition activities (phasing noted), **ii)** approximate slopes before and after grading (steep slopes noted), **iii)** stockpile locations (sediment, soil, materials, etc.), **iv)** any Waters of the State crossings, **v)** designated vehicle exit points (onto paved roads), **vi)** structures and other impervious surfaces upon completion of construction, **vii)** on-site and off-site construction support activity; (**c**) all Waters of the State within 1-mile of the site's discharge point (and the impairment/high-quality status of the water body); (**d**) type and extent of pre-construction ground cover; (**e**) drainage patterns of storm water and authorized non-storm water before and after grading; (**f**) storm water and authorized non-storm water discharge locations (including discharges to storm sewer inlets and outfalls to Waters of the State); (**g**) pollutant-generating activities (CGP Part 7.3.2.f); (**h**) storm water controls (including natural buffers and shared controls); (**i**) storage of polymers, flocculants, or other treatment chemicals. — **Yes** ☐ **No** ☐

9) Are the first downstream receiving waters of the state listed in the SWPPP, NOI, or the Site Map identifying the impairment (and TMDL status) or high-quality (Category 1 or 2) status of the water body? (**CGP Part 3.2 and 7.3.3.c**) — **Yes** ☐ **No** ☐ **N/A** ☐

10) If the receiving water is identified as impaired (particularly for sediment or nutrients, and especially if it has an EPA-approved TMDL), does the SWPPP list the impairment causing pollutants for the water body, and does it address the control of those impairment causing pollutants in the plan (if those pollutants are anticipated to be present on-site)? (**CGP Part 3.2**) — **Yes** ☐ **No** ☐ **N/A** ☐

11) If the receiving water is identified as high-quality, does the plan describe precautions taken to minimize pollution effects in the water body? (**CGP Part 3.2**) — **Yes** ☐ **No** ☐ **N/A** ☐

12) Are all potential pollutant-generating activities listed, with the pollutants/constituents listed and their locations identified either by description or reference to the site map? (**CGP Part 7.3.2.f**) — **Yes** ☐ **No** ☐

CONSTRUCTION GENERAL PERMIT (CGP) SWPPP EVALUATION (continued)

13) For each potential pollutant and/or pollutant-generating activity listed, does the SWPPP include: a description of the specific controls to meet requirements of the CGP (CGP Part 2.2 and 2.3), the design specifications (with reference to manufacturer or BMP manuals/ ordinances being followed), routine maintenance specifications, and the projected schedule for installation/implementation? (**CGP Part 7.3.5.a**) — Yes ☐ | No ☐

14) Are the presence/absence of all authorized non-stormwater discharges (CGP Part 1.2.2) identified, with a description of measures used to reduce them or prevent them from contributing pollutants to discharges (CGP Part 2) ? (**CGP Part 7.3.4**) — Yes ☐ | No ☐

15) If the project identifies dewatering as a pollutant-generating activity, does the plan describe the scope of dewatering and the BMPs used to manage those practices? (**CGP Part 7.3.2.f**) **NOTE**: UPDES Permit coverage for dewatering (and approval from local authorities) must be obtained prior to discharging from dewatering; can be obtained after SWPPP approval. (**CGP Part 1.2.4 and 2.3.7**) — Yes ☐ | No ☐ | N/A ☐

16) If the project is within 50 feet of a Water of the State (CGP Part 2.2.1 and A.1), was the selected natural buffers compliance alternative (CGP Part A.2.1), or exception (CGP Part A.2.2) identified, and were the required descriptions of equivalent sediment controls, alternatives, and/or infeasibility provided? (**CGP Part 7.3.5.b.(1) and A.2.3.**) — Yes ☐ | No ☐ | N/A ☐

17) Are the selected BMPs for erosion and sediment control (per CGP Part 2.2) identified and described with design specifications and instructions for installation, maintenance, and the projected schedule for implementation either in the main body of the SWPPP or as an attachment? (**CGP Part 7.3.5.a**) **NOTE**: CGP requires the following elements to be addressed in the SWPPP: **(a)** Preserve vegetation where possible (**CGP Part 2.2.2**); (**b**) Install sediment controls along downslope perimeter areas (**CGP Part 2.2.3**); (**c**) Minimize sediment track-out (**CGP Part 2.2.4 and 7.3.5.b.(3)**); (**d**) Manage stockpiles with perimeter controls and locate away from storm water conveyances (**CGP Part 2.2.5**); (**e**) Minimize dust (**CGP Part 2.2.6**); (**f**) Minimize steep slope disturbances (**CGP Part 2.2.7**); (**g**) Preserve topsoil (**CGP Part 2.2.8**); (**h**) Minimize soil compaction where final cover is vegetation (**CGP Part 2.2.9**); (**i**) Protect storm drain inlets (**CGP Part 2.2.10**); (**j**) Slow down runoff with erosion controls and velocity dissipation devices (**CGP Part 2.2.11**); (**k**) Appropriately design any sediment basins or impoundments (**CGP Part 2.2.12 and 7.3.5.b.(4)**); (**l**) Follow requirements for any treatment chemicals (**CGP Part 2.2.13**); (**m**) Stabilize exposed portions of site with 30-days of inactivity (**CGP Part 2.2.14**) — Yes ☐ | No ☐

18) If the project is linear (per CGP Part 2.2.3), are the areas where perimeter controls are not feasible documented (to support the determination) and are the other practices being implemented to minimize pollutant discharges described? (**CGP Part 7.3.5.b.(2)**) — Yes ☐ | No ☐ | N/A ☐

19) Are the specific vegetative/non-vegetative final stabilization measures (CGP Part 2.2.14) described, including location information and deadlines for implementation in accordance with CGP Part 2.2.14.a.? (**CGP Part 7.3.5.b.(6)(i-ii)**) — Yes ☐ | No ☐

20) Are spill prevention and response procedures (CGP Part 1.3.5 and 2.3.6) included that have procedures and responsible parties identified for stopping, containing, cleaning, and reporting spills, leaks and other releases (including notification of appropriate parties if the release contains a hazardous substance or reportable quantity)? (**CGP Part 7.3.5.b.(7)(i-iii)**) — Yes ☐ | No ☐

21) Are the selected BMPs for pollution prevention control (per CGP Part 2.3) identified and described with design specifications and instructions for installation, maintenance, and the projected schedule for implementation? (**CGP Part 7.3.5.a**) **NOTE**: CGP requires the following to be described in the SWPPP: **(a)** Equipment and vehicle fueling (**CGP Part 2.3.1**); **(b)** Equipment and vehicle washing (**CGP Part 2.3.2**); **(c)** Storage, handling, disposal of building products and wastes (**CGP Part 2.3.3**); **(d)** Washing of stucco, paint, concrete, form release oils, curing compounds, etc. (**CGP Part 2.3.4**); **(e)** Properly applying fertilizers (**CGP Part 2.3.5**) — Yes ☐ | No ☐

22) Are waste management procedures (CGP Part 2.3.3) described for handling, storing, and disposing of wastes generated on-site, including documented infeasibility and alternative practice statements for violating setback requirements (CGP Part 2.3.3.c(2)(ii)) or claims of exceptions from CGP Part 2.3.3.e? (**CGP Part 7.3.5.b.(8)(i-ii)**) — Yes ☐ | No ☐

23) If the project is claiming to be an "Emergency-Related construction activity" for the special condition allowing for work to begin prior to permit issuance, does the plan include a description of the nature of the public emergency and why immediate authorization was necessary? (**CGP Part 1.4.1.b**) — Yes ☐ | No ☐ | N/A ☐

24) If treatment chemicals (CGP Part 2.2.13) are planned for the project, are the required elements described [soil types on-site and from fill materials, list of treatment chemicals planned and justification that they are suitable for the site's soil characteristics, dosage of treatment chemicals or the methodology used to determine dosage, information from Safety Data Sheets (SDS), schematic drawings of enhanced controls or treatment systems, description of storage of chemicals (CGP Part 2.2.13.c), references to applicable local requirements for the use of these chemicals, copies of manufacturers specifications regarding their use, and any training that personnel who handle and apply chemicals have received prior to use of those chemicals? (**CGP Part 7.3.5.b.(5)(i-ix)**) — Yes ☐ | No ☐ | N/A ☐

25) Are the inspection, maintenance, and corrective actions procedures detailed in the plan (per CGP Part 2.1.4, Part 4, and Part 5), including the inspection schedule (CGP Part 4.2, Part 4.3, or Part 4.4), the location of the rain gauge or address of the weather station for rainfall monitoring (if applicable to the schedule), and any maintenance or inspection checklists or forms? (**CGP Part 7.3.6.a-d**) — Yes ☐ | No ☐

26) If the project discharges to a water body that is either impaired (for sediment or nutrients) or high-quality (CGP Part 3.2), is the increased inspections frequency of every 7 calendar days and within 24-hours of a 0.5-inch storm event selected? (**CGP Part 7.3.6.a and Part 4.3**) — Yes ☐ | No ☐ | N/A ☐

27) Is the reduced inspections frequency for stabilized areas, arid/semi-arid/drought-stricken areas, or frozen conditions selected with appropriate description and documentation of the applicability of that frequency? (**CGP Part 7.3.6.c and Part 4.4**) — Yes ☐ | No ☐ | N/A ☐

28) Was the SWPPP certified by the duly authorized signatory of the operator ? (**CGP Part 7.3.8 and Part 9.9.2**) — Yes ☐ | No ☐

CONSTRUCTION GENERAL PERMIT (CGP) SWPPP EVALUATION (continued)

29) If the project is >5-acres in disturbance, has a perennial surface water within 50 feet of the project, or has a steep slope (70% or 35 degrees, or more), was the SWPPP certified by a "qualified" SWPPP writer? (**CGP Part 7.2 and 7.2.1.a-e**) **Yes** ☐ **No** ☐ **N/A** ☐

30) Is a copy of the NOI that was submitted via the CDX NeTCGP for this project included in the SWPPP? (**CGP Part 7.3.9.a.**) **NOTE:** This would not be applicable if the SWPPP is being reviewed prior to the operator obtaining permit coverage. **Yes** ☐ **No** ☐ **N/A** ☐

31) Is a copy of the Authorization to Discharge Letter received from NeT (with the assigned NPDES ID) included in the SWPPP? (**CGP Part 7.3.9.b.**) **NOTE**: This would not be applicable if the SWPPP is being reviewed prior to the operator obtaining permit coverage. **Yes** ☐ **No** ☐ **N/A** ☐

32) Is a copy of the UPDES Construction General Permit (UTRC00000) included in the SWPPP, or a link by which the permit can be easily accessed by the storm water team if managing the SWPPP electronically? (CGP Part 7.3.9.c.) **Yes** ☐ **No** ☐

33) At the completion of this review, is the SWPPP approved and accepted as being in compliance with storm water regulations? NOTE: If not, specific comments will be provided below (or attached on a separate sheet if corrections are longer than the space provided) to clearly state why the SWPPP is non-compliant and logged in an index of modifications that includes citations to the permit requirements, local ordinances, state law, or federal law that require the modification. (Utah Code 19-5-108.3(6)(c)) **Yes** ☐ **No** ☐

34) Is this site designated by the MS4 as "Priority" based on the following factors: Soil erosion potential; Site slope; Project size and type; Sensitivity of receiving water bodies (impaired or high-quality waters); Proximity to receiving water bodies; or, Non-storm water discharges and past record of non-compliance by the operators of the construction site? **NOTE:** This is an internal question for MS4s to meet MS4 Permit requirements for prioritizing certain construction sites for increased inspections and does not affect the approval of the SWPPP. (**MS4 Permit Part 4.2.4.3.5**) List the applicable prioritizing factors: _____ **Yes** ☐ **No** ☐ **N/A** ☐

INDEX OF COMMENTS AND CORRECTIONS (WITH CITATIONS) FOR ACHIEVING SWPPP COMPLIANCE
(attach an additional comments page if more space is needed)

Reviewer (*Print Name*): _____ Title: _____ Signature: _____ Date: _____

Standard Operating Procedure for MS4 Construction Oversight

SWPPP Review and Inspection SOP

Last Reviewed: August 27, 2026

Introduction

This SOP was written for Utah MS4s to help them meet the requirements of their MS4 Permit and to provide guidance to abide by Utah State Code. This SOP references the *Construction Site Storm Water Runoff Control* section of the MS4 Permit. The overarching goal of this SOP is to standardize storm water construction program practices across all MS4s in the State of Utah.

From **Utah Code 19-5-108.3:**
"The applicant shall allow construction site inspections by the authority. Except as provided in Subsection (12), the authority shall conduct an oversight inspection[1] through an electronic site inspection[2]."

"The authority may conduct an on-site inspection if the authority: has a documented reason for justifying an on-site oversight inspection."

To differentiate between the two types of oversight inspections, the terms "on-site oversight" and "electronic oversight" inspection are used.

- "On-site oversight inspection" is an inspection in which MS4 staff physically visit(s) a construction site to determine a site's compliance with construction storm water permits as has been done historically.
- "Electronic oversight inspection" is an offsite inspection in which MS4 conducts a review of the operator's submitted electronic site inspection to determine a site's compliance with construction storm water permits.

Each of these types of oversight inspections will be described in the *During Construction* portion within the *Process* section of this SOP.

1. Purpose:

The purpose of this SOP is to describe how all MS4s will conduct inspections for construction sites that require construction storm water permit coverage under the Construction General Permit (CGP) or Common Plan Permit (CPP). For purposes of this SOP, "operator" means the person responsible for the Storm Water Pollution Prevention Plan (SWPPP) implementation.

[1] "Oversight inspection" means a construction site inspection performed by the authority to impose compliance with the permit. (Utah Code 19-5-108.3)
[2] "Electronic site inspection" means geo-located and time-stamped photographs the applicant takes, evaluates, and submits electronically to the authority. (Utah Code 19-5-108.3)

2. Responsibilities:

Each MS4's permit staff are responsible for implementing the requirements and may not differ from this SOP. The operator is responsible for abiding by all requirements of the UPDES CGP or CPP, and the MS4 is responsible for oversight.

- The position responsible for pre-construction SWPPP reviews at permitted construction sites is the EHS Environmental Specialist.
- The position responsible for oversight inspections is the EHS Environmental Specialist.
- The position(s) who has authority to implement enforcement procedures are the director(s) of Planning, Design and Construction (PDC).

This SOP is to be followed and updated according to State and municipal requirements.

3. MS4 Permit Requirements:

1. Oversight Inspections
    a. Required to be completed on any "qualifying construction site" with a land disturbance of greater than or equal to one acre as described in the DWQ MS4 Permit.
    b. The MS4 must inspect all phases of construction: prior to land disturbance, during active construction, and following active construction.
2. Qualifying Construction Sites
    a. Oversight inspections are required to be completed at least monthly.
    b. Exceptions
        i. If the operator has demonstrated adequate compliance history[3], the MS4 **must** reduce the inspection frequency as described in part 3.2.c. of this SOP.
            1. If at any point, the operator is not in compliance, the MS4 **must** resume monthly inspections until two consecutive months of adequate compliance history is again achieved.
            2. An updated list of sites that have demonstrated adequate compliance history can be found: L-Drive: STORMWATER > SWMP(26-30) > Appx C > MCM4 - Const. SW Runoff > Projects 1 acre + > Current Const. Projects
        ii. If the operator has suspended construction activity due to frozen conditions, the MS4 **may** reduce oversight inspection frequency as described in part 3.2.c. of this SOP.
            1. Monthly inspections **must** immediately resume with any thawing conditions.

[3] "Adequate compliance history" means (1) two consecutive months of oversight inspections which did not result in enforcement, including warnings of enforcement (this may include the inspection prior to land disturbance and the first monthly inspection); 2) no instances of verified complaints; and 3) no observed impacts to waters of the state or the MS4 system.

2. An updated list of sites meeting this criteria can be found: L-Drive: STORMWATER > SWMP(26-30) > Appx C > MCM4 - Const. SW Runoff > Projects 1 acre + > Current Const. Projects

iii. If the site is located in an arid location and within the seasonally dry period, the MS4 **may** reduce oversight inspection frequency as described in part 3.2.c. of this SOP.

1. Monthly inspections **must** immediately resume with any rain event.
2. An updated list of sites meeting this criteria can be found: N/A

c. The reduced inspection schedule for oversight inspections must at minimum include:
   i. One inspection prior to land disturbance
   ii. One inspection each year during active construction
   iii. One inspection following active construction
   iv. Inspections to investigate any verified complaint

3. Priority Qualifying Construction Sites
   a. Priority construction sites are distinguished by factors defined in Part 7.0 of the DWQ MS4 Permit.
      i. Oversight inspections are required to be completed at least monthly.
4. Qualified Personnel
   a. The oversight inspection must be performed by a "qualified person" as defined in Part 7.0 the DWQ MS4 Permit.
   b. Anyone having a job duty related to implementing the construction storm water program must be trained within 60 days of hire and annually thereafter.
5. Record Retention
   a. All MS4s must maintain records for five years or until construction is completed, whichever is longer, of all applicable construction project documents which could include:
      i. Site plan reviews (L-Drive)
      ii. SWPPPs (L-Drive)
      iii. Oversight Inspections (SAM System, L-Drive)
      iv. Enforcement Actions (notices of violation, fines, stop work orders) (L-Drive)
      v. Communications of inspection results to the operator(s) (L-Drive)
      vi. Corrective actions and closure dates (SAM System, L-Drive)

4. Process:

1. Pre-construction
   a. Conduct a SWPPP review for compliance with the CGP or CPP, local ordinances, and consistency with the actual conditions of the site.
      i. The MS4 may request more information or modification if the MS4 lists why the SWPPP is noncompliant and includes specific CGP, CPP, or ordinance citations.

ii. The MS4 has 14 business days to review the SWPPP initially and 5 business days to review each subsequent modification of the SWPPP.
iii. The initial SWPPP review may occur during the pre-construction oversight inspection.
iv. When the SWPPP review is complete, the MS4 must notify the applicant in writing if the authorization to discharge is granted.

b. Conduct a preconstruction SWPPP meeting prior to land disturbance which at minimum must include:
   i. A review of the site design
   ii. Planned operations at the construction site
   iii. Planned Best Management Practice(s) (BMPs) during the construction phase
   iv. Planned BMPs to manage run-off created after development.
   v. MS4 enforcement policy
   vi. Procedure to notify the MS4 of the completion of active construction.
c. Conduct a pre-construction electronic oversight inspection or on-site oversight inspection.
   i. This pre-construction inspection must occur before land disturbance and will verify that the operator has placed all site-specific construction BMPs prescribed by the SWPPP.
d. The MS4 must determine if the construction site will be inspected as a "priority construction site" based upon factors listed in the DWQ MS4 Permit.
e. Verify that the operator submitted a Notice of Intent (NOI) through the NeT NPDES eReporting Tool online (NeT) *before* earth disturbing activities.
f. Documentation:
   i. SWPPP Review Checklist: Document the SWPPP Review using the Checklist provided by USWAC through the L-Drive
   ii. Pre-construction Meeting: Document the meeting in the L-Drive.
   iii. Pre-construction Inspection: Document the inspection through the SAM System and the L-Drive.
g. Election of Oversight Inspection
   i. Document if the operator has chosen to opt-out of electronic site inspection requirements.
      1. The form used is "Operator Electronic Site Inspection Opt-Out Form – State of Utah_USWAC".
      2. Retain records of any opt-out elections through the L-Drive
   ii. Document if the operator has asked the MS4 to perform monthly oversight inspections regardless of compliance status.
      1. The document used is a PDF file or screenshot of the e-mail communication.
h. Retain records of any operator elections through the L-Drive.

2. During Construction

a. Electronic Oversight Inspection
    i. Perform the required electronic oversight inspections through access to the operator's SWPPP, electronic site inspection(s), and operator's self-inspection(s).
        1. The operator's report must use geo-located and time-stamped photos of all BMPs implemented at the construction site.
        2. All photos must be sufficient to depict that the BMP(s) is meeting its proper function to eliminate or control pollutants on site.
        3. The operator's report should show compliance with the CGP or CPP if applicable, and the site specific SWPPP.
            a. This includes all documentation regarding corrections taken as a result of the operator's self-inspection.

b. On-site Oversight Inspection
    i. An on-site oversight inspection may be conducted after the MS4 inspector has provided a 48-hours advance notice of an on-site inspection.
        1. Exceptions: If there is an imminent threat of discharge or the operator has formally opted-out of electronic site inspections.
    ii. An on-site oversight inspection may be warranted under the following conditions:
        1. Inadequate characterization in electronic site inspections of site conditions or portions of a site
        2. Verified complaints
        3. Failure to submit an electronic site inspection at the appropriate time
        4. Alterations of electronic photographs
        5. The construction site is within one-half mile of a river, a stream, or a lake
        6. Compliance with the CGP, CPP if applicable, and site specific SWPPP cannot be reasonably determined during an electronic oversight inspection
        7. A perceived or reported threat to water quality that is immediate[4] and/or imminent[5]
        8. Failure to install BMPs prior to land disturbance
        9. Illicit discharge, unknown/unidentified non-storm water discharge, or prohibited discharge per CGP or CPP permits
        10. The operator opts out of the electronic site inspection and instead elects an on-site inspection
        11. Any other oversight inspection step listed below that cannot be fulfilled

[4] Immediate threat means contaminants are entering a river, a stream, or a lake.
[5] Imminent threat means contaminants are anticipated to be discharged into a river, a stream, or a lake within 48-hours.

c. An oversight inspection, both electronic and on-site, is performed by following these steps:
    1. Review the SWPPP
    2. Review the SWPPP signage for compliance with the CGP or CPP
        a. Placed in a safe, conspicuous, and publicly accessible location near the entrance
        b. Includes UPDES permit tracking number, contact information, and method of SWPPP access
    3. Review the operator self SWPPP inspection reports
    4. Review the entire perimeter and any downgradient areas
    5. Review points of vehicle/equipment exit
    6. Review any discharge points (keep in mind that these are not always piped inlets)
    7. Review all BMPs installed to mitigate or prevent sediment, erosion, and pollution
    8. Review all stabilizing areas (especially steep slopes)
    9. Review all pollutant generating activities such as fueling areas, washout areas, etc.
    10. Observe all discharges (if prohibited or unauthorized this is an immediate and/or imminent threat to water quality)
    11. Observe all conditions that could result in polluted storm water discharge (including sediment in the street/gutter)
    12. Determine if any additional sediment, erosion, and/or pollution prevention controls are needed
    13. Verify that all above activities are accounted for and updated in the site's SWPPP and Map
    14. Any deficiencies must be noted in the oversight inspection form
d. For oversight inspections, MS4 staff must use the *Oversight Construction Inspection Form* provided by the Division of Water Quality.
    i. Send a copy of each oversight inspection to the operator.
    ii. Maintain a record of all oversight inspections through the SAM System and L-Drive.
e. If violations of the CGP or CPP are observed on the site or within the operator's documentation, take steps to address the violations as outlined in the *Enforcement for Construction Sites SOP*.
    i. Violations could include:
        1. Failure to maintain BMPs
        2. Failure to install BMPs
        3. An illicit discharge
        4. Failure to conduct inspections
        5. Failure to document corrections

6. Failure to update SWPPP
7. Any other CGP and/or CPP requirements that are deficient

f. Reduced inspection frequency may apply under adequate compliance history conditions as well as other site conditions. See Part 3 of this SOP.

3. After Construction
   a. Verify if the operator has requested a Notice of Termination (NOT) within NeT. MS4 staff who have 'MS4 Authority' will be notified of the request for a termination inspection of the operator's NOI via an email notification from NeT.
      i. If the site has not filed a NOT request in NeT, provide resources to the operator to request a NOT in NeT. Resources can be found: https://deq.utah.gov/water-quality/general-construction-storm-water-updes-permits
   b. Inspect the construction site to verify if these conditions have been met:
      i. Has the site achieved final stabilization?
      ii. Have all construction materials, waste and waste handling devices been removed?
      iii. Have all temporary storm water controls been removed?
      iv. Have all pollutants and pollutant-generating activities been removed?
      v. If landscaping will be completed by the homeowner, have temporary sediment and erosion controls been installed?
   c. If the termination conditions above have been met, approve the NOT request in NeT.
   d. If the termination conditions above have not been met, communicate with the operator any outstanding NOT requirements that must be addressed in order to approve the NOT.
   e. Document the NOT inspection through the State's Storm Water NOT Inspection Form and maintain a record of it through the L-Drive.
   f. If contact with the operator has been unsuccessful, submit an administrative NOT by emailing WQinfodata@utah.gov. The NOT request will be processed in NeT. It **still requires** a documented oversight NOT inspection of the site.

***Note to the MS4:*
It is recommended that MS4s use this template to facilitate their construction storm water program requirements and should add specific information for each MS4 relevant to the program.

Standard Operating Procedures:
Construction Site Inspection Procedure

Responsibility: Environmental Health and Safety Department - Environmental Specialist

Frequency and Duration: Monthly or bimonthly as determined by the priority status of the site; until successful completion of a NOT inspection.

Description: This is the procedure EHS staff follow when inspecting a construction site with respect to storm water pollution prevention (4.2.4.4.1, 4.2.4.4.3).

Applicability: Inspection of construction sites.

1. The most current Utah DWQ inspection form is used.
2. Electronic template is created for each construction site larger than 1 acre.
3. Necessary safety equipment is used hard hat, orange vest, steel toed shoes and safety glasses (as required by site).
4. University identification is presented when arriving on site to meet with the site POC.
5. Keep an electronic archive of any photos taken.
6. Use specific references and language from the State Construction General Permit to communicate any site deficiencies and associated corrective actions.
7. Complete electronic form back in the office, the report will include (in a single PDF) photo log taken in regards to specific corrective actions required on site. Send photos and PDF of inspection form to contractor/project manager by email. Documentation will also include contractor email receipt confirmations.
8. Provide site POC with an electronic copy of report of all negative findings/corrective actions if corrective actions are required.
9. Notify Construction Project Delivery Project Manager of deficiencies, corrective actions, and deadlines for corrective action as necessary.
10. Notify Construction Project Delivery project manager of completed corrections and/or continued deficiencies as necessary.
11. Perform follow up inspections with respect to provided deadlines as needed.
12. Follow Construction Enforcement SOP as needed.
13. Document all inspections, corrective actions and enforcement actions in the EHS report system.

Construction Oversight Notice of Termination Form

BACKGROUND INFORMATION

Site Name:	UPDES Permit #:
Site Address:	
Local Jurisdiction or County:	
Permit Effective Date:	Permit Expiration Date:
Total Project Area:	Total Disturbed Area:

Project Type: (circle) *Subdivision* *Commercial* *Industrial* *Linear (Road/Pipe/Power)* *Land Disturbance*

OPERATOR CONTACT INFORMATION

	NAMES	PHONE NUMBERS	E-MAIL
Operator:			
Onsite Facility Contact:			
Important Contacts:			
Important Contacts:			

NOTICE OF TERMINATION (NOT) INSPECTION

Inspected By:	Date of Evaluation:
Title\Organization:	

	List: Yes, No, N/A
1. Has the site achieved final stabilization? (>70% vegetative and/or non-vegetative cover for all disturbed areas) (CGP 8.2.1.a, 2.2.14.b; CPP 1.7.1)*	
2. Have all construction materials, waste and waste handling devices been removed? (CGP 8.2.1.b; CPP 2.4)	
3. Have all temporary storm water controls been removed? (CGP 8.2.1.c)	
4. Have all pollutants and pollutant-generating activities been removed? (CGP 8.2.1.d; CPP 2.8, 2.9)	
5. If landscaping will be completed by the homeowner, have temporary sediment and erosion controls been installed? (CGP 8.2.4; CPP 1.7.2)	

***Provide comments for exceptions under CGP 2.2.14.b(3) (arid conditions, restored ag. land, or areas to remain disturbed).**

COMMENTS:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Inspector:

(Print Name) (Title) (Signature) (Date)

Operator:

(Print Name) (Title) (Signature) (Date)

modified 01/25

Construction Oversight Inspection Form

Project Name		**UPDES Permit #**			**Expiration Date**		
Address					**Date**		
Owner		**Operator**			**Start Time**		
Site Contact		**Phone**			**Stop Time**		
Weather		**Date of last rain event**		**Approximate Rainfall (in)**			
Inspector(s)		**MS4/City**		**Receiving Waters**			
Project Area		**Disturbed Area**		**Project Type**			
Inspection reason	Scheduled☐	Complaint/Tip:☐	Random☐	**Inspector Code**	State☐	Local☐	
Inspection Code	SW Sampling ☐	SW non-Sampling ☐	**Inspection Type**	Onsite ☐	Electronic ☐	Reason (please list):	

Part 1: Onsite Storm Water Controls (BMPs) *(Utah Code § 19-5-108.3 part 7(c)(ii)(F))*	**List:** Yes, No, N/A
Arrival and Initial Checks: *(Track-Out Control)*	
1. Are roadways free of mud and sediment accumulation? *(CGP 2.2.4.e; CPP 2.1.4, 3.2.2; Utah Code § 19-5-108.3 part 7(c)(ii)(B))*	
2. Are effective track-out controls, such as stabilized construction entrances or wheel wash systems, installed and maintained at all egress points? *(CGP 2.2.4; CPP 2.1.4)*	
Perimeter Inspection: *(Perimeter Controls; Natural Buffer Areas; Discharge Points)*	
3. Are perimeter controls (e.g., silt fences, wattles, berms) properly installed and maintained, effectively preventing sediment from leaving the site, with no visible evidence of sediment discharges beyond the site boundary? *(CGP 2.2.3; CPP 2.1.2)*	
4. For disturbances located within 50 feet of waters of the state, are natural buffers (or equivalent controls), properly installed, maintained and effective at minimizing sediment discharges? *(CGP 2.2.1; CPP 2.1.6)*	
5. Are velocity dissipation devices installed at outfalls, along drainage channels, or at other locations to slow down runoff and prevent erosion? *(CGP 2.2.11; CPP 2.1.5.d)*	
Interior Site Inspection: *(BMPs: Inlet Protection; Stockpiles and Construction Materials; Erosion Controls / Pollution Prevention Controls; Chemical Storage and Fueling Areas; Sanitation and Waste Management; Concrete and Paint Washout)*	
6. Are storm drain inlets within and downslope of the construction site properly protected with appropriate BMPs (See SWPPP for installation specifications)? Has accumulated sediment in and around the inlet been removed? *(CGP 2.2.10; CPP 2.1.3)*	
7. Are soil and material stockpiles adequately protected from erosion and sediment transport using covers, silt fences, or other appropriate BMPs, and are they located away from stormwater conveyances and inlets? (*CGP 2.2.5; CPP 2.1.1)*	
8. Are effective suppression measures, such as water spraying or mulching, implemented on exposed soil areas to prevent excessive dust generation? *(CGP 2.2.6; CPP N/A)*	
9. Are erosion control measures (e.g., stabilization, mulching, erosion blankets) implemented effectively on slopes, disturbed areas, and other vulnerable areas, including any areas with no construction activities for 30 days? *(CGP 2.2.14; CPP 2.1.7)*	
10. Is vegetation preservation, slope disturbances, top-soil management, and soil compaction being effectively managed to prevent potential impacts on water quality? *(CGP 2.2.2, 2.2.7-2.2.9, 2.11; CPP 2.1.5)*	
11. Are effective spill prevention, containment, and pollutant discharge minimization measures in place for all equipment fueling, maintenance, and washing activities? *(CGP 2.3.1, 2.3.2; CPP 2.2.1, 2.2.3)*	
12. Are construction material storage, chemical storage and hazardous waste areas properly managed, minimizing exposure to precipitation, and are secondary containment and spill prevention measures in place? *(CGP 2.3.3.a-d; CPP 2.2.2, 2.2.3)*	
13. Are all areas free from spills or leaks? Has all evidence of a pollutant spill been properly contained and cleaned? *(CGP 2.3; CPP 2.2.3; Utah Code § 19-5-108.3 part 7(c)(ii)(C))*	
14. Are waste management practices effective, with all debris and blowable waste properly contained, and disposed of to prevent exposure to storm water and overflow? (CGP 2.3.3. e; CPP 2.2.4)	
15. Are portable sanitation facilities (e.g., port-o-potties) positioned securely, away from drainage features, and maintained to prevent leaks or spills? *(CGP 2.3.3.f; CPP 2.2.5)*	
16. Are designated areas for concrete, paint, and other construction material washouts properly managed to prevent contamination of stormwater? *(CGP 2.3.4; CPP 2.2.6)*	
17. Is the operator preventing any visible pollutants, prohibited discharges, or sediment from reaching unprotected storm drains or waters of the state? If an immediate threat is observed (See *Utah Code § 19-5-108.3 part 1(g))*, call the Environmental Incident Response Line (801) 536-4123. *(CGP 1.3, 3.1; CPP 1.3, 1.4)*	

Comments *(Summarize key observations from the inspection, including any violations, corrective actions needed, and any discussions with the site operator)***:**

Part 2: Storm Water Records Review *(Utah Code § 19-5-108.3 part 7(c)(ii)(E))* *(Ensure all information is accurate and up to date)*	**List:** Yes, No, N/A
1. Is the SWPPP signage posted at the site entrance clearly visible, and does it include the required information (e.g., UPDES tracking number and site operator contact information)? (CGP 1.5; CPP 1.7)	
2. Is a copy of the SWPPP available onsite, or is its location clearly indicated on the posted signage and accessible within a reasonable time? *(CGP 7.4.1; CPP 4.1.2)*?	
3. Does the CGP SWPPP identify Storm Water Team personnel information including names, positions and responsibilities? Does the CPP SWPPP contain name, address, telephone and email information for general contractor, owner, and any other party implementing SWPPP? *(CGP 7.3.1; CPP 4.2.1)*	
4. Is there documentation verifying that all key personnel have received appropriate training as required by the CGP/CPP, and are these records included in the SWPPP? *(CGP 6.2, 6.3, 2.2.13.f, 7.3.1; CPP 4.2.9)*	
5. In the CGP SWPPP, is the construction activity described in detail, including an estimate of the area to be disturbed, the sequence of construction activities, and a description of all on-site and off-site construction activity support areas? In the CPP SWPPP, are sequences and construction activities listed including estimated dates for activities, landscaping, and any cessations of earth disturbing activities? *(CGP 7.3.2; CPP 4.2.2)*	
6. Does the SWPPP include a detailed site map showing storm drains, slopes, surface drainage patterns, stream buffer zones, stormwater discharge points, construction boundaries, limits of disturbance, surface waters (including the name of receiving waters), and the placement of both structural and non-structural controls? *(CGP 7.3.3; CPP 4.2.3)*	
7. Does the SWPPP include accurate discharge information, including receiving waters, impaired waters, and high-quality waters? Are there specific measures outlined to prevent the discharge of pollutants into these waters? *(CGP 3.2; CPP 1.5; 4.2.5)*	
8. Does the SWPPP identify all pollution-generating activities (e.g., concrete washout, solid waste disposal) that could affect storm water discharges from the site? *(CGP 7.3.2.f; CPP 4.2.6)*	
9. Are all authorized non-storm water discharges (e.g., fire hydrant flushing, uncontaminated groundwater) identified in the SWPPP? *(CGP 7.3.4; CPP N/A)*	
10. Does the SWPPP describe natural buffers and/or equivalent sediment controls (i.e., compliance alternatives)? *(CGP 7.3.5.b(1), Appendix A; CPP 4.2.4)*	
11. Does the SWPPP include detailed specifications for the placement and installation of all required erosion and sediment control measures (e.g., silt fences, sediment basins, check dams, inlet protection)? *(CGP 7.3.5.a; CPP 4.2.7)*	
12. Have specific stabilization measures, including both vegetative and non-vegetative practices, as well as the stabilization deadline, been provided in the SWPPP? *(CGP 7.3.5.b(6); CPP N/A)*	
13. Does the SWPPP include comprehensive spill prevention and response procedures, including personnel responsibilities, cleanup steps, and emergency contact information? *(CGP 7.3.5.b(7); CPP N/A)*	
14. Does the SWPPP include detailed specifications for the placement and installation of all required pollution prevention control measures, (e.g., material storage, construction waste management, sanitary waste management, and spill prevention measures) *(CGP 7.3.5.a; CPP 4.2.7)*	
15. Does the SWPPP show the inspection frequency selected for the site, the rain-gauge/weather station location (if applicable), any reduced frequency periods (e.g., frozen or stabilized areas), and the checklists/forms that will be used? *(CGP 7.3.6; CPP N/A)*	
16. Are routine site inspections being conducted at the selected frequency (i.e., every 7 or 14 days + within 24 hours of a 0.50-inch rainfall)? (CGP 4.2, 4.3, 4.4; CPP 3.3.1, 3.3.2; *Utah Code § 19-5-108.3 part 7(c)(ii)(D))*	
17. Do the inspection reports document all areas and items required for inspection, including any BMP problems found or non-compliance observed? *(CGP 4.5, 4.6; CPP 3.3.1, 3.3.2, 3.3.3)*	
18. Are corrective actions from previous inspections entered in the corrective-action log within 24 hours (CGP only). Are corrective actions resolved or scheduled within 7 days, with the SWPPP and site map updated accordingly? *(CGP 5.2, 5.4, 7.5.a; CPP 3.4.1, 3.4.2, 4.3.1, 4.3.2)*	
19. Does the SWPPP include the Notice of Intent (CGP only), a copy of the CGP or CPP, and the Authorization to Discharge Letter?? *(CGP 7.3.9; CPP 4.2.10)*	
20. Has the SWPPP been signed by the appropriate responsible corporate officer or duly authorized representative? *(CGP 9.9.2; CPP 4.2.11)*	
21. Has the operator submitted a complete and accurate NOI, signed by a responsible corporate officer? (CGP 1.4, 9.9.1; CPP 1.6, 5.9.1)	

Comments:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry into the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Inspector				
	Print Name	Title	Signature	Date

Standard Operating Procedures:
Construction Enforcement

Responsibility: Environmental Health and Safety, Construction Project Delivery

Frequency and Duration: Ongoing; as needed

Description: Construction contracts require compliance with state and federal laws; failure to meet those requirements is met with an escalating enforcement policy (4.2.4.2, 4.2.4.2.1, 4.2.4.4, 4.2.4.2.2, 4.2.4.4.4).

Applicability: Construction site enforcement

- The University MS4 Inspector (EHS Environmental Specialist) informs the contractor of deficiencies and issues a notice of the required corrective actions. The Environmental Specialist lists the issue(s) that need attention on the corrective action form and includes a completion deadline (e.g., 24 hrs, 3 days, 7 days, etc). The specific date and time is noted; for instance, "must be corrected within 24 hours, that is, no later than 4PM November 9."
- The Environmental Specialist notifies the Construction Project Delivery Project Manager of the need for corrective action by sending an electronic copy of the inspection form.
- A follow up inspection that takes place after the initial time frame has expired will determine if previous corrective action items have been adequately addressed.
- If the corrective actions are completed properly and on-time, EHS will notify the CPD Project Manager (PM) that the contractor has met their obligations related to the inspection(s) and corrective action(s) in question. If the corrective actions are **not** completed on time or properly, the Environmental Specialist will notify the Contractor and CPD Project Manager, as well as the CPD Quality Control Manager that a notice of work stoppage is recommended to be issued by CPD after an additional 24 hours.
- When a stop work order has been issued, all work on the site will stop for 24 hours, except for storm water BMP installation, maintenance and/or cleanup.
- If upon another follow-up inspection, the site is still out of compliance then the University may hire a 3rd party contractor to follow up on the corrective actions and the primary construction contractor will be billed for the work, the site will then be allowed to resume work.
- All inspections and enforcement actions will be documented and tracked in the EHS incident/report system, and by email.
- Contactor will have the opportunity to appeal the Stop Work Order/Enforcement Actions issued by CPD with the Director of Construction & Design.

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CGP Excerpts for Construction Site Enforcement

1. Is the SWPPP on site and accessible, or is the SWPPP location posted in an obvious place and reasonably accessible (in a short time)?
    - CGP 7.4.1: *You must keep a current copy of your SWPPP at the site or at an easily accessible location so that it can be made available at the time of an on-site inspection or upon request by DWQ, the EPA, or an MS4. The SWPPP can be stored electronically as long as personnel on-site can access it and make it available for inspector review.*
    - CGP 1.5: *All permitted sites must have a sign posted in a conspicuous, safe, publically accessible place and near the entrance to the project. The font on the sign must large enough for normal corrected vision to easily read the sign contents from a public right-of-way.*

2. Are erosion control, sediment control, buffer controls and good housekeeping BMP's installed on the site as shown in the SWPPP?
    - CGP 2.1.2: *Design and install all storm water controls in accordance with good engineering practices, including applicable design specifications (see manufacturer specifications and/or applicable erosion and sediment control manuals or ordinances – departures from such specifications must reflect good engineering practices and must be explained in your SWPPP).*

3. Has the SWPPP been updated to reflect the current site conditions (modifications dated & initialed on site map, new BMPs on site map, discontinued BMPs crossed off site map, new BMP details & spec's in SWPPP, SWPPP amendment Log, etc.)?
    - CGP 7.5.1: *You must modify your SWPPP, including the site map(s), within seven (7) days of any of the following conditions:*
        - a. *Whenever you make changes to your construction plans, storm water controls, or other activities at your site that are no longer accurately reflected in your SWPPP. This includes changes made in response to corrective actions triggered under Part 5. You do not need to modify your SWPPP if the estimated dates in Part 7.3.2.f change during the course of construction;*
        - b. *To reflect areas on your site map where operational control has been transferred (e.g., new general contractor or owner),note the change and the date of transfer since initiating permit coverage;*
        - c. *If inspections or investigations by DWQ or its authorized representatives determine that SWPPP modifications are necessary for compliance with this permit;*
        - d. *Where DWQ determines it is necessary to install and/or implement additional controls at your site in order*

4. Are on-site inspections being performed and recorded by a qualified person on a weekly or biweekly basis, reporting items required by permit? (Inspector name, qualifications and signature, weather, problems/repairs, corrective action, new BMPs, removed BMPs, discharges, etc.)

    - CGP 4.1. PERSON(S) RESPONSIBLE FOR INSPECTING THE SITE: *The person(s) inspecting your site may be a person on your staff or a third party you hire to conduct such inspections. You are responsible for ensuring that the person who conducts inspections is a "qualified person" and currently certified.*

5. Have all corrective action items from previous inspections been logged, addressed and documented within the time frame allotted?

    - CGP 5.2.1: *When site conditions warrant immediate attention, take all reasonable steps to minimize or prevent the discharge of pollutants until a permanent solution for the problem is installed and made operational.*
    - CGP 5.2.2: *When the problem does not require a new or replacement control or significant repair, the corrective action must be completed by the close of the next business day.*
    - CGP 5.2.3: *When the problem requires a new or replacement control or significant repair, the corrective action must be completed no later than seven (7) calendar days from the time of discovery. If it is infeasible to complete the installation or repair within seven (7) calendar days (e.g., due to availability of materials, excessive costs to expedite shipping or activities, or lengthy installation times) you must document in your records why it is infeasible and provide a reasonable correction schedule.*

6. Are SW flows entering and leaving the construction site controlled, managed, or diverted around the site? (e.g. buffer zones perimeter controls, berms, silt fence, up gradient boundary diversion, down gradient boundary sediment control, etc.)

    - CGP 2.1.2: *Design and install all storm water controls in accordance with good engineering practices, including applicable design specifications (see manufacturer specifications and/or applicable erosion and sediment control manuals or ordinances – departures from such specifications must reflect good engineering practices and must be explained in your SWPPP).*

7. Is there evidence of sediment discharge such as mud flows or soil deposits from the construction site in downstream locations?

- CGP 2.1.2: *Design and install all storm water controls in accordance with good engineering practices, including applicable design specifications (see manufacturer specifications and/or applicable erosion and sediment control manuals or ordinances – departures from such specifications must reflect good engineering practices and must be explained in your SWPPP).*
- CGP 2.1.4: *Ensure that all storm water controls are maintained, remain in effective operating condition during permit coverage, and are protected from activities that would reduce their effectiveness*

8. Is there evidence of vehicles tracking soil off the construction site?

   - CGP 2.2.4: *Minimize sediment track-out.*

     - c. *Implement additional track-out controls as necessary to ensure that sediment removal occurs prior to vehicle exit; and*
     - d. *Where sediment has been tracked-out from your site onto paved roads, sidewalks, or other paved areas outside of your site, you must remove deposited sediment before it accumulates significantly and is tracked beyond the immediate vicinity of the project. Frequency of removal is dependent on site conditions, whatever is necessary to control off site tracking.*
     - *Remove the track-out by sweeping, shoveling, or vacuuming these surfaces, or by using other similarly effective means of sediment removal. You are prohibited from hosing or sweeping tracked-out sediment into any storm water conveyance, storm drain inlet, or water of the state.*

9. Is there soil, construction material, landscaping items, or other debris piled on impervious surfaces (roads, drives) that could be washed with SW to a storm drain or water body?

   - CGP 2.2.5: *Manage stockpiles or land clearing debris piles composed, in whole or in part, of sediment and/or soil*

     - *Locate the piles outside of any natural buffers established under Part 2.2.1 and away from any storm water conveyances, drain inlets, and areas where storm water flow is concentrated;*
     - *Install a sediment barrier along all down gradient perimeter areas*
     - *For piles that will be unused for 14 or more days and are stored in areas that are being inspected at a reduced frequency due to temporary stabilization or frozen conditions (Part 4.4.1. and 4.4.3.), provide cover or appropriate temporary stabilization (consistent with Part 2.2.14)*
     - *You are prohibited from hosing down or sweeping soil or sediment accumulated on pavement or other impervious surfaces into any storm water conveyance, storm drain inlet, or water of the state.*
     - *Where practicable, contain and securely protect from wind.*

10. Is there a need to repair, maintain, or improve erosion control BMPs (temporary stabilization, erosion blankets, mulch, vegetated strips, rip rap, surface roughening, pipe slope drain, dust control, etc.)?

    - 2.2.14: *Stabilize exposed portions of the site. Implement and maintain stabilization measures (e.g., seeding protected by erosion controls until vegetation is established, sodding, mulching, erosion control blankets, hydromulch, gravel) that minimize erosion from exposed portions of the site in accordance with Parts 2.2.14.a and 2.2.14.b.*

11. Is there a need to repair, maintain, or improve sediment control BMPs (silt fence, check dams, fiber rolls, sediment trap/basin, inlet protection, waddles, straw bails, curb cut-back, etc.?

    - 2.2.3. *Install sediment controls along any perimeter areas of the site that will receive pollutant discharges. a. Remove sediment before it has accumulated to the point where the control has become ineffective. Often that is one-half of the above-ground height of any perimeter control.*
    - 2.2.10. *Protect storm drain inlets. a. Install inlet protection measures that remove sediment from discharges prior to entry into any storm drain inlet that carries storm water flow from your site to a surface water of the state, provided you have authority to access the storm drain inlet*.
        - b. *Clean, or remove and replace, the protection measures as sediment accumulates, the filter becomes clogged, and/or performance is compromised. Where there is evidence of sediment accumulation adjacent to the inlet protection measure, remove the deposited sediment by the end of the same business day in which it is found.*

12. Is there a need to repair, maintain, or improve good housekeeping controls (clean track out pad, sweeping, construction materials management, litter/trash control, port-o-potties staked down, fueling areas, concrete wash out area, proper curb ramps, spill prevention, etc.)?

    - CGP 2.3.4: *For washing applicators and containers used for stucco, paint, concrete, form release oils, curing compounds, or other materials: a. direct wash water into a leak-proof container or leak-proof and lined pit designed so that no overflows can occur due to inadequate sizing or precipitation.*
        - b. *Handle washout or cleanout wastes as follows: (1) Do not dump liquid wastes in storm sewers or waters of the state; (2) Dispose of liquid wastes properly24; and (3) Remove and dispose of hardened concrete waste consistent with your handling of other construction wastes in Part 2.3.3.*
        - c. *Locate any washout or cleanout activities as far away as possible from waters of the state and storm water inlets or conveyances, and, to the extent feasible, determine areas to be used for these activities and conduct such activities only in these areas.*

- CGP 2.2.4.d: *Where sediment has been tracked-out from your site onto paved roads, sidewalks, or other paved areas outside of your site, you must remove deposited sediment before it accumulates significantly and is tracked beyond the immediate vicinity of the project. Frequency of removal is dependent on site conditions, whatever is necessary to control off site tracking. . Remove the track-out by sweeping, shoveling, or vacuuming these surfaces, or by using other similarly effective means of sediment removal. You are prohibited from hosing or sweeping tracked-out sediment into any storm water conveyance, storm drain inlet, or water of the state.*

- CGP 2.3.3.f: *For sanitary waste, position portable toilets so that they are secure and will not be tipped or knocked over. Locate them away from waters of the state and, when possible, at least 10 feet from any storm water conveyance, inlet, curb and gutter, or conduit to a waterway. If it is not possible to maintain at least 10 feet of separation, evaluate the need for additional controls such as secondary containment, additional surface preparation, or berms and implement as appropriate.*

- CGP 2.2.5: Manage stockpiles or land clearing debris piles composed, in whole or in part, of sediment and/or soil: a. Locate the piles outside of any natural buffers established under Part 2.2.1 and away from any storm water conveyances, drain inlets, and areas where storm water flow is concentrated;
    - b. Install a sediment barrier along all down gradient perimeter areas;
    - c. For piles that will be unused for 14 or more days and are stored in areas that are being inspected at a reduced frequency due to temporary stabilization or frozen conditions (Part 4.4.1. and 4.4.3.), provide cover8 or appropriate temporary stabilization (consistent with Part 2.2.14);
    - d. You are prohibited from hosing down or sweeping soil or sediment accumulated on pavement or other impervious surfaces into any storm water conveyance, storm drain inlet, or water of the state.
    - e. Where practicable, contain and securely protect from wind.

- 2.3.1: For equipment and vehicle fueling and maintenance: a. Provide an effective means of eliminating the discharge of spilled or leaked chemicals, including fuels and oils, from these activities
    - b. If applicable, comply with the Spill Prevention Control and Countermeasures (SPCC) requirements in 40 CFR part 112 and Section 311 of the CWA;
    - c. Ensure adequate supplies are available at all times to handle spills, leaks, and disposal of used liquids;
    - d. Use drip pans and absorbents under or around leaky vehicles;
    - e. Dispose of or recycle oil and oily wastes in accordance with other federal, state, tribal, or local requirements; and

- f. Clean up spills or contaminated surfaces immediately, using dry clean up measures (do not clean contaminated surfaces by hosing the area down), and eliminate the source of the spill to prevent a discharge or a continuation of an ongoing discharge

- 2.2.13.a: *Minimize discharge risk from stored chemicals. Store all treatment chemicals in leak-proof containers that are kept under storm-resistant cover and surrounded by secondary containment structures (e.g., spill berms, decks, spill containment pallets), or provide equivalent measures designed and maintained to minimize the potential discharge of treatment chemicals in storm water or by any other means (e.g., storing chemicals in a covered area, having a spill kit available on site and ensuring personnel are available to respond expeditiously in the event of a leak or spill).*

- 2.3.3.c.1-2: For diesel fuel, oil, hydraulic fluids, other petroleum products, and other chemicals: (1) Store chemicals in water-tight containers, and provide either (1) cover (e.g., plastic sheeting, temporary roofs) to minimize the exposure of these containers to precipitation and to storm water, or (2) a similarly effective means designed to minimize the discharge of pollutants from these areas (e.g., having a spill kit available on site and ensuring personnel are available to respond expeditiously in the event of a leak or spill), or provide secondary containment (e.g., spill berms, decks, spill containment pallets); and (2) Clean up spills immediately, using dry clean-up methods where possible, and dispose of used materials properly. You are prohibited from hosing the area down to clean surfaces or spills. Eliminate the source of the spill to prevent a discharge or a furtherance of an ongoing discharge.

- 2.3.3.e.1-4: For construction and domestic wastes:23 (1) Provide waste containers (e.g., dumpster, trash receptacle) of sufficient size and number to contain construction and domestic wastes; (2) Provide containment or cover for waste that is blowable or that can leach nutrients, metals, pesticides, herbicides, oil, grease, bacteria, or other pollutants; (3) On business days, clean up and dispose of waste in designated waste containers; and (4) Clean up immediately if containers overflow.

13. Are there disturbed areas that have not had construction activities for 14 to 21 days without stabilization? (except snow or frozen ground)?

    - 2.2.14. *Stabilize exposed portions of the site. Implement and maintain stabilization measures (e.g., seeding protected by erosion controls until vegetation is established, sodding, mulching, erosion control blankets, hydromulch, gravel) that minimize erosion from exposed portions of the site in accordance with Parts 2.2.14.a and 2.2.14.b. a.*

        - *Initiate the installation of stabilization measures in any areas of exposed soil where construction activities have permanently ceased or will be temporarily inactive for 14 or more calendar days as soon as possible and prior to the end of the 14th day of inactivity.*

- *Complete the installation of stabilization measures as soon as practicable, but no later than 14 calendar days after stabilization has been initiated.*

Contract Provisions Supporting
Storm Water Escalation Process

Provisions from existing DFCM and University General Conditions:

4.5.2 COMPLIANCE WITH PUBLIC AUTHORITIES, NOTICES. The Contractor shall comply with and give notices required by laws, ordinances, resolutions, rules, regulations and lawful orders of public authorities bearing on the performance of the Work.

8.2.4 HOLDBACK BY THE UNIVERSITY. Notwithstanding anything to the contrary contained in the Contract Documents, the University may, as a result of the claims resolution process, withhold any payment to the Contractor hereunder if and for so long as the Contractor fails to perform any of its obligations hereunder or otherwise is in default under any of the Contract Documents.

9.1.3 NONCONFORMING WORK. If such procedures for testing, inspection or approval under Paragraph 9.1.1 reveal failure of portions of the Work to comply with the requirements established by the Contract Documents, the Contractor shall bear all costs made necessary by such failure including those of repeated procedures and compensation for the University's expenses, including the cost of retesting for verification of compliance if necessary, until the University accepts the Work in question as complying with the requirements of the Contract Documents.

12.2.2 UNIVERSITY'S RIGHT TO CARRY OUT THE WORK.

(1) If the Contractor defaults or neglects to carry out the Work in accordance with the Contract Documents and fails within a ten (10) day period (or longer if approved by the University in writing) after receipt of written notice from the University to cure such default or neglect, the University may without prejudice to other remedies the University may have, correct such deficiencies, including taking over the Work and prosecuting the same to completion, by contract or otherwise, and may take possession of, and utilize in completing the Work, such materials, appliances, and facilities as may be on the site of the Work as well as the site as necessary for its proper completion. In such case, the University shall offset from payments then or thereafter due the Contractor the cost of correcting such deficiencies, including compensation for the A/E, the University's staff and legal counsel's additional services and expenses made necessary by such default, neglect or failure. If payments then or thereafter due the Contractor are not sufficient to cover such amounts, the Contractor shall pay the difference to the University. The Contractor shall continue performance of the Contract to the extent not terminated.

(2) Except with respect to defaults of Subcontractors, the Contractor shall not be liable for any excess costs if the failure to perform the Contract arises out of causes beyond the control and without the fault or negligence of the Contractor or anyone for whom the Contractor may be liable. Such causes may include, but are not limited to, acts of God or of the public enemy, acts of the University of Utah,

State of Utah or federal government in either their sovereign or contractual capacity, fires, floods, epidemics, quarantine restrictions, strikes, freight embargoes, and unusually severe weather; but in every case the failure to perform must be beyond the control and without the fault or negligence of the Contractor or anyone for whom the Contractor may be liable. If the failure to perform is caused by the default of a Subcontractor, and if such default arises out of causes beyond the control of both the Contractor and the Subcontractor, and without the fault or negligence of either of them or anyone for whom either may be liable, the Contractor shall not be liable for any excess costs for failure to perform unless the supplies or services to be furnished by the Subcontractor were obtainable from other sources in sufficient time to permit the Contractor to meet the required delivery or completion schedule.

12.5 UNIVERSITY'S RIGHT TO STOP THE WORK. If the Contractor fails to correct Work or fails to carry our Work, as required by the Contract Documents or fails to comply with all required and customary safety precautions; the University, by written order signed personally or by an agent specifically so empowered by the University in writing, may order the Contractor to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, the right of the University to stop the Work shall not give rise to a duty on the part of the University to exercise this right for the benefit of the Contractor or any other person or entity.

THE UNIVERSITY OF UTAH

Standard Operating Procedures:
Notice of Termination (NOT) Process

Responsibility: Environmental Health and Safety Department

Frequency and Duration: As needed

Applicability: The following procedures apply to all construction projects that disturb 1 acre or more and are looking to turn project area(s) back over to University control, or turn the project area(s) over to the control of another contractor (4.2.4.4.2).

1. Before the University will sign off on the Notice of Termination (NOT) a final Storm Water inspection of the site must be completed and meet the requirements of "final stabilization" as defined in the general construction permit.
    a. The University requires that a uniform (e.g. evenly distributed, without large bare areas) perennial vegetative cover with a density of 70% of the native background vegetative cover for the area has been established on all unpaved areas and areas not covered by permanent structures.
    b. Area not stabilized by vegetative cover can be provided equivalent permanent stabilization measures such as the use of riprap, geo-textiles, etc. The inspection will in part check these permanent BMPs to ensure that they have been installed correctly.
    c. All construction-phase BMPs must be removed unless there is a short-term requirement to prevent erosion or provide sediment control. In that case, the contractor will be required in writing to remove the temporary BMPs within a specified time-frame.
2. In a situation where the contractor applying for the NOT is turning the area over to the control of another construction company, who is beginning a new project, final stabilization is not required so long as the company taking control of the site has submitted their Notice of Intent (NOI) and takes legal responsibility for of the Best Management Practice (BMP) maintenance at the site immediately.
3. Process:
    a. Contractor must file to terminate their NOI in the State (DWQ) database online.
    b. Contractor must schedule a time with for Environmental Health and Safety staff for a final inspection at least seven days before the desired inspection date so that EHS may confirm the termination (NOT) in the online database.
    c. Final inspection is completed with the State Inspection form and an electronic copy will be provided to the responsible party by HES, who will keep the original for University records.

    This ends the University's responsibility for SWPPP inspection on the site where construction is concerned. If site is turned over to another Contractor, the University will inspect the new Contractor's operation as per MS4 Permit requirements.

Campus Master Plan

Related Offices

- Public Relations
- Purchasing
- Space Planning
- Utah Division of Facilities Construction and Mgmt (DFCM)



Introduction

Initiated by University President Michael K. Young in 2005, the Campus Master Plan will give physical form to the University's mission to engage, prepare, and partner with our neighbors, national and international friends, and campus students, faculty, and staff. More...

The 2008 Campus Master Plan

The 2008 University of Utah Campus Master Plan is complete and now available in PDF format. The PDF is organized by section. More...

Supplemental Campus Master Plan Documents

This page contains links to the master plan addenda and additional studies such as precinct plans. More...

Contact Info

Campus Planning

Shannon Failner

- Administrative Assistant
- office: 801-581-3135
- Send email

Documents and Standards

Related Offices

- Public Relations
- Purchasing
- Space Planning
- Utah Division of Facilities Construction and Mgmt (DFCM)

Banner Guidelines and Standards

The University endorses the use of on-campus banners and non-permanent signage that adhere to the following guidelines. These standards are established to protect University buildings and property from possible damage.

Contract Documents

Contract Documents

Design Standards

The purpose of this design standard is to acquaint the Consultant with functions and standards of the University of Utah. A basic knowledge in these areas is essential before consultants can successfully carry out contract responsibilities.

Drawing Information and Templates

Facilities Management has specific criterion that must be met for all AutoCAD and REVIT files submitted by outside consultants and contractors.

Forms

Facilities Management Forms

General Conditions

The General Conditions document of Construction Project Delivery

Contact Info

Business Services

- 801-581-4707
- fax: 801-581-6081

Construction Project Delivery

- 801-581-6883
- fax: 801-581-6081
- Send email

Campus Planning

- 801-581-3135
- Fax: 801-581-6081

Storm Water Excerpts from the Campus Design Standards:

- Supplemental General Conditions for the University of Utah (Sept 30, 2011)
- General Conditions for the University of Utah (August 27, 2010)
- 3.0 DFCM Requirements: 3.1 General and 3.2 Civil (DFCM Design Manual, UofU Supplement May 1, 2017), DFCM Programming Standards (031506)

(Supplemental General Conditions) Storm Water Pollution Prevention (SWPPP):

In addition to complying with the SWPPP requirements provided for in the Instruction to Bidders, the Contractor shall comply with the following. The University must approve any variance or exception in writing.

18.1

The Contractor must employ the following storm water pollution prevention measures during construction of the project.

a. Perimeter control, a system of sediments control best management practices (BMPs) that act as barriers to retain sediment on the construction site.

b. Construction entrance/exit stabilization for all entrances/exits used by the project, no matter how short the duration. Sediment tracking onto University roads, parking lots, sidewalks, and other paved surfaces is prohibited. If tracking occurs, the Contractor must clean the affected area before the end of the workday.

c. Temporary earth stabilization until final stabilization has been achieved.

d. Protect all storm drain inlets/catch basins that could receive storm water from the project until final stabilization of the site has been achieved.

e. If concrete work is part of the project, a concrete washout area must be provided. The area must be lined or a sealed container may be used.

18.2

The Contractor's SWPPP must be reviewed and approved by the University's Department of Environmental Health and Safety (EHS) prior to submitting the application (NOI) online, and the Contractor must have the permit before beginning construction. The University Project Manager will assist in submitting the Contractor's SWPPP to EHS.

18.3

The Contractor shall assume full responsibility for any SWPPP drafted by others and adopted by the Contractor for use at the construction site. The Contractor shall finalize and file the SWPPP grading,

sediment and erosion control plan and pay permit fees. The Contractor shall make any needed modifications to the SWPPP to fit the existing site conditions prior to beginning construction.

18.4

In addition to other requirements, the Contractor shall:

a. Inspect the construction site to verify the SWPPP plan every two weeks and after significant rainfall, and keep a record of each inspection at the construction site,

b. Remedy deficient management practices, controls and control structures; and,

c. Modify the SWPPP as site conditions change (i.e., as demolition and construction phases progress).

(4.2.4.1, 4.2.4.1.1)

General Conditions:

9.1 TESTS AND INSPECTIONS
(General Conditions) 9.1.1 Inspection Access: Tests, inspections and approvals of portions of the Work required by the Contract Documents or by laws, ordinances, rules, regulations, resolutions or orders of public authorities having jurisdiction shall be made at an appropriate time. Unless otherwise specifically set forth in the Contract Documents or agreed to by the University in writing, the University shall contract for such tests, inspections and approvals with an independent entity, or with the appropriate public authority, and the University shall bear all related costs of tests, inspections and approvals except as provided below. If any of the Work is required to be inspected or approved by the terms of the Contract Documents or by any public authority, the Contractor shall, at least two working days prior to the time of the desired inspection, and following the procedures established by the University, request such inspection or approval to be performed. The Contractor shall give the A/E timely notice of when and where tests and inspections are to be made so that the A/E may observe such procedures. (4.1.4.1.3)

12.2.2.: UNIVERSITY'S RIGHT TO CARRY OUT THE WORK:
(1) If the Contractor defaults or neglects to carry out the Work in accordance with the Contract Documents and fails within a ten (10) day period (or longer if approved by the University in writing) after receipt of written notice from the University to cure such default or neglect, the University may without prejudice to other remedies the University may have, correct such deficiencies, including taking over the Work and prosecuting the same to completion, by contract or otherwise, and may take possession of, and utilize in completing the Work, such materials, appliances, and facilities as may be on the site of the Work as well as the site as necessary for its proper completion. In such case, the University shall offset from payments then or thereafter due the Contractor the cost of correcting such deficiencies, including compensation for the A/E, the University's staff and legal counsel's additional services and expenses made necessary by such default, neglect or failure. If payments then or thereafter due the Contractor are not sufficient to cover such amounts, the Contractor shall pay the difference to the University. The Contractor shall continue performance of the Contract to the extent not terminated. (4.2.4.1)

12.5.: UNIVERSITY'S RIGHT TO STOP THE WORK:
If the Contractor fails to correct Work or fails to carry our Work, as required by the Contract Documents or fails to comply with all required and customary safety precautions; the University, by written order signed personally or by an agent specifically so empowered by the University in writing, may order the Contractor to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, the right of the University to stop the Work shall not give rise to a duty on the part of the University to exercise this right for the benefit of the Contractor or any other person or entity. (4.2.4.1)

UofU Design Standards:

(2.8.a) In addition to the DFCM requirements the A/E shall coordinate with the University's Environmental Health and Safety Office for specific University requirements.

(3.2.a.3.d) As an alternate for University consideration, the A/E's design shall include at least one concrete pavement section that incorporates pervious concrete. The A/E will consult with Facilities Management through the University Project Manager about the possibility of including at least one section as an alternate bid item in the bidding documents. Options might include concrete pavers, etc.

(3.2.a.4.e) As an alternate for University consideration, the A/E's design shall include at least one asphalt pavement section that incorporates rubberized asphalt (at a minimum as a top layer), or pervious (gap graded) asphalt, or pervious concrete. The A/E will consult with Facilities Management through the University Project Manager about the possibility of including at least one section as an alternate bid item in the bidding documents.

(3.2.d.1) Storm drainage calculations and drawings are to be submitted to the University Project Manager for review and approval. The submittal shall include the engineer's stamp and dated signature.

Storm Water Design Criteria: (4.2.5.3, 4.2.5.3.2)

- (3.2.d.2.a) The storm water hydrology associated with new construction projects must mirror predevelopment hydrology of the previously undeveloped site; or, the design must improve the hydrology of a redeveloped site and reduce the discharge of storm water.

- (3.2.d.2.b) Projects which add impervious surfaces and storm water run-off must include storm water control systems that will not increase flow into the University's (and consequently Salt Lake City's) storm water system.

- (3.2.d.2.c) Provide on-site detention of storm water runoff to detain the 100 year, 24-hour storm, with 0.20 CFS/Acre run-off rate. Show calculations for detection volume requirement.

- (3.2.d.2.d) Provide on-site retainage for a 10 year 2-hour storm. If a 10 year 2-hour storm cannot be retained on the project site, design a modification to the University's storm water system which will accommodate an equivalent retention of the 10 year 2-hour storm. The modification could include bio retention (bioswale), previous pavement, etc.

- (3.2.d.2.e) Runoff first to pervious surfaces or landscape. The A/E's design shall direct the runoff onto pervious surfaces or landscaped areas prior to capture in a formal drainage

system/structure to slow the time of concentration and increase water quality, and provide supplemental irrigation for landscaped areas.

- (3.2.d.2.f) Limit Impervious Surfaces. Every effort shall be made to minimize and disconnect impervious surfaces, slow the time of concentration, and improve water quality through the use of micro detention, bio retention (bioswale), etc. Convey runoff in surface conveyances to the greatest extent possible.

- (3.2.d.2.g) The design shall incorporate both water quality and water quantity best management practices (BMP) and pollutant concentration calculations.

Storm Water Management Plan:

- (3.2.g.1.a) An approved Storm Water Pollution Prevention Plan (SWPPP) for projects 1 acre or larger will be required prior to obtaining a digging permit. (4.2.5.1)

- (3.2.g.1.b) Direct the Contractor to submit the SWPPP to the University Construction Project Delivery Project Manager and the Occupational and Environmental Health and Safety Department for review.

- (3.2.g.2.a) Maintenance and Escalation of Best Management Practices: The density of developed area and close proximity of impervious surfaces requires proactive storm water protection at the University of Utah. Impermeable surfaces adjacent to construction sites are to be kept free of sediment and construction site debris. The University requires all contractors to ensure that these potential pollutants be controlled to the "Maximum Extent Practicable" (MEP) as defined by the Federal Clean Water Act (CWA) part 402(p)(3)(B)(iii). In situations where the installation of a Best Management Practice (BMP) has proven ineffective (two or more corrective actions issued) the University of Utah will require alternate BMPs.

- (3.2.g.3.a) Long Term Storm Water Controls: The design team must complete the University's Utah Pollution Discharge Elimination System submittal form for Longer Term Storm Water control compliance. Describe why the specific long-term storm water controls were selected, the pollutant removal expected from the selected controls and the technical basis that supports the performance claims for the selected controls. For a copy of this form, please see the forms section on the University's Documents and Standards web page. (4.2.5.2.2)

Erosion Control:

- (3.2.g.6.a) Avoid disturbing areas of high erosion susceptibility, sensitive vegetation areas, and areas with steep slopes. (4.2.5.3.1, 4.2.5.4.2)

- (3.2.g.6.b) Provide special erosion control measures on slopes greater than the angle of repose necessary for natural erosion control. Coordinate erosion control measures with the soils engineer.

- (3.2.g.6.c) Erosion Control Plan: Create an erosion control and sedimentation plan for all construction activities associated with the entire project site. The plan must incorporate practices for stock piling top soil of reuse, seeding, grading, mulching, filter socks, stabilized construction entrances, protection of drain inlets, preservation of existing vegetation, and any other 'best management practice ("BMP") needed to control site erosion and sedimentation from storm water runoff.

- (3.2.g.6.c.i) The plan must include a drawing and a complete description of the BMPs that will be implemented to prevent erosion at the site and control sedimentation in storm water runoff. A menu of sample erosion and sediment control BMPs can be found at the EPA's National Pollutant Discharge Elimination System / National Menu of Storm Water Best Management Practices website.

- (3.2.g.6.d) Sediment Control at Open Utilities: For projects where open utilities will be necessary during construction, require the Contractor to protect the University's utility system by installing sediment control devices at each open utility, similar to Royal InfraSafe Sediment control Barrier (manufactured by Royal environmental Systems, Inc.) Require the contractor to install the devices in accordance with the manufacturer's recommendations.

DFCM Programming Standards (031506):

Site Analysis:

- 2.5.B Physical Characteristics: Collect, organize and present facts about the site which are pertinent to the development of the project.
    - Including, but not limited to: Environmental assessments, geologic surveys, soil investigation, surface contours and property description surveys, utilities surveys, title search, and archeological surveys.

Project Stormwater Infrastructure Flow & Quality Design Basis

Project Name:_____ Plans prepared by:_____

Date:_____ Company:_____

Project ID#:_____

What long term best management practices (BMPs), or post-construction flood control devices have been selected to manage storm water for the project?

- Subsurface Detention Vault
- Stormwater Pond(s)
- Rain Garden
- Grassed Swale(s)
- Green Roof
- Permeable Pavement
- Other(s) _____

How were these BMP(s) selected?

- Cost
- Space requirements
- Instillation expertise availability
- Material availability
- Performance standard
- Pollutant targeting

Do these BMP(s) meet the requirements of the University Design Standards part 3.2.d.2.a-e?

- Yes
- No (a written exception has been granted by the University Planning & Design Group)

If meeting the University Design Standards for long term best management practices is technically infeasible for this project, describe site constraints and provide the rationale for the use of alternative design criteria.

Requirements per MS4 – 4.2.5.2.2, 4.2.5.3.4

Project Stormwater Infrastructure Flow & Quality Design Basis

What storm water pollutants are targeted by the BMP(s) and what is the calculated pollutant removal for the associated design?

Sediment	Floatables (litter, trash, etc.)
Oil/petroleum products	Fertilizers
Pesticides	Leaves/Grass Clippings
Other(s) _____	

What is the technical basis supporting the performance claims? Provide information quantifying the infiltration, and/or evapotranspiration, etc. have been used and to what extent.

Manufacture's provided specifications

Documented performance results

Analytical method or model _____

Other(s) _____

University of Utah Design Standards: (The University must approve any variance or exception in writing)

New development are required by the University of Utah Campus Design Standards (December 2010) to mirror predevelopment hydrological conditions. New sites should therefore be managing rainfall on site at close to 100% of the rainfall volume. Designers are to document the technical basis and calculations for the infiltration rates.

(Civil - 3.2.d.2.c) *"Provide on-site detention of storm water runoff to detain the 100 year, 24-hour storm, with 0.20 CFS/Acre run-off rate. Show calculations for detection volume requirement."*

(Civil - 3.2.d.2.d) *"Provide on-site retainage for a 10 year 2-hour storm. If a 10 year 2-hour storm cannot be retained on the project site, design a modification to the University's storm water system which will accommodate an equivalent retention of the 10 year 2-hour storm. The modification could include bio retention (bio swale), previous pavement, etc."*

Municipal Permit references:

MS4 4.2.5.2.2 – *"Documentation on how the requirements of the ordinance or other regulatory mechanism will protect water quality and reduce the discharge of pollutants to the MS4. Documentation shall include: How long term BMPs were selected; the pollutant removal expected from the selected BMPs; and the technical basis which supports the performance claims for the selected BMPs."*

MS4 4.2.5.3.4 – "*… If meeting this retention standard is technically infeasible, a rationale shall be provided on a case by case basis for the use of alternative design criteria. The project must document and quantify that infiltration, evapotranspiration and rainwater harvesting have been used to the maximum extent technically feasible and that full employment of these controls are infeasible due to site constrains."*

To be filled out by University Construction Project Mangers

Finished Project Stormwater Implementation Costs (Construction Project Delivery)

Project Name: _____ Date :_____

Prepared by:_____ Dept:_____

Project ID#:_____

What was the total cost to implement construction phase storm water pollution prevention from the beginning of the project to final stabilization?

Stormwater pollution prevention plan (SWPPP) preparation:

Certified (weekly or biweekly) site self-inspections:

Best Management Practice (BMP) Materials, installation, and maintenance (silt fences, straw waddle, inlet protection bags, gravel exits, etc.):

Cleanup/Disposal (i.e. sweeper trucks, concrete washout removal):

Other materials or labor:

What was the total cost to implement post construction storm water pollution prevention systems?

Material/installation costs for Long Term BMPs (i.e. ponds, subsurface vaults, permeable pavement, etc.):

Project total stormwater implementation cost:

UofU Long Term Flood Control Device Inventory (4.2.5.4, 4.2.5.4.1, 4.2.5.4.2)

BMP name/description	Number of occurrences	Locations	Maintenance Requirements	Priority and Inspections Information
Injection wells (AKA: Seepage Pits, Sumps, Sinkholes, Dry wells, Infiltration basin) *An injection well is used to place fluid underground into porous geologic formations. These underground formations may range from deep sandstone or limestone, to a shallow soil layer.*	11	84 (Southwest) 32 (Southwest) 581 (East) 589 (East) 90 (North) 5(Northeast) 83 (North) 10 (South) 19 (East) 1 (East) 120 (west) (not on map) (See MS4 map for locations)	Remove trash, vac truck as needed. See relevant SOP for full details.	Low (annually inspected) Date of most recent inspection(s): 6.15.20
Subsurface Infiltration or Storage devices (including In-line storage, StormTech Catchment Structures) *Includes a variety of pre-cast or pre-built proprietary subsurface detention vaults, chambers, or other devices designed to capture and infiltrate storm water runoff*	16	SJ Quinney College of Law (3) NW Parking Garage (1) ACC Parking Garage (8) Kahlert Village (4)	Remove trash, vac truck as needed. See relevant SOP for full details.	Low (annually inspected) Date of most recent inspection(s): 6.12.20
Storm drain inlet	1808	Various, see MS4 map for location.	Remove trash, vac truck as needed. See relevant SOP for full details.	Medium (cleaned annually w/vac truck by Transportation – Tracked in AIM)
Vegetated swales *Swales (e.g., grassed channels, dry swales, wet swales, or bio-swales) are vegetated, open-channel management practices designed specifically to treat and attenuate storm water runoff. As*	0			N/A

storm water runoff flows along these channels, vegetation slows the water to allow sedimentation, filtering through a subsoil matrix, and/or infiltration into the underlying soils.				
Permeable pavement *Pervious or porous pavement surface, often built with an underlying stone reservoir that temporarily stores surface runoff before infiltration.* *Permeable interlocking concrete pavement (pavers)* *Pervious concrete pavement* *Porous asphalt pavement*	2 locations	Sutton Building Gardner Commons (2)	Clean with vac truck at least annually. See relevant SOP for full details.	Medium (Along with parking lot and street sweeping: permeable pavement is cleaned with a sweeper truck each quarter.) Most recent inspection(s): 6.1.20
Stormwater ponds *Dry detention ponds (a.k.a. dry ponds, extended detention basins, detention ponds, and extended detention ponds) are basins whose outlets have been designed to detain storm water runoff for some minimum time (e.g., 24 hours) to allow particles and associated pollutants to settle. Unlike wet ponds, these facilities do not have a large permanent pool of water. However, they are often designed with small pools at the inlet and outlet of the basin.*	21	Skaggs Pharmacy (West) ACC Parking (North) Lassonde (Southwest) (2) Gardner Commons (Southwest) Bullpen Pond (South) Utah Tiered (West) Warnock (East) Eccles Broadcast (North) Huntsman Center (South) (3) Horticulture Compound (West) Honors Housing (East) Student Life Center (North) Garff Building (North) Sutton (West) Biology Grow Site (2) Chapel Glen (See MS4 map for locations)	See relevant SOP for full details.	Low (inspected annually) Most recent inspection(s): 6.1.20

UofU Long Term Flood Control Device Inventory (4.2.5.4, 4.2.5.4.1, 4.2.5.4.2)

Green roof *AKA Vegetated roof – a building hardscape surface topped with planters/landscaping, etc.*	9	Huntsman Cancer Hospital (556) HCI South (554) HCI North (555) ACC Garage (366) Basketball offices behind arena (99) Marriot Library (86) Quinney Law (70) Sutton (12) Business (79)	See relevant SOP for full details.	Low Most recent inspection(s): 6.8.20
Protection of natural features *Undeveloped sites can have numerous natural features that provide environmental, aesthetic, and recreational benefits if preserved and protected from the impacts of construction and development. These features include wetlands, riparian areas, floodplains, aquifer recharge areas, mature trees, woodlands, and other wildlife habitat. Restricted areas such as floodplains and steep slopes should also be protected from possible impacts from construction activities. Natural area protection is not limited to undeveloped land; properties that are being redeveloped might have attractive open space, well-drained soils, or riparian areas that should be identified and considered for preservation early in the planning process.*	2	Heritage Preserve Riparian Zone of Red Butte Creek	See Campus Master plan for details.	High (construction not permitted in protected area)
Vegetated buffers	0			N/A

Areas of natural or established vegetation maintained to protect the water quality of neighboring areas. Buffer zones slow storm water runoff, provide an area where runoff can infiltrate the soil, contribute to groundwater recharge, and filter sediment.				
Vegetated landscaping *Areas of vegetated landscaping allowing for storm water runoff infiltration.*	Yes	239 Acres	See Landscape Maintenance SOPs for full details.	Medium (regular/ongoing maintenance conducted by Grounds Dept. – Tracked in AIM)

Green Roof Annual Inspection (4.2.5.5.3, 4.2.6.6.6)

Location:

Date:

Time:

Inspector:

Inspection Item	Satisfactory	Unsatisfactory	Comments
Undesirable vegetative growth			
Sediment erosion			
Standing water			
Trash accumulation			
Storm drain inlet			
Leaves/organic detritus			
Any public hazards			

Action items:

Department/Personnel responsible for maintenance: Landscaping, Plumbing

Corrective action deadline:

Re-inspection date:

Signature of inspector:

Additional comments:

Injection Well Annual Inspection (4.2.5.5.3, 4.2.6.6.6)

Location:

Date:

Time:

Inspector:

Inspection Item	Satisfactory	Unsatisfactory	Comments
Concrete condition			
Nearby pavement condition			
Metal great condition			
Undesirable vegetative growth			
Trash accumulation			
Standing water			
Excessive Sediment buildup			
Any public hazards			

Action items:

Department/Personnel responsible for maintenance: Plumbing, heavy equipment

Corrective action deadline:

Re-inspection date:

Signature of inspector:

Additional comments:

Permeable Pavement Annual Inspection (4.2.5.5.3, 4.2.6.6.6)

Location:

Date:

Time:

Inspector:

Inspection Item	Satisfactory	Unsatisfactory	Comments
Pavement wear/tear condition			
Sediment buildup			
Trash accumulation			
Standing water			
Clear of obstructions			
Any public hazards			

Action items:

Department/Personnel responsible for maintenance: Heavy Equipment

Corrective action deadline:

Re-inspection date:

Signature of inspector:

Additional comments:

Stormwater Pond Annual Inspection (4.2.5.5.3, 4.2.6.6.6)

Location:

Date:

Time:

Inspector:

Inspection Item	Satisfactory	Unsatisfactory	Comments
Embankment erosion			
Sediment buildup			
Undesirable vegetative growth			
Standing water			
Storm drain inlet			
Trash accumulation			
Slope erosion			
Any public hazards			
Evidence of animal/pet waste?			

Action items:

Department/Personnel responsible for maintenance: Landscaping, Plumbing

Corrective action deadline:

Re-inspection date:

Signature of inspector:

Additional comments:

Subsurface Vault Annual Inspection (4.2.5.5.3, 4.2.6.6.6)

Location:

Date:

Time:

Inspector:

Inspection Item	Satisfactory	Unsatisfactory	Comments
System backed up			
Sediment buildup			
Undesirable vegetative growth			
Standing water			
Storm drain inlet			
Trash accumulation			
Surrounding area erosion			
Any visible public hazards			

Action items:

Department/Personnel responsible for maintenance: Plumbing, Heavy Equipment

Corrective action deadline:

Re-inspection date:

Signature of inspector:

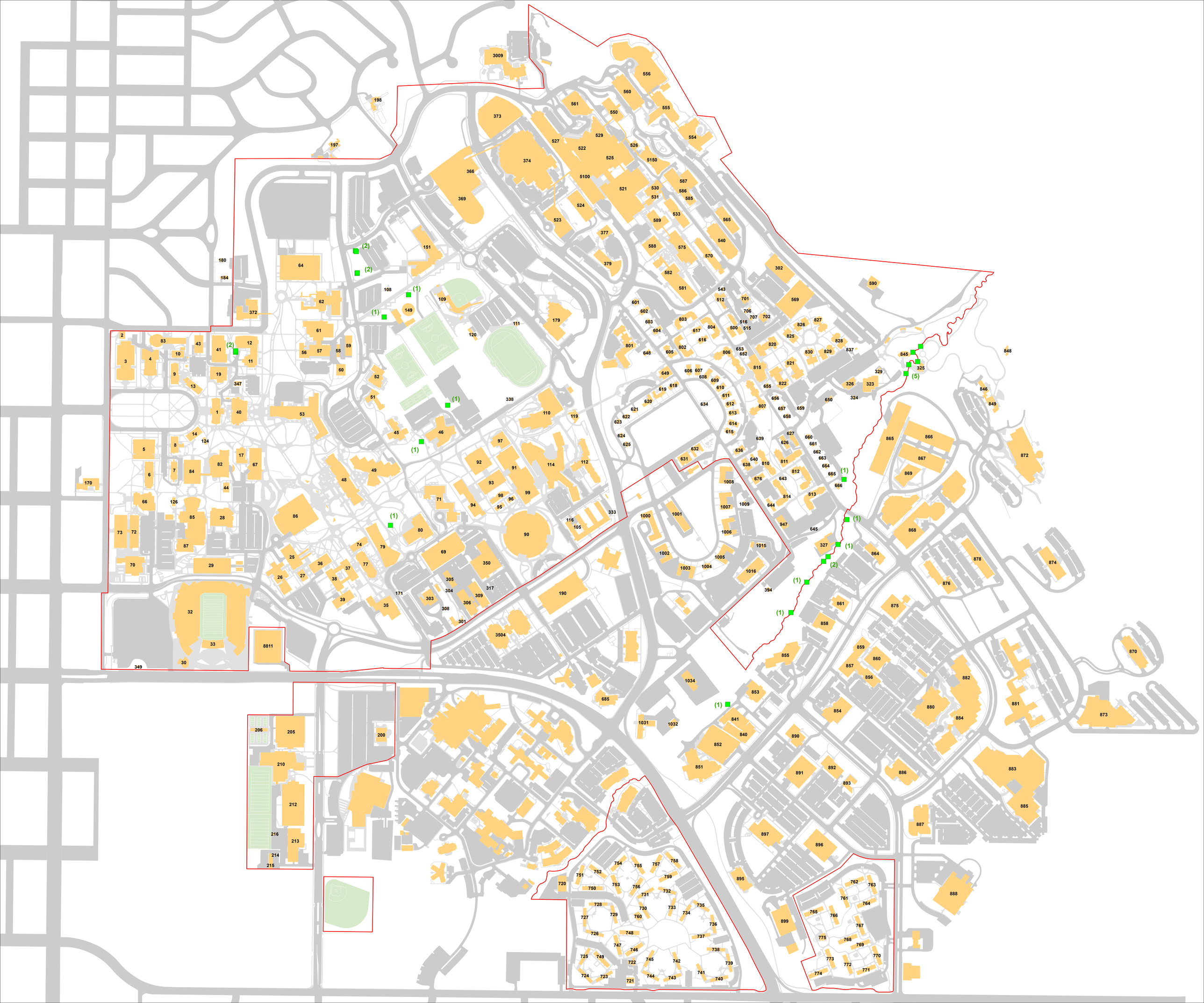
Additional comments:

Appendix D

Illicit Discharge, Detection & Elimination Program:

- **Dry Weather Field Screening (MCM 3)**
  - **University Outfall Map**
  - **Dry Weather Screening Outfall Inventory**
  - **Dry Weather Screening SOP**
  - **Dry Weather Screening Flow Chart**
  - **Annual Dry Weather Visual Monitoring Inspection Form**

- **Spill Prevention and Response (MCM 3)**
  - **Illicit Discharge Policy & Enforcement Procedure**
  - **IDDE Policy (Website Example)**
  - **IDDE Database Map (Example)**
  - **EHS Incident Report Manager (Example)**
  - **EHS Incident Report (Example)**
  - **Spill Response Program SOP**
  - **OEHS On-Call Procedures Summary Sheet**
  - **University Police Department Dispatch Procedure**
  - **Tracing Illicit Discharges SOP**
  - **Hazardous Material Emergency Response Plan**
  - **UofU Recycling FAQ (Website Example)**
  - **“What Goes Around Comes Around” (Website Example)**


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Dry Weather Screening Outfall Inventory (4.2.3.1)
Appendix D

Facility Name	Control/Area Description	Location of Outfall
Greenhouse Outfall	Drain in the center of the parking lot to Red Butte Creek	See Outfall map
Biology Grow Site	Pipe from the grow area into Red Butte Creek—no catch basin	See Outfall map
Heartport/420 Wakara	Catch basin drains to creek	See Outfall map
Shuttle lot/Low Bridge	Catch basin drains to creek	See Outfall map
Building 666	Bubble up overflow grate	See Outfall map
Bridge SD at intersection of Pollock Road and Chipeta Way.	Catch basin drains to creek	See Outfall map
Dentistry	west of 841	See Outfall map

RBC Substation #1	Gravel area catchment with outfall that drains to creek	See Outfall map
RBC Substation #2	Gravel area catchment with outfall that drains to creek. Bottom of concrete wall north of substation #1	See Outfall map
RBG Concert 1	Catch basin drains to creek	See Outfall map
RBG Concert 2	Catch basin drains to creek	See Outfall map
RBG Concert 3	Catch basin drains to creek	See Outfall map
RBG Concert 4	Catch basin drains to creek	See Outfall map
RBG Concert 5	Catch basin drains to creek	see Outfall map

Dry Weather Screening SOP

Responsibility: Environmental Health and Safety Department, Plumbing Shop

Frequency and Duration: Ongoing; Annually

Description: This procedure is used to find illicit discharges to the MS4. University staff inspects portions of the storm drainage system and storm drain outfalls during periods of dry weather (4.2.3.3.3).

Applicability: University outfalls that discharge to Red Butte Creek.

Equipment

- Clear sampling jar
- Map showing location
- Visual monitoring report form
- Camera

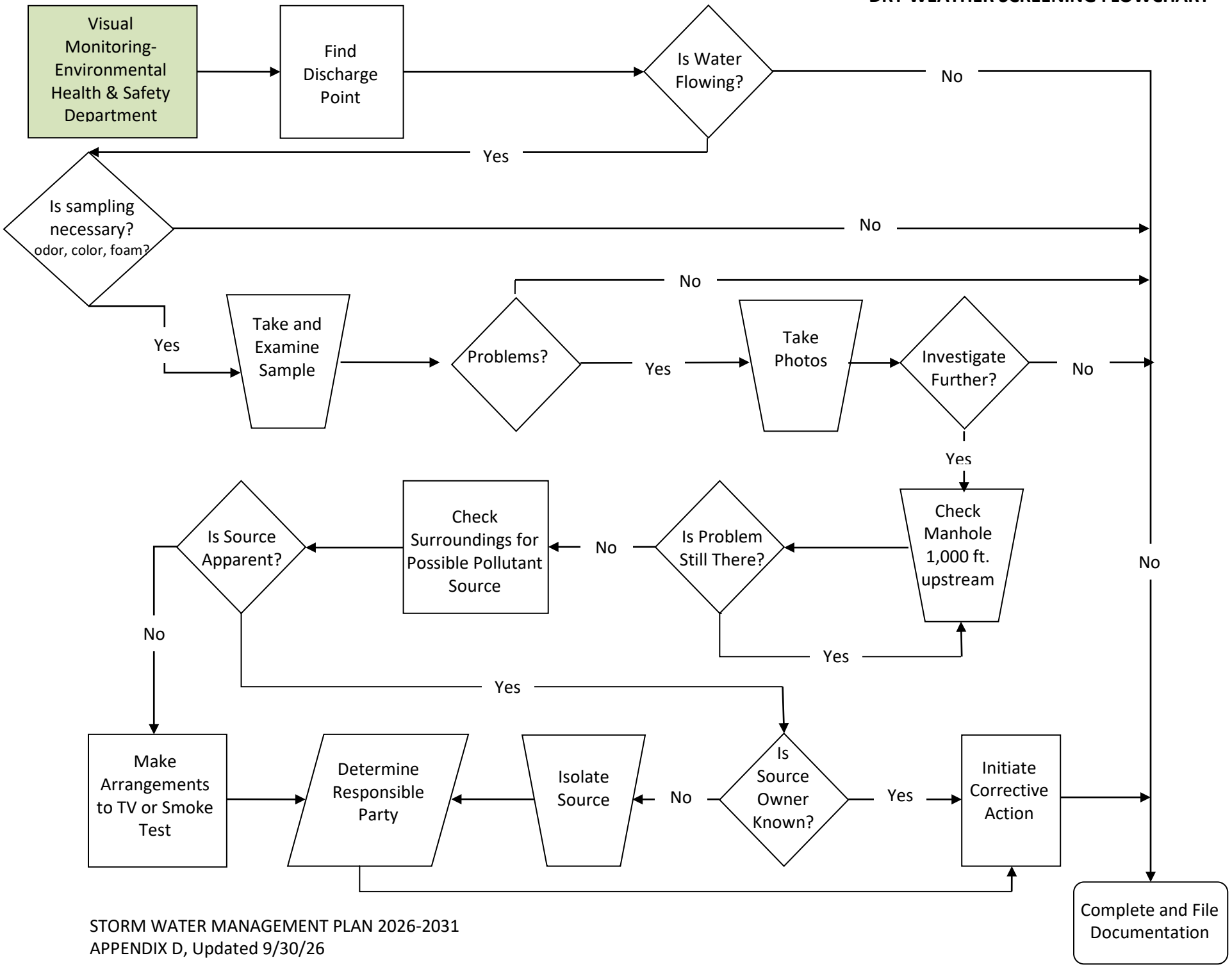
Inspection

- ☐ Check for dry weather discharge
- ☐ If discharge is present, evaluate discharge to determine if sampling is necessary; sampling may be necessary if there is visual, or other, contamination
- ☐ Follow procedures on visual monitoring form
- ☐ Photo document findings
- ☐ If there is cause for concern move to inspection follow up procedures

Inspection Follow-Up Procedures in event of discharge concern

- ☐ File any Photos, log activity in EHS electronic reporting system.
- ☐ Call health department and report findings 801-580-6681
- ☐ Trace discharge upstream by checking manholes – 1,000 foot intervals
- ☐ Find last manhole with any evidence of illicit discharge
- ☐ Look at surface improvements in the area to determine possible suspects
- ☐ If determination cannot be made from the surface investigations, smoke or dye test line for unknown connections.

DRY WEATHER SCREENING FLOWCHART



ANNUAL DRY WEATHER VISUAL STORM WATER DISCHARGE MONITORING INSPECTION FORM

Date of Examination: _____ Permit No. UTR: 090024_____

Outfall location or ID number: _____

Nature of Discharge (i.e., runoff, land drain, irrigation or snowmelt): _____

Type of Monitoring:

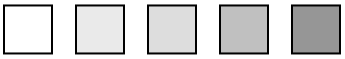
☐ Dry Weather Screening
Date of last Rainfall Event:_____

Visual Quality of Storm Water Discharge: (circle response)

At Time of Sampling:

Color: clear brown green rust other: _____

Odor: Yes / No

Clarity: 

Floating Solids: Yes / No

Foam: Yes / No

After One Hour of Settling:

Settled Solids: Yes / No

Suspended Solids: Yes / No

Oil Sheen: Yes / No

Other obvious indicators of storm water pollution: _____

_____

Probable sources of any observed storm water contamination: _____

_____

Identified Deficiencies: _____

_____

Corrective Actions: _____

_____

Name of Examiner_____ Title_____

Signature_____Date_____

University of Utah Storm Water Pollution Prevention Program

Illicit Discharge Policy

Prohibition of Illicit Discharges

No person shall introduce or cause to be introduced into the University's permitted municipal separate storm sewer system any discharge that is not composed entirely of storm water. Upon detection of any illicit discharge the immediate cessation and removal of improper disposal practices is required. The commencement, conduct or continuance of any non-storm water discharge to the municipal separate storm sewer system is prohibited except as described in part 1.2.2.2 of the Small MS4 General UPDES permit.

Legal Authority (4.2.3.2.1)

The majority of the MS4 is comprised of University of Utah owned and operated facilities. Through its ownership and control, the University controls discharges to and from the MS4, as described in the Storm Water Management Plan (SWMP). The University will have the responsibility to implement all measures within the SWMP.

The University of Utah is both responsible for and has legal authority for storm water discharges from both University owned and non-University facilities. This legal authority includes enforcement of storm water requirements and regulations.

Applicability

This University of Utah Rule applies to all water generated on developed or undeveloped land entering the University of Utah's storm sewer system, including University of Utah facilities and University of Utah tenants located within the University's permitted municipal separate storm sewer system. This rule applies to all persons employed by, doing business with, or visiting the University.

Purpose

1. Protect, maintain, and enhance the environment of the University of Utah.
2. Protect the public health, safety and general welfare of the University of Utah community, including, but not limited to: residents, students, faculty, staff, contractors, vendors, and other campus visitors, by controlling discharges of pollutants to the University of Utah's storm water system.
3. To maintain and improve the quality of the receiving waters into which the storm water outfalls flow, including without limitation: lakes, rivers, streams, ponds, wetlands and groundwater.
4. Enable the University of Utah to comply with the National Pollutant Discharge Elimination System permit (NPDES/UPDES) and applicable regulations, 40 CFR 122.26 for storm water discharges.
5. Allow the University of Utah to regulate and prohibit discharges into storm water facilities of sanitary, industrial, or commercial sewage or waters that have otherwise been contaminated. This regulation and prohibition of sewage and contaminated water discharges is required by the August 1, 2010 Small MS4 permit issued by the Utah Division of Water Quality.

Author

Environmental Health & Safety

References

University of Utah SOP 10: Tracing the Source and Removal of Illicit Discharges

University of Utah MS4 Permit UTR090000

University of Utah Storm Water Management Program Plan

Utah Water Quality Act, Title 19, Chapter 5, Utah Code Annotated 2004, as amended

Federal Water Pollution Control Act (33 U.S.C. §§1251 et. seq., as amended to date)

Definitions

Contaminant – any physical, chemical, biological, or radiological substance or matter in water.

Discharge – dispose, deposit, spill, pour, inject, seep, dump, leak, or place by any means, or that which is disposed, deposited, spilled, poured, injected, seeped, dumped, leaked, or placed by any means including any direct entry of any solid or liquid matter into the municipal separate storm sewer system.

Illicit Connections – illegal or unauthorized connections to the municipal separate storm sewer system whether or not such connections result in discharges into that system.

Illicit Discharge – any discharge to the municipal separate storm sewer system that is not composed entirely of storm water and not specifically exempted by this rule.

Municipal Separate Storm Sewer System (MS4) – the conveyances owned or operated by the municipality (in this case the University of Utah) for the collection and transportation of storm water, including the roads and streets and their drainage systems, catch basins, curbs, gutters, ditches, man-made channels, and storm drains.

National Pollutant Discharge Elimination System (NPDES) Permit – a permit issued pursuant to 33 USC 1342.

Person - an individual, corporation, partnership, association, state, municipality, commission, or political subdivision of a state, or any interstate body.

Runoff – water produced by storms, surface drainage, snow and ice melt, and other water handled by the storm sewer drainage system; that portion of the precipitation on a drainage area that is discharged from the area into the MS4.

Storm Water – storm water runoff, snow melt runoff, surface runoff, street wash waters related to street cleaning or maintenance, infiltration and drainage.

Storm Water Management Facilities System – the drainage structures, conduits, ditches, combined sewers, sewers, and all device appurtenances by means of which storm water is collected, transported, pumped, treated, or disposed of.

Storm Water Management Plan- the set of drawings and other documents that comprise all the information and specifications for the programs, drainage systems, structures, best management practices (BMPs), concepts and techniques intended to maintain or restore quality and quantity of storm water runoff to pre-development levels.

Storm Water runoff - the flow on the surface of the ground resulting from precipitation.

Surface Water – includes waters upon the surface of the earth in bounds created naturally or artificially including, but not limited to, streams, other water courses, lakes and reservoirs.

Waters of the U.S. – Surface watercourses and water bodies as defined at 40 CFR 122.2, including all natural waterways and definite channels and depressions in the earth that may carry water, even though such waterways may only carry water during rains and storm and may not carry storm water at and during all times and seasons.

UPDES – Utah Pollutant Discharge Elimination System

Specific Activities

1. Washing down paved areas into storm drains or gutters is prohibited unless necessary for health or safety purposes. *Storm Water Management Plan Procedure 05 – Power/Pressure* Washing provides details on acceptable washing practices.
2. No person shall throw, deposit, leave, maintain, keep, or permit to be thrown, deposited, left, or maintained, in or upon any University of Utah property, driveway, parking area, street, alley, sidewalk, component of the storm drain system, or water of the U.S., any refuse, rubbish, garbage, litter, or other discarded or abandoned objects, articles, and accumulations, so that the same may cause or contribute to pollution.
3. Machinery and equipment, including motor vehicles, which are leaking significant amounts of oil or fluid, must be repaired.
4. Any machine or equipment which is to be repaired or maintained in an uncovered outdoor area shall be placed on a pad of absorbent material to contain leaks, spills, or small discharges.
5. Fuel and chemical residue or other types of potentially harmful material, such as animal waste, garbage or batteries, which are located in an area susceptible to runoff, shall be removed immediately and disposed.
6. Use of any pesticide, herbicide, or fungicide, the manufacture of which has been either voluntarily discontinued or prohibited by the Environmental Protection Agency, is prohibited.
7. Grease traps must be maintained and serviced by the applicable food service vendor at a frequency that prevents overflow or release of grease to the sewer system.
8. Any discharge of untreated sanitary wastewater is illegal and must be eliminated. Discharges of this nature must be reported to the Division of Water Quality and to the local wastewater treatment plant.

Prohibition of illicit connections

The construction, use, maintenance or continued existence of illicit connections to the separate municipal storm sewer system is prohibited. This prohibition expressly includes, without limitation, illicit connections made in the past, regardless of whether the connection was permissible under law or practices applicable or prevailing at the time of connection. See Appendix D of the University's Storm Water Management Plan for details on removal of illicit connections.

Reporting Illicit Discharges and Notification of spills

In the event of a spill or leak of hazardous materials, oil, or any other pollutant, the person shall immediately notify the University of Utah Occupational Environmental Health & Safety Department at 801-581-6590 and/or the University Police Department at 801-585-2677.

Enforcement

- The University Police will be notified of all illegal dumping activities including those concerning the storm sewer system as needed.
- If a violation of this University Rule is also a violation of Salt Lake City or Salt Lake County ordinances or state or Federal law, the appropriate agency (e.g., Salt Lake City Public Utilities, Salt Lake Valley Health Department, Utah Division of Water Quality) will be notified of the violation.
- Historically the University has also pursued cost recovery from responsible 3rd parties for cleanup when it was applicable and reasonable to do so.

HAZARDOUS MATERIAL EMERGENCY RESPONSE PLAN

Revised 8/3/2026

University of Utah
Environmental Health and Safety

University of Utah
Hazardous Material Emergency Response Plan
Responsibilities

University President
|
VP. Admin Services
|
Director - EHS
|
On Scene Commander —-->
|

Director - EHS
Assoc Director - EHS
Command
EHS
Police Division
Security / Service Officers

SLC Fire Dept	**EHS**	**Poison Control**	**Plant Operations**	**SLC / County Health**	**Police/Security**	**Radiological Health**	**DEQ**	**UOSH**
Haz Mat Response Rescue Evacuation Material ID and Detection Containment Property Conservation Personnel Decontamination Fire Fighting	Material ID Hazard Assessment Containment Clean-up Decontamination Notification and Coordination with Government Agencies Sampling Final Inspections	Material Hazard Information	Utilities Damage Assessment Clean-up	Public Health Environment Protection	Evacuation Traffic Control Crowd Control Site Security	Radiation Emergencies Assessment Containment Clean-up Decontamination Monitoring Notification	Environmental Protection	Employee Injury/Fatality

ACTION CHECKLIST

PRIORITIES: Protect life, control incident, and protect property.

EMERGENCY PHASE

1. Assessment.
   NOTE: Entering the scene may be too hazardous at this point.

   a. Determine type and quantity of hazardous material(s) involved:
      _____

   b. Exact Location: _____

   c. Isolate immediate area: _____

   d. Any victims or potential victims? _____

   e. Is evacuation necessary? _____

2. Summon Additional Assistance (as needed).

   a. Salt Lake City Fire Department (Paramedics, Hazardous Material Response Team, Fire Fighting).
   b. Police/Security.
   c. Plant Operations.
   d. Radiological Health (Radiation Incidents Only).
   e. Vacuum trucks (see Appendix).

3. Establish a Command Post when additional assistance is summoned.
   Make sure it is a safe distance away, up-wind/uphill of the scene and in view of the scene (if possible). If Salt Lake City Fire Department responds, locate this command post with their command post.

4. Advise Dispatch who is in command and location of command post.

5. Victim Rescue. Rescuers must be properly protected.
   Salt Lake City Fire Department has primary responsibility for victim rescue.

6. Provide Hazard Information to emergency response and medical personnel. Contact Poison control for additional assistance: 1-800-222-1222

7. Evacuate the affected area as needed.
   Consider; the wind direction, spill flow, explosion potential, toxicity of material, electrical hazards, etc. Consult with Plant Operations regarding ventilation shutdown (if necessary).

8. Crowds and Traffic Control.
   Request that police/security establish crowd control to prevent civilians and unprotected personnel from entering the Evacuation Zone.

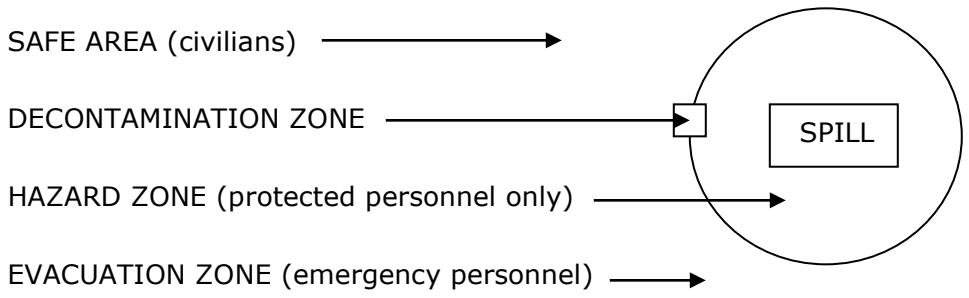
9. Establish Evacuation and Hazard zones.

   a. Yellow banner tape set up to designate Evacuation zone. Use sampling equipment if

available to determine safe evacuation z

b. Red banner tape set up around the Hazard Z
NOTE: Only personnel actually working on th ent will be allowed in the Hazard Zone. All personnel a this zone must be decontaminated before exiting.

HAZARD ZONE SKETCH



10. Incident Control.

c. Stop the leak.

d. Determine the extent of vapor spread, using combustible gas meter, detector tubes, pH meter, infrared analyzer or other equipment.
e. Contain the material (absorb, blanket, or construct dams/channels with inert materials).
f. Where possible dilute or neutralize material.
NOTE: Avoid flushing when possible! Attempt to contain and collect.
e. Eliminate open flames when necessary, starting downwind.
NOTE: To avoid sparking, do not flip open switches.
f. Prevent the material from entering ground water or sewer system.

11. Public Information/Relations.
University Public Relations (or designee) are the only ones authorized to act as Public Information Officer for the University.

RECOVERY PHASE

1. Assign Environmental Health and Safety personnel to gather names, phone numbers, and addresses of people involved in the incident (injured, exposed, responsible parties).

2. Determine if the emergency is a Reportable Spill/Leak using the EPA List of Lists/Reportable Quantities list. Updated list can be found at https://www.epa.gov/epcra/consolidated-list-lists or L:\DIVISION\Haz Waste\emergency response plans\Current plans. If reportable:

a) Inform the Director of Environmental Health and Safety
b) Contact the agency listed on the table and provide the information requested by the

agency
c) If required, contact the National Response Center: 1-800-424-8802
d) Note the date and times reports made

Type of Incident	Division	Office Hours Phone	After Hours Phone
Air Pollution Control Device Upsets	Air Quality	(801) 536-4000	**(801) 536-4123**
Hazardous Waste Spills and Radiological Materials	Waste Management and Radiation Control	(801) 536-0200	
CERCLA/ EPCRA Hazardous Substances *	Environmental Response and Remediation	(801) 536-4100	
Releases Affecting "Waters of the State" or Petroleum Products *	Water Quality	(801) 536-4300	

*** May also require notification of the National Response Center (1-800-424-8802)**

3. Contact the DEQ Spills Hotline: 801-536-4123

4. Contact Salt Lake County Health Department, Emergency Response at 385-468-8888 to inform them of the incident.

5. Contact the manufacturer of the spilled substance and other references to determine chemical toxicity, hazardous exposures, and decontamination procedures. Obtain MSDS for the material. Consult Chemical Dictionary and other references. Determine whether ongoing health monitoring is necessary for exposed personnel.

6. Assess and document damages by collecting samples, taking photos, obtaining cost estimates, listing injured parties, noting disruption of services, etc.

7. Containment and Security Procedures.
If the spill will not be cleaned up immediately:

   a. Post appropriate warning signs.
   b. Notify occupants.
   c. Arrange for continuing site security.
   d. Provide on-going site monitoring.

8. Clean Up/Decontamination/Disposal Procedures:

   a. Consult with the Utah Division of Environmental Quality or Salt Lake Valley Health Department to determine the extent of cleanup and decontamination necessary.
   b. Ensure that personnel are provided with and are using proper personal protective equipment.
   c. Clean up material and place in a compatible container; e.g., polyethylene bag (<20 lbs),

polyethylene-lined 55-gallon drum(s) (>20 lbs.), etc.

d. Decontaminate all equipment (that can be adequately decontaminated) that came in contact with the hazardous material.
e. Place contaminated equipment and protective clothing in polyethylene bags for disposal. NOTE: Personnel and equipment should be decontaminated as they leave the Hazard Zone.
f. Transport bags/drums to Bldg 590 for temporary storage until final disposal at an approved hazardous waste site. Properly label drums and waste manifest.
g. Collect samples to ensure that site decontamination is adequate.

9. Perform Final Inspection and issue a site release.
   SLC/County Health, Utah State Health, SLC Fire and University Environmental Health and Safety should mutually agree that the site has been cleaned and decontaminated adequately.

10. Prepare a detailed Incident Report.

11. Re-stock all spill response equipment and supplies.

12. Submit Reports to agencies (in #3) as necessary.
    (Send copy of reports to Risk Management.)

13. Evaluate and critique the response to the incident with involved personnel.

14. When appropriate, implement Plan Changes to improve emergency response and make recommendations to appropriate personnel/departments to prevent a similar incident from recurring.

APPENDIX

SPILL RESPONSE RESOURCES - ENVIRONMENTAL HEALTH & SAFETY

MATERIAL	AMOUNT	LOCATION
Activated Charcoal	100 lbs.	Bldg 590
Activated Charcoal	15 lbs.	Vehicle
Acid absorbent/neutralizer	100 lbs.	Bldg 590
Acid absorbent/neutralizer	5 lbs.	Vehicle
Base absorbent/neutralizer	150 lbs.	Bldg 590
Base absorbent/neutralizer	20 lbs.	Vehicle
Spill pillows	various	Bldg. 590
Spill pillows	various	Vehicle
Other absorbents (vermiculite)	100 - 500 lbs.	Bldg 590
Other absorbents (vermiculite)	15 lbs.	Vehicle
Visqueen		Bldg 590
Detector tubes/sampling pump		Bldg 605, IH Tech area
Personal protective equipment (gloves, goggles, clothing)		Bldg 590, 605, and Vehicle
55 gallon drums	1-5 drums	Bldg 590
Spill response kits (limited absorbent, neutralizer, plastic, protective clothing, respiratory protection, and equipment.)		Bldg. 605, Vehicle, SOM, MEB, CAMT, Chemistry
Vacuum Trucks		Envirocare 801-299-1900 Roto-Rooter 801-972-2828 Rooter Man 801-532-6011 B&E Rooter 801-261-8893 Electric Drain 801-266-7806
Contract Responders		Clean Harbors 435-843-4840 Envirocare 801-299-1900 Philips Services 801-631-0119 Veolia Env. 801-294-7111

HAZARDOUS MATERIAL
EMERGENCY RESPONSE PLAN

Hazardous material incident: an accidental release of a substance that may be harmful to people, property or the environment.

HAZARDOUS MATERIAL INCIDENT TELEPHONE PROMPT

Exact Location: (building name/#, room #): _____

Nature/extent of injuries or illness: _____

Complainant: _____ Phone#: _____

Type of Incident: _____

Quantity Spilled: _____

Chemicals involved:
Have the caller spell the name of the substance. If caller doesn't know the name, get a description or characteristics, odors and effects:

Property damage:

EMERGENCY CALL LIST

This page redacted due to presence of personal contact information, full version available for agency review at the UU Environmental Health and Safety office.

SPILL RESPONSE RESOURCES (OUTSIDE ENVIRONMENTAL HEALTH & SAFETY)

PLANT OPERATIONS

MATERIAL	AMOUNT	LOCATION
Sand and sand bags		General Services
Visqueen		General Services
Heavy Equipment		General Services
Rakes, shovels, etc		General Services
Water hauling		General Services
Squeegees		General Services Custodial
Water vacuums		Custodial
Ladders		Custodial
Mops, etc.		Custodial
Spill Kit		Gas Pumps
Portable Spill Kits		School of Medicine - Level B
Portable Spill Kits		Chemistry – 1st Floor
Portable Spill Kits		CAMT – 1st Floor
Portable Spill Kits		MEB – 1st Floor

SLC FIRE HAZARDOUS MATERIALS RESPONSE TEAM

MATERIAL
Absorbent materials
Explosi-meters
Water

NOTIFICATION REQUIREMENTS FOR HAZARDOUS CHEMICAL RELEASES
12/15/2008

In compliance with SARA III the following notification procedures must occur for any release of "Extremely Hazardous Chemicals" in reportable quantities (see attached list) that extends beyond University of Utah boundaries by any means (air, water, sewer, ground water, etc.).

Immediately notify:

Community Emergency coordinator
Local Emergency Planning committee
Corey Lyman

State Emergency Response Commission for any adjacent state likely to be affected
Utah SERC will be notified by ***Not Announced

Immediate notification includes:

1. Chemical name or identity of any substances in the release.
2. Indication that it is on the list of Extremely Hazardous Chemicals
3. Estimate of quantity released.
4. Time and duration of the release.
5. Medium or media into which the release occurred.
6. Known or anticipated acute or chronic health risks associated with the emergency and advise regarding medical attention necessary for exposed individuals.
7. Proper precautions to take as a result of the release including evacuation.
8. Name and telephone numbers of persons to contact for further information.

Follow-up notification (as soon as reasonable) Includes:

1. Actions taken to respond to and contain the release
2. Any known or anticipated acute or chronic health risks associated with the release.
3. Advise regarding medical attention necessary for exposed individuals.

Amendments:

9/22/2008	Change of Fire Division on call personnel and titles Change of Emergency coordinator list for building 590. Change of on call list.
10/9/2008	Change of LEPC Coordinator from Dan Andrus to Corey Lyman.
12/15/2008	Add Chris Kay to on-call lists Make Date corrections
12/29/2008	Add Kristen Orwin to on-call lists
5/27/2009	Annual Review of Plan – No Changes
6/11/2009	Remove Jon White and Brianne Garzarelli from on call lists
5/13/2010	Annual Review, No Changes
7/14/2010	Made changes to "Recovery Phase"; changed outside agency reporting numbers; added Judy Moran to emergency call list; removed Christian Buehler as Office Assistant
7/27/2010	Added Jared Lee to the On Call List
6/20/2011	Removed Jim Johnston from On-call list
1/5/2012	Updated phone numbers for on-call personnel, added Bryan Benham and Gina Ramoz to on-call list.
8/14/2012	Removed Bryan Benham from on-call personnel. Added Don Stidd and Liz Hodges to on-call personnel list.
10/17/12	Added Alicia Duprey, James Morris to on call list. Added Richard White and Scott Jefferies to fire division. Added Shera Kostrencich to administration. Removed Don Korth and Dave Limberg from fire division
5/19/14	Added phone number of Poison control to emergency phase instruction #6. Edited Recovery phase #2 to reference the location for reportable quantities list. Updated Utah Solid and Hazardous waste spill number from 801 538 6170 to 801 536 0200. Updated number for water quality to (801) 536-4300 in lieu of 801-538-6146. Updated the number for SL Dept of Health to 385-468-8888 in lieu of 801 468 2710. Updated the number Clean Harbors a contract responder. Added Matt Lundquist, Greg Walters, Mike Brehm, Bill Bonn removed Gina Ramoz, Judy Moran, Mike Halligan.
7/10/2014	Updated phone numbers for on-call personnel, removed Michele Johnson, Richard White, added Donny Schultz. Corrected normal work hours for a number of individuals.
6/18/2015	Updated contact name and phone numbers for reporting illicit sanitary sewer releases. Updated EHS contact names and phone numbers. Don Stidd, Alicia Duprey and DonnyShultz were removed from plan.
8/3/2026	Updated link for EPA reportable quantities list, added DEQ Spills Hotline phone number, consolidated Hazardous Waste Spills and Radiological Materials contact.

Signed in as: **Christian Buehler** (Log out)

Preventing Illicit Discharges (Illegal Dumping)

What is an illicit discharge?

Illicit discharges are generally any spill into a storm drain system this is not composed entirely of storm water. Illicit discharges are a problem because, unlike wastewater which flows to a wastewater treatment plant, storm water generally flows to waterways without any additional treatment. These Illicit discharges often include pathogens, nutrients, surfactants, and various toxic pollutants.

These pollutants include, but are not limited to the following:

- Household Hazardous Wastes (kitchen and bathroom cleaners, etc)
- Oil or other fluids from motor vehicles
- Pet Waste
- Trash, litter or debris such as grass clippings

Half of a cup of motor oil can contaminate over 30,000 gallons of water. So if so little can do so much, what can you do to prevent oil spills? The first step is to be aware of the possible hazards in your workplace, including storage and use of oils. Some other keys to pollution prevention:

- Store oil containers inside secondary containment. If you store several containers of oil, provide enough containment for at least one entire container.
- Store containers out of the flow of traffic.
- Tightly close containers when you are not using them
- Make everyone in the area aware of what is stored and how to respond.
- Have a spill response kit available in the event of an accident.
- Conduct vehicle maintenance in a proper place, not in a parking lot.
- Clean up drips and leaks promptly.
- Keep in mind- all oils, including edible oils, are an environmental hazard.

The commencement, conduct or continuance of any illegal discharge to the storm drain system is prohibited.

Remember! Only clean water can go down the storm drain.

If you observe illegal dumping or spilled materials at the U please call Environmental Health and Safety at (801)581-6590.

additional information

Site Map

IDDE



- - IDDE point

  Updated September 24th 2026

Signed in as: Christian Buehler (Log out)

EHS Report #1396475456: Incident Response: Illicit Discharge concern

View Edit

Details

Title of event: Incident Response: Illicit Discharge concern

Filed By: Christian Buehler

Building: 0500 CVRTI
Location details: East side of building 500.
Filed Date: Wed, 04/02/2014 - 09:15
Event date: Wed, 04/02/2014 - 21:15
Narrative: Kristen Shulsen let me know about some soapy looking water that was possibly making its way down the storm drain near building 500.
People: Kristen Shulsen Christian Buehler Eric Gardner

Details: I didn't find any soapy water running down the drain at building 500, however a Layton Constructor subcontractor was doing some concrete cutting on the east side of the building. There was no material running into the storm drain at that time.

I called Eric Gardner with Layton construction since he is the super intendant of the Infrastructure Upgrade project, Layton is scheduled to begin digging at this location tomorrow (4.3.14), and they will be installed BMPs such as inlet protection to protect the nearby drain locations.

Corrective actions: No further action is required.
All clear date: Wed, 04/02/2014
Time spent: 1
Billable: Not billable
Attachments: 2014-04-02_09-33-02_102.jpg

Add new comment

Signed in as: Christian Buehler (Log out)

EHS Reports

Create an EHS Report

My EHS Reports

Event date	Building	Event	Filed By	All clear date
05/31/2016 - 10:30	0000	Inspection: Lassonde SWPPP	Christian Buehler	
05/31/2016 - 10:00	0000	Inspection: Infrastructure Upgrade SWPPP	Christian Buehler	
05/31/2016 - 09:30	0000	Inspection: Football Practice Field SWPPP	Christian Buehler	
05/27/2016 - 13:30	0000	Inspection: HS Parking SWPPP	Christian Buehler	
05/27/2016 - 13:30	0000	Inspection: HCI Phase 4 SWPPP	Christian Buehler	

EHS Reports

Filter EHS Reports by Event Date

From date:
2016 Jan 1

To date:
2016 Dec 31

Report #

Event title contains:

Narrative contains:

Details contains:

Building
<Any>

Filed by:
<Any>

Apply

Event date	Building	Event	Filed By	All clear date
06/01/2016 - 15:45	0811	Incident Employee Medical	Marc Momcilovich	06/01/2016

Event date	Building	Event	Filed By	All clear date
06/01/2016 - 13:35	0522	Incident: Fire Alarm, No Fire, Construction Related	William Bonn	06/01/2016
05/31/2016 - 10:30	0000	Inspection: Lassonde SWPPP	Christian Buehler	
05/31/2016 - 10:00	0000	Inspection: Infrastructure Upgrade SWPPP	Christian Buehler	
05/31/2016 - 09:30	0000	Inspection: Football Practice Field SWPPP	Christian Buehler	
05/28/2016 - 19:45	0523	Incident: on call notification of non employee medical	Jennifer Stones	05/28/2016
05/27/2016 - 13:30	0000	Inspection: HS Parking SWPPP	Christian Buehler	
05/27/2016 - 13:30	0000	Inspection: HCI Phase 4 SWPPP	Christian Buehler	
05/27/2016 - 12:30	0151	Incident: UOSH Reportable Injury	Elizabeth Hill	05/31/2016
05/27/2016 - 09:55	0525	Incident: Fire Alarm Caused by Elevator Machine Problem, Building 525	William Bonn	05/27/2016
05/26/2016 - 17:56	0732	Indident: On call notification of non employee medical	Jennifer Stones	05/26/2016
05/25/2016 - 21:15	0851	Incident: Fire Alarm Trouble Alarm, Building 851	William Bonn	
05/25/2016 - 15:00	0485	Consultation: BSB Fire Control Room Options, Bldg 485	William Bonn	05/25/2016
05/25/2016 - 11:17	0560	Incident: Fire Alarm, No Fire, Building 560	William Bonn	05/25/2016
05/25/2016 - 10:00	0000	Inspection: Crocker Science Center SWPPP	Christian Buehler	
05/25/2016 - 09:00	0000	Inspection: RBG Conservation Garden SWPPP	Christian Buehler	
05/23/2016 - 17:14	0000	Consultation: EHS Questions - LMS Question about chemical input	Gregory Walters	05/24/2016
05/23/2016 - 15:30	0570	Incident: Property damage due to EW/SS testing	Jennifer Stones	05/23/2016
05/20/2016 - 22:25	0064	Incident: On Call - Ammonia Release	STEPHEN NATROP	05/24/2016
05/20/2016 - 01:45	0151	On Call Blue Alarm Ustar	STEPHEN NATROP	05/20/2016
05/19/2016 - 18:30	0073	Services: Community Forum AQ Representation	MICHAEL BREHM	

Spill Response Program

Responsibility: Environmental Health and Safety Department, Plumbing Shop

Frequency and Duration: Ongoing

Description: The EHS Department is the typical responder for spills, leaks and environmental releases (4.2.3.3).

Applicability: Spill response.

1. Publicize reporting mechanism on EHS website and printed response signs.
2. Spill/Illicit discharge reported to EHS or UPD (after hours).
3. Follow written procedures found in the "Hazardous Material Emergency Response Plan" and/or "University Police Dispatch Procedure."
4. Record data about the response per the above procedures.
    a. Date of initiation of investigation.
    b. Location.
    c. Description.
    d. Method of discovery.
    e. Corrective action (immediate removal, repair).
    f. Date of corrective action and/or enforcement action.
    g. Date and method of removal verification.
5. Enter data about the incident (spill, leak, environmental release, or illicit discharge) in the EHS database.

Environmental Health & Safety On-Call event procedures:

In the event of a UOSH reportable injury:

Immediately report the injury to James Stubbs (O: 801-585-5788 C: 801-425-3807)

In the event of a flood at the hospital:

Contact the Clinical Care Safety Staff:

Chris Kay (O: 801-587-9297 C: 801-592-1258)

In the event a radiation alarm is sounding or any other request involving radiation:

Inform the requestor that they will need to contact Radiological Health, 801-581-6141.

In the event that there is vomit in a parking terrace:

Notify custodial services, 801-581-6108.

In the event of a spill of a chemotherapy agent

Notify hospital environmental services 801-581-2253

In the event of a blood or OPIM spill:

On Main Campus (Inside or Outside) – Notify Custodial Services, 801-581-6108

Inside the Hospitals & Clinics – Notify Environmental Services, 801-581-2253

In the event of an illicit discharge into a storm drain:

Accidental discharges should be ceased immediately and cleaned up (leaking cars, spills etc.)

Purposeful dumping into the storm drain is illegal – Notify University Police 5-2677

All on-call incidents involving Hospitals and Clinics must be reported to :

Phil Chafee: 801-585-3134 Cell: 801-330-7108

-Or-

Kip Thompson: 801-585-6288 Cell: 435-850-9385

UNIVERSITY POLICE DISPATCH PROCEDURE

CHEMICAL/BIOLOGICAL RELEASE, SPILL/ FUMES/ VAPORS/ODORS	EFFECTIVE DATE:

DEFINITION: In case of accidental release of a substance which may be harmful to people, property or the environment. Problem may be detected by monitors, visual inspection, odors or other knowledge of a release. This includes chemical and biological material spills, exposures, fumes and vapors.

CALL-TAKING PROCEDURE:

1. Obtain caller name and a call back number
2. Obtain incident location information: building name, number, specific room number or incident location parking lot or roadway.
3. Obtain time of onset of release/spill/vapors/fumes.
4. Obtain information on nature and extent of injuries and illnesses.
5. If Injuries conference in the SLC Fire Department.
6. Obtain complete name of chemical or substance involved, if known: exact spelling and CASE# (if possible), intensity of smells.
7. Ask caller for an estimate of amount spilled.
8. Create a CAD case.
9. Notify Environmental Health and Safety (EHS) at phone numbers listed below
10. **EHS will determine whether HAZMAT should be dispatched.**
11. Send Security if bldg access is needed
12. Send Police for crowd control as needed
13. If criminal intent found, send a Detective as needed.

DISPATCH PROCEDURE:

NATURE OF CALL	PRIORITY	ALERT TONES	UNITS	NOTIFY
CHEMICAL, BIOLOGICAL/FUMES, VAPORS	1	none	Sec, EHS, 1U	EHS at phone # shown below / on-call Detective / Command

GENERAL NOTES:

Business Hours:

Contact EHS at 1-6590. If no contact use the pager
EHS pager 801-339-3335.

After Hours:

EHS pager number EHS Pager 801-332-3335. If no contact in 5 minutes page again.
If no contact in 5 minutes call James Stubbs at 801-425-3807

Standard Operating Procedures:
IDDE Program – Tracing and Removal of Illicit Discharges

Responsibility: Environmental Health and Safety/Plumbing Shop

Frequency and Duration: As needed

Description: Procedure to trace and remove illicit discharges (4.2.3.4).

Applicability: Use to trace any illicit discharge where the source is unknown and prevent discharge.

1. Preparation

    a. Review / consider information collected when illicit discharge was initially identified and documented using Incident Tracking Form or Outfall Inspection Form.

    b. Obtain storm drain mapping for the area of the reported illicit discharge from GIS as needed.

    c. Gather any necessary equipment: tape measure, clear container, clipboard with necessary forms, flashlight, and camera, etc.

2. Process

    a. Protect the affected storm drains using sand bags, dams, absorbent material or any other resources at your disposal to divert or prevent the flow from entering the storm drain.

    b. Survey the general area / surrounding properties to identify potential sources of the illicit discharge.

    c. Trace illicit discharges using visual inspections of upstream points. Use available mapping to identify tributary pipes, catch basins, etc.

    d. If the discharge is ongoing once you have found the source, stop it at the source. Call the Facility Management department for help if necessary, at 801-581-5082

    e. Evaluate the discharge for observable indicators, source characteristics and potential impacts.

    f. Characterize/determine the material of the discharge based on its source.

d. If the source of the illicit discharge cannot be determined by a survey of the area or observation of the storm drain system, then follow these additional steps:

1. Use weirs, sandbags, dams, or optical brightener monitoring traps to collect or pool intermittent discharges during dry weather.

2. Dye test individual discharge points within suspected buildings.

3. Collect samples as necessary for testing as warranted by discharge investigation.

d. If the source is located and is the result of a spill, follow SOP: Responding to and Recording a Spill.

e. If the source is located and is the result of an illicit pipe connection, work with plumbing shop to shut off and correct the connection.

f. Contact University Police or the Salt Lake Valley Health Department as needed.

g. If the source cannot be found, note the location/event for future reference in the EHS report system. Notify Facilities Management of location/illicit discharge status.

3. Clean up

a. Clean catch basin, clean storm drain, or initiate spill response, as applicable. Follow relevant SOPs.

4. Documentation

a. Document tracing results in the AIM system/EHS Report system.
b. Document the actions taken to cease the discharge and verify that the discharge has stopped.

SOP: Responding to and Recording a Spill

This is a step-by-step guide for responding to, reporting and recording an outdoor spill on the University of Utah campus. This is mainly the responsibility of the EHS Environmental Specialist for stormwater compliance, but items 1 and 2 can be completed by anyone responding if necessary.

1. Gather all relevant information. (Responsibility: Anyone responding)
    - Date and time of spill.
    - Location of spill.
    - Where did the spill go? (Storm drain, soil, etc.)
    - Description of what happened.
    - Method of discovery/who reported the spill.
    - Cleanup efforts/methods/date & time completed
    - All people/companies/organizations involved.
    - Date of corrective actions/enforcement actions.
    - Associated costs.
    - Take photos of the spill and cleanup efforts.

2. Report the spill to the proper contacts/authorities. (Responsibility: Anyone responding)
    - EHS Environmental Specialist - Stormwater Compliance: Tyler Fredsall: 801-581-4264, tyler.fredsall@ehs.utah.edu
    - EHS Associate Director - Environmental Team: Amit Nair 801-585-1617, amit.nair@ehs.utah.edu
    - Department of Environmental Quality Spills Hotline: 801-536-4123
      They will report it to additional authorities if relevant/necessary (Salt Lake City Public Works, Salt Lake County Health Department)
    - If necessary: Salt Lake County Health Department Public Reporting Resources
      Website: https://www.saltlakecounty.gov/health/report/contamination/
      Phone: 385-468-8888

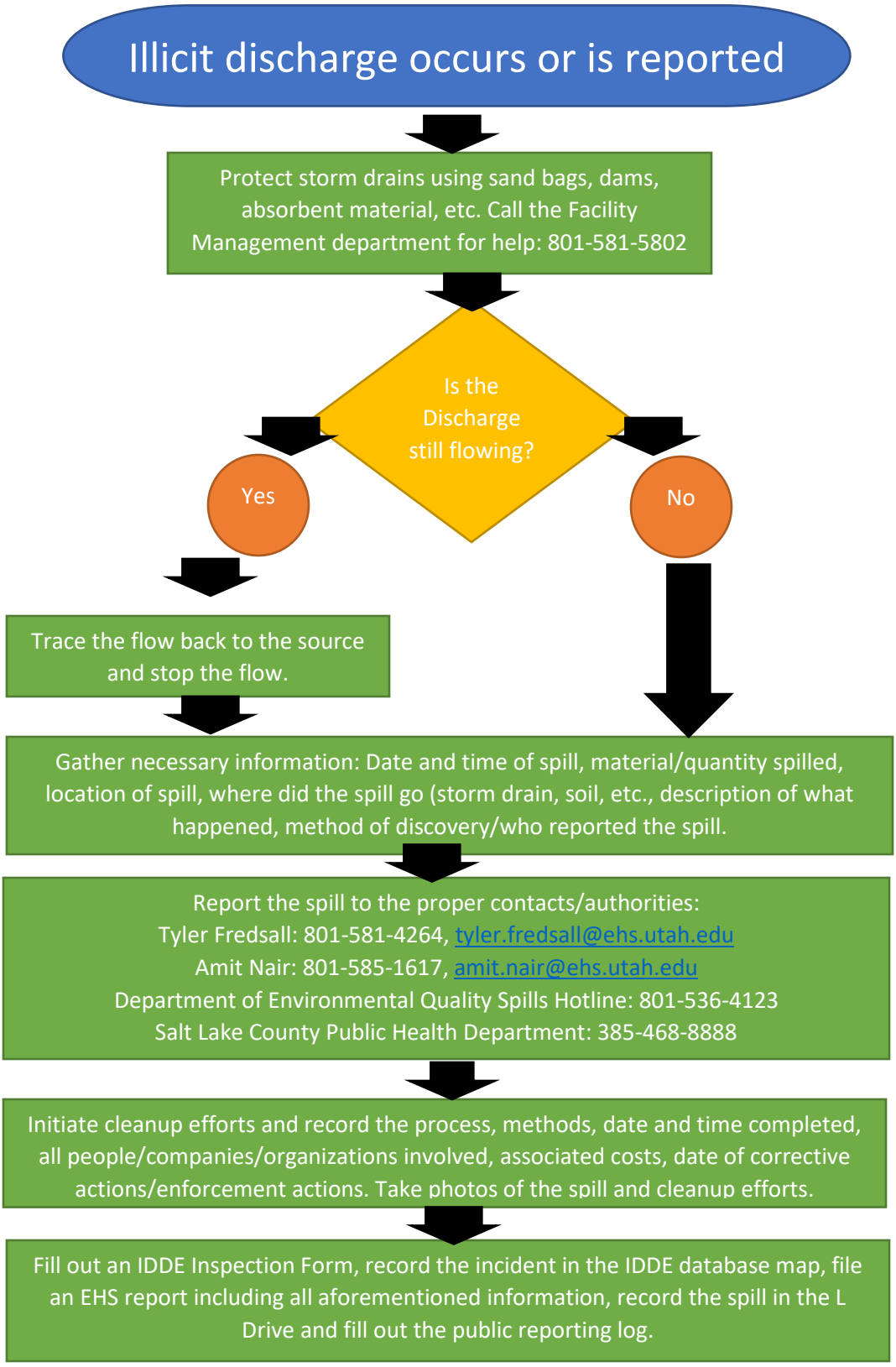
3. Update the IDDE database map: (Responsibility: Environmental Specialist - Storm Water Compliance). Database map link: https://arcg.is/0Prf05
    - When that opens, click on the blue “University of Utah” button, and then sign-in using your normal CIS username/password.
    - To create a new IDDE point, click on the “IDDE Points” button in the left sidebar, and place on the map. That will then turn into a list of attributes you can fill out. You can either click the “Create” button to save, or the “back” button at the top left to cancel.
    - To modify an existing point, click the “Select” button, select a point, and then you can update attributes or adjust its location. Click “Update” to save, or the “back” button to cancel. The “delete” button will permanently delete the feature.
    - Contact the current GIS department staff for help if necessary:
      Christopher Jacob Strong chris.strong@utah.edu
      JAMIE ELLEN MCBRYDE jamie.mcbryde@fm.utah.edu

4. Fill out an IDDE inspection form: (Responsibility: Environmental Specialist - Storm Water Compliance)
   L:\DIVISION\Environmental Compliance\ENVIRONMENT (2014-2019 Brehm)\WATER\Stormwater\SWMP(21-25)\Appx D\MCM 3 – IDDE\IDDE Inspection Form

5. File an EHS report including all of the aforementioned information. (Responsibility: Environmental Specialist - Storm Water Compliance)
   https://uofutah.sharepoint.com/sites/OEHSInner/ess/Lists/OEHS/Most%20Recent%20Reports.aspx

6. Record the spill in the L Drive and fill out the Public Reporting Log. (Responsibility: Environmental Specialist - Storm Water Compliance)
   L:\DIVISION\Environmental Compliance\ENVIRONMENT (2014-2019 Brehm)\WATER\Stormwater\SWMP(21-25)\Appx D\MCM 3 - IDDE\IDDE responses

Illicit Discharge Response Flow Chart



University of Utah EHS Public Reporting & IDDE Response Log (SWMP 2026-2031)								
Date of Report	**Name of Person Reporting**	**Contact Information**	**Incident Reported**	**Follow-up actions taken**	**Feedback Received**	**Entry Recorded By: (name)**	**Status (open/closed)**	**Date closed**

Recycling FAQs

How does the recycling program work?



The custodial staff collects the paper and puts it into street totes for curbside pick-up. It then goes to a recycler and is processed for the recycling market.
Pre-program test sites recycled over 40% of the waste stream. It is the U's goal to exceed that amount.

Why do we separate our recyclable materials into different bins?

There are a few downfalls to “single stream” recycling:

- Materials can become contaminated and still end up in the landfill despite your recycling efforts.
- The cost to process the materials goes up.
- Reduced commodity pricing due to cross contamination.
- Greater carbon footprint due to extra resources used during material separation.

By separating our recyclable materials at the source we can be assured that they are going directly to a company that will be turning them into the highest grade of recycled product.

What is the difference between Office Pack

Contact Info

Joshua James

- Recycling Coordinator
- office: 801-581-5173
- Send email (mailto:josh.jam

Related Information

- FAQs PDF (/facilities-services/u-recycling/UUrecycle2013.
- Electronic Waste (/facility-operations/u-recycling/electronic-waste.php)
- Recyclemania

and Mixed Paper?

Office Pack	Mixed Paper
Acceptable Materials: • White Papers: Copy,Fax, Typing Bond • Pastel Colored Papers, Carbonless Papers • Pre-Shredded Office Paper • Envelopes:With or Without Windows • Direct Mail • Index Cards:White or Colored • Manila Envelopes or Folders • Staples, Paper Clips, Tape, Sticky-Notes • Binding:Wire or Plastic, Comb or Spiral	**Acceptable Materials:** • Newspapers and Advertising Inserts • Magazines, Catalogues, Phone Books, Paperbacks • White, Colored, Goldenrod and Fluorescent Papers • Unbleached Papers • Envelopes:With or Without Windows • Direct Mail • Index Cards:White or Colored • Manila Envelopes or Folders • Paper Ream Wrappers • Staples, Paper Clips, Tape, Sticky-Notes • Binding:Wire or Plastic, Comb or Spiral

(/facility-operations/u-recycling/recyclemania.php

- University Recycling Program (/facility-operations/u-recycling/recycling-program.php)
- What Goes Around, Comes Around (/facility-operations/u-recycling/recycling-events.php)
- Where Can I Recycle? (/facility-operations/u-recycling/recycling-locations.php)

Contaminants: • Deep-Tone Goldenrod and Fluorescent Papers • Newspapers and Advertising Inserts • Magazines, Catalogues, Phone Books, Paperbacks • Corrugated Cardboard and Paperboard • Paper Ream Wrappers • Tissue Paper and Paper Towels • Paper Cups, Food Wrappers/Bags, Pizza Boxes • Liquids, Foods, Green Waste, Plastics, Metals	**Contaminants:** • Corrugated Cardboard and Paperboard • Tissue Paper and Paper Towels • Paper Cups, Food Wrappers/Bags, Pizza Boxes • Liquids, Foods, Green Waste, Plastics, Metals

How much is this program costing the U?

The administration has committed more than $300,000 as one-time implementation funding-a bargain compared to the cost of other recycling programs. There are ongoing costs for the collection, consolidation, and hauling of recyclables, but Facility Operations will use the revenues collected from recycling to offset these costs.

What are the benefits to the U of recycling?

The recycling rate on campus is expected to increase by over 40percent; it will reduce disposal volumes in landfills and conserve natural resources; and the University will be an example of leadership in sustainability efforts.

What are the downsides?

A big risk is that the recycling stream will be contaminated with

inappropriate items causing the recycler to reject the recyclables. It is critically important that everyone place only approved materials in the various containers so the U can be paid by the recycler and receive revenues to cover the cost of the program. That's why we have labels on all bins listing what's acceptable to recycle. Also, although our employees are committed to making the program a success, it does create more work for the custodial and transportation staffs.

If you could give one message to everyone on campus regarding recycling, what would

What Goes Around, Comes Around

The Office of Sustainability has partnered with Housing and Residential Education, Facility Operations Recycling and Metech Recycling to establish an annual event to effectively reuse and recycle unwanted items during the Spring Move-Out week in the residence halls.

About the Event

This is a concerted effort to collect reusable goods, recyclables and e-waste from students moving out of housing that would otherwise be thrown away at the end of the semester. We collect clothes, electronics (both for reuse and responsible recycling), lamps, couches, pillows, general supplies and furniture. We donate all of the items received to the Big Brothers, Big Sisters organization.

Event Highlights:

- Help GIVE BACK to the Environment & the Community!
- GET INVOLVED with Local Organizations & the University!
- FEEL GOOD about your work & MAKE NEW FRIENDS!

Event Sponsors:

- Office of Sustainability
- Housing and Residential Education
- Facility Operations Recycling Program

Contact Info

Joshua James

- Recycling Coordinator
- office: 801-581-5173
- Send email (mailto:josh.jam

Related Information

- Electronic Waste (/facility-operations/u-recycling/electronic-waste.php)
- Recyclemania (/facility-operations/u-recycling/recyclemania.p

- Metech Recycling (http://www.metechrecycling.com/)
- Samsung Electronics (http://www.samsung.com/us/aboutsamsung/sustainability/sustainability.html) (a huge thanks to them for funding the e-waste recycling component)

For more information or to volunteer, contact Ashley Patterson (mailto:Ashley.Patterson@sustainability.utah.edu) at 801.581.7506

- Recycling FAQs (/facility-operations/u-recycling/recycling-faqs.php)
- University Recycling Program

Appendix E

Education and Outreach (MCM 1)

- **BMP Fact Sheet 1 - Residents and General Public**
- **UofU Chronicle Ad Example**
- **Civil Eng. and Environmental Sustainability course examples**
- **University Student Apartments Handout**
- **Class Room Presentation Example**
- **@TheU Blast Email Example**
- **BMP Fact Sheet 2 - Institutions, Industrial and Commercial**
- **Stormwater Pollution Prevention (Website Example)**
- **BMP Fact Sheet 3 - Developers and Contractors (Construction)**
- **Construction Contractor Pre-construction training (Example)**
- **BMP Fact Sheet 4 - MS4-owned or Operated Facilities (Staff)**

Involvement and Participation (MCM 2)

- **Policy 3-201 Physical Facilities Community Impact**
- **Community Forum Newsletters (Example)**
- **SWAMT Meeting roster (Example)**
- **Stormwater Management Plan website availability (Example)**
- **Stormwater website contact information (Example)**
- **Stormwater Annual Reports website availability (Example)**

BMP Fact Sheet

Residents and General Public – Education Materials

Measurable Goal: The desired result is to meet the permit requirements outlined in section 4.2.1.1, and 4.2.1.2. The information provided covers such topics as general storm water pollution prevention, specific pollutants of concern, and the University's prohibitions against illicit discharges and improper disposal of waste. Focused topics are specifically targeted at the audience in question.

Focused topics for Residents and the General Public include:

- Household Hazardous Waste Disposal
- Proper Car Maintenance and Washing
- Proper management of pet wastes
- The effects of floatable trash, grease, sediments, and other pollutants
- LID

Rationale and expectations: Environmental protection information is made easily accessible to students, residents and the general public through website pages and an annual emailed articles, as well handouts and discussion topics disseminated through University Student Apartment RAs. As a University Civil and Environmental Engineering type courses are offered to students which will teach Stormwater and LID design, Environmental Sustainability, and other relevant subjects that students will take into the professional workplace.

Objectives & Goals: Address the target pollutants (TSS, oils, grease, and floatables, etc.) and pollutant sources (parking lots and etc.) through education of the specified audience. The University makes it clear to both resident and commuter students that storm water pollution prevention is important to the Institution by the methods we promote to reduce runoff and improve water quality.

Measure of Success: Quizzes and surveys have been used in the past with limited consistency. The University is seeking to apply online surveys and pre/post training quiz questions to track changes in knowledge and behavior during the 2021-2025 permit period, planning to use this data to create a baseline.

For each Action Item the Responsible Department, Initiation Date, Milestone Date, and Measure of Successful Delivery will be included.

Action Items	Responsible Department	Initiation Date (Year)	Milestone/ Completion Date (Month, Year)	Measure of Successful Delivery
Develop and deliver course curriculum for a college-level class on environmental topics including storm water design and pollution prevention.	Civil & Environmental Engineering, and Environmental & Sustainability Studies https://www.plantecology.net/campus-overview.html	Civil (1990)/ Sustainability (2003)	Ongoing	Students must pass courses with a 'C' or better in order to receive course credits towards graduation.
Provide general storm water pollution prevention information to students-residents through Residence Hall Resident Advisors (USA, Residential Living).	EHS	2003	Ongoing	Successful if information is provided to student RAs for dissemination.
OEHS provides a guest lecture for a college-level class on storm water pollution prevention.	EHS, Civil Engineering	2003	Ongoing	Successful if at least one class session uses material.
Storm Water Pollution Prevention/IDDE Mass Mailing using the @theU system.	EHS	2016	Ongoing	Successful if at least one mass mailing sent out annually.

CVEEN 3610 - Introduction to Environmental Engineering I

Course Detail

Units:	3 units
Course Components	Discussion Lecture

Enrollment Information

Enrollment Requirement	Prerequisites: "C" or better in (CVEEN 2140 AND CHEM 1210) AND Full Major status in Civil Engineering.

Description

Overview of the environmental engineering profession, environmental quality measurements, regulatory overview, water and wastewater quality, environmental chemistry, air quality, design of municipal water treatment systems.

CVEEN 4410 - Engineering Hydrology

Course Detail

Units:	3 units
Course Components	Lecture

Enrollment Information

Enrollment Requirement	Prerequisites: "C-" or better in CVEEN 3410 AND Full Major status in Civil Engineering.
Requirement Designation	Quantitative Intensive BS

Description

Hydrologic cycle and its elements including precipitation, interception, infiltration, evapotranspiration, runoff; flood and drought analysis; unit-hydrographs, probability and frequency analysis, routing methods; ground water, hydrologic design procedures, watershed models.

CVEEN 5305 - Introduction to Foundation Engineering

Course Detail

Units:	3 units
Course Components	Lecture

Enrollment Information

Enrollment Requirement	Prerequisites: "C-" or better in CVEEN 3310 AND Full Major status in Civil Engineering.

Description

Meets with CVEEN 6305. An introduction to the field of foundation engineering concentrating on the geotechnical background necessary for foundation analysis and design. Topics include shear strength of granular, cohesive and partially saturated soils; subsurface exploration and testing; lateral earth pressures and retaining walls; slope stability; settlement and ultimate bearing capacity of shallow foundations; seepage forces and filters.

CVEEN 5605 - Water and Wastewater Treatment Design

Course Detail

Units:	3 units
Course Components	Lecture

Enrollment Information

Enrollment Requirement	Prerequisites: "C-" or better in CVEEN 3610 AND Full Major status in Civil Engineering.

Description

Meets with CVEEN 6605. This course will discuss principles and practice of water and wastewater treatment. Focus will be placed on system design. Main objectives of the course are to provide students a basic understanding of the processes employed in water and wastewater treatment plants, and the skills to analyze and design treatment systems utilizing physical, chemical, and biological processes.

CVEEN 6410 - Watershed Modeling

Course Detail

Units:	3 units
Course Components	Lecture

Enrollment Information

Enrollment Requirement	Prerequisites: Graduate status OR Instructor Consent.

Description

Meets with CVEEN 5410. Course introduces students to basic and advanced applied watershed modeling concepts, techniques and applications. Students will learn to use digital geographic datasets, delineate watersheds, determine watershed characteristics, model hydrologic processes, perform hydrologic simulations using lumped, distributed, and urban watershed models, apply radar rainfall data, and analyze adequacy of hydraulic structures to withstand predicted flow rates.

CVEEN 6430 - Stormwater Management and Design

Course Detail

Units:	3 units
Course Components	Lecture

Enrollment Information

Enrollment Requirement	Prerequisites: Graduate status OR Instructor Consent.

Description

An overview of stormwater management. Topics include stormwater management history and regulations, urban hydrology and hydraulics, stormwater quality and receiving-water impacts, design of drainage systems and best management practices, and computer modeling techniques.

CVEEN 6470 - Surface Water Quality Prediction and Assessment

Course Detail

Units:	3 units
Course Components	Lecture

Enrollment Information

Enrollment Requirement	Prerequisites: Graduate status OR Instructor Consent.

Description

Fundamentals of surface water quality, water quality measurements, simple reactor models; development, calibration, and application of water quality models for dissolved oxygen, nutrient, and toxic substances concentrations.

CVEEN 6480 - Hydrotopia: Water Management in the West

Course Detail

Units:	3 units
Course Components	Lecture

Enrollment Information

Enrollment Requirement	Prerequisites: Graduate status OR Instructor Consent.

Description

Interdisciplinary case study analysis of historical and emerging water issues and water engineering projects in the western United States. Case studies my cover general topics such as water conservation, water supply, water and energy, water and ecology, and water and society as related to specific problems or engineering projects in the western United States. Within the context of these case studies students will learn the fundamentals and advanced topics related to water resources planning and management, water law, water resources engineering, water management modeling, and engineering and environmental ethics.

CVEEN 6660 - System Dynamics and Environmental Policy

Course Detail

Units:	3 units
Course Components	Lecture

Enrollment Information

Enrollment Requirement	Prerequisites: Full Major status in Engineering.

Description

Environmental policy design requires an understanding of human interactions with environmental systems. It requires an accounting of the complexities of behavior, context and policy. These complexities often produce indirect and unanticipated consequences. They yield unexpected patterns and counter-intuitive results. Students from many academic fields learn user-friendly software (STELLA) to do environmental policy simulation without proficiency in advanced mathematics. Students use computer simulations to sort out environmental complexities; transform group perceptions into simulation models; apply principles of environmental management; test policy effects and define possible pathways for future policy change.

CVEEN 7440 - Urban Watershed Management

Course Detail

Units:	3 units
Course Components	Lecture

Enrollment Information

Enrollment Requirement	Prerequisites: Full Major status in Engineering.

Description

This course introduce graduate students to the principles of urban watershed management. Covered topics include assessment of urban watershed health in terms of in-stream water quality, biota and geomorphic stability and the impacts of stormwater management/land use practices on urban watershed health. State and federal regulations and processes governing water quality in urban watersheds are discussed extensively.

ENVST 2000 - Field Experience: Environment and Sustainability

Course Detail

Units:	1 units
Course Components	Field Work

Description

This course provides an opportunity for students, focused on studies related to the environment and sustainability, to meet each other, in a field-research setting, and discuss a major environmental sustainability issue. The class will be held over a three-day weekend in the local area (overnight camping required). This class is open to all interested students, but is required for all Environmental Studies majors. Each year the class will focus on a particular issue related to the environment or sustainability that is of interest to the region where the class is being held. Local stakeholders will be invited to address the students and engage in dialogue.

ENVST 2050 - Introduction to Environmental and Sustainability Science

Course Detail

Units:	4 units
Course Components	Lecture

Enrollment Information

Requirement Designation	Physical/Life Science Exploration

Description

The goal for this class is to have students versed in the topics of: 1) Ecology and Sustainability, 2) Biodiversity, and 3) Earth Resources and Environmental Quality. The course consists of lectures, participation exercises, which will require critical thinking and data analysis, and the laboratory assignments (at-home and field based). The materials have been designed to step you through the topics and if you already have some science background this class will help you make connections among scientific disciplines and ESS.

ENVST 3364 - Challenges to Global Sustainability

Course Detail

Units:	3 units
Course Components	Lecture

Enrollment Information

Enrollment Requirement	Prerequisites: ENVST 2000 AND ENVST 2050 AND ENVST 2100.
Requirement Designation	International Requirement

Description

With the recent upswings in economic, political, cultural, and technological globalization, human societies around the globe are increasingly interconnected in various ways, often unequally. At

the same time, forms of globalization pose both challenges and opportunities for addressing the most fundamental sustainability challenges facing the world today. This course provides a multidisciplinary overview of the human causes, environmental and ecological consequences, and potential policy solutions to various sustainability challenges in global contexts.

ENVST 3390 - Sustainable Streams and Riparian Zones

Course Detail

Units:	3 units
Course Components	Lecture

Description

This course will provide training in the physical, chemical, and biological factors that sustain streams and riparian areas. Social, Political and economic factors will be considered in the context of conservation and restoration of these habitats and the ecosystem services they provide. The course will use readings, videos, discussion, and classroom and field exercises to facilitate student learning. Field-based exercises will be conducted at sites along Red Butte Creek with contrasting land uses and at a local restoration site.

ENVST 5390 - Sustainable Streams and Riparian Zones

Course Detail

Units:	3 units
Course Components	Lecture

Description

This course will provide training in the physical, chemical, and biological factors that sustain streams and riparian areas. Social, Political and economic factors will be considered in the context of conservation and restoration of these habitats and the ecosystem services they provide. The course will use readings, videos, discussion, and classroom and field exercises to facilitate student learning. Field-based exercises will be conducted at sites along Red Butte Creek with contrasting land uses and at a local restoration site.

ENVST 5559 - Capstone: Air, Water, & Health Sustainability

Course Detail

Units:	3 units
Course Components	Lecture

Enrollment Information

Enrollment Requirement	Prerequisites: ENVST 2000 AND ENVST 2050 AND ENVST 2100.

Description

Students will review and critique prevailing theories and models of environmental and sustainability studies that have been introduced in previous coursework. Students also will assess the success of various approaches towards sustainability in various sectors of society pertaining to air and water resources and their effect on the health of humans and other biota. Students will reflect on their role as responsible citizens and members of the job market. They also will practice skills needed in both areas. Finally, students will complete a group project that contributes to a more sustainable University of Utah campus.

Storm Water Pollution Prevention

The Storm water drains you see in parking lots and along the roadways discharge **directly** into state water bodies. There is no cleanup that takes place once storm water enters the drain so anything that gets put into the drain such as oil or litter all goes to the same place, the Jordan River.

As part of the Stormwater Management Plan the University of Utah prohibits the commencement, conduct or continuance of any illegal, non-storm water discharge to the storm drain system. Pollutants include, but are not limited to the following:

- Household Hazardous Wastes (kitchen and bathroom cleaners, etc.)
- Oil (even edible oils) and/or fluids/fuel from motor vehicles.
- Pet Waste can contain E. coli and other contaminants and needs to be picked up immediately.
- Trash, litter or debris such as grass clippings
- Construction site generated pollutants (concrete washout, paint, sediment)

Remember! Only clean water can go down the storm drain!

For more information on storm water pollution prevention or any of the following please contact Environmental Health and Safety: (801)581-6590

- To report outdoor spills, illegal dumping or other illicit discharges threatening storm drains
- To submit questions or comments concerning the University's Stormwater Management Program
- To report construction site related pollution concerns such as sediment tracking onto streets

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The University's SWMP is a living document that is updated over time to better suit the needs of the University Municipal area. Feedback on policies and procedures is welcomed so that it can be considered by the Stormwater Advisory Management Team and integrated for program improvement. Feedback is welcome from our design partners, staff, and the general public. Please review the University's Storm Water Management Plan at https://www.ehs.utah.edu/guidelines/stormwater-management-program/ and submit any comments or suggestions to EHS via tyler.fredsall@ehs.Utah.edu or call during regular office hours at (801)581-6590.

"EHS: Our life's work is caring for your natural environment!"

BMP Fact Sheet

Non-University Owned Facilities – Education Materials

Measurable Goal: The desired result is to meet the permit requirements outlined in section 4.2.1.1, and 4.2.1.2. The information is provided covers such topics as general storm water pollution prevention, specific pollutants of concern, and the University's prohibitions against illicit discharges and improper disposal of waste. Focused topics are specifically targeted at the audience in question.

Additional focus topics include:

- Household Hazardous Waste Disposal
- Proper Car Maintenance and Washing
- Proper management of pet wastes
- General storm water education
- Nitrogen and Phosphorus reduction
- Illicit Discharge Detection and Elimination

Rationale: Environmental protection information is made easily accessible to the public through website pages and annual emailed information. Emailed outreach is provided annually to the one non-University owned building on campus, Primary Children's Hospital providing them directly with information concerning University O&M standards and other target specific topics, as well as pointing them to our stormwater website.

Objectives & Goals: Address the target pollutants (TSS, oils, grease, and floatables, etc.) and pollutant sources (parking lots and etc.) through education of the specified audience. The University makes it clear to institutions, industrial, and commercial facilities that storm water pollution prevention is important to the Institution by the methods we promote to reduce runoff and improve water quality.

Measure of Success: Quizzes and surveys have been used in the past with limited consistency. The University is seeking to apply online surveys and pre/post training quiz questions to track changes in knowledge and behavior during the 2021-2025 permit period, planning to use this data to create a baseline.

For each Action Item the Responsible Department, Initiation Date, Milestone Date, and Measure of Successful Delivery will be included.

Action Items	Responsible Department	Initiation Date (Year)	Milestone/ Completion Date (Month, Year)	Measure of Successful Delivery.
Include specific information on the OEHS website (include links) and at OEHS office.	EHS	2005 and 2003	Ongoing	Successful if information available on the EHS website and in the EHS office.
O&M SOPs designed for storm water pollution protections are shared electronically with applicable target audience, including Nitrogen and Phosphorus reduction.	EHS	Dec-11	Annually	Successful if SOPs and information are provided to Primary Children's Hospital by email.

Signed in as: **Christian Buehler** (Log out)

Preventing Illicit Discharges (Illegal Dumping)

What is an illicit discharge?

Illicit discharges are generally any spill into a storm drain system this is not composed entirely of storm water. Illicit discharges are a problem because, unlike wastewater which flows to a wastewater treatment plant, storm water generally flows to waterways without any additional treatment. These Illicit discharges often include pathogens, nutrients, surfactants, and various toxic pollutants.

These pollutants include, but are not limited to the following:

- Household Hazardous Wastes (kitchen and bathroom cleaners, etc)
- Oil or other fluids from motor vehicles
- Pet Waste
- Trash, litter or debris such as grass clippings

Half of a cup of motor oil can contaminate over 30,000 gallons of water. So if so little can do so much, what can you do to prevent oil spills? The first step is to be aware of the possible hazards in your workplace, including storage and use of oils. Some other keys to pollution prevention:

- Store oil containers inside secondary containment. If you store several containers of oil, provide enough containment for at least one entire container.
- Store containers out of the flow of traffic.
- Tightly close containers when you are not using them
- Make everyone in the area aware of what is stored and how to respond.
- Have a spill response kit available in the event of an accident.
- Conduct vehicle maintenance in a proper place, not in a parking lot.
- Clean up drips and leaks promptly.
- Keep in mind- all oils, including edible oils, are an environmental hazard.

The commencement, conduct or continuance of any illegal discharge to the storm drain system is prohibited.

Remember! Only clean water can go down the storm drain.

If you observe illegal dumping or spilled materials at the U please call Environmental Health and Safety at (801)581-6590.

additional information

Site Map



Emergency contacts

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Call **801-585-2677** to contact police for other than an emergency

In Case of Emergency (PDF)
Fill this out and post it in your workspace

Report a hazard

Report a hazard or safety concern on campus

Injury or accident

Follow these **instructions**

Unwanted hazardous materials pickup

- **Login to Lab Management System**
- **Request LMS Account**
- **First time? More info...**

Bad air or odor complaint?

Report an environmental concern

BMP Fact Sheet

Construction Contractors – Education Materials

Measurable Goal: The desired result for construction projects is to meet the permit requirements outlined in section 4.2.1.1, and 4.2.1.4 which requires the development of SWPPPs and BMPs for reducing adverse impacts from development sites, as well as general storm water pollution prevention information. Focused topics are specifically targeted at the audience in question.

Rationale: Environmental protection information is made available to contractors through website pages, contract documents and by mandatory training. Contractors are supplied with wet season (spring/fall) emails refreshing them on the need to make proactive efforts on storm water pollution prevention.

Objectives & Goals: Address the target pollutants (TSS, oils, grease, and floatables, etc.) and pollutant sources (parking lots and etc.) through focused education of the specified audience. The University makes it clear to both project designers and construction contractors that storm water pollution prevention is important to the Institution by the methods we promote to reduce runoff and improve water quality.

Measure of Success: Quizzes and surveys have been used in the past with limited consistency. The University is seeking to apply online surveys and pre/post training quiz questions to track changes in knowledge and behavior during the 2021-2025 permit period, planning to use this data to create a baseline.

For each Action Item the Responsible Department, Initiation Date, Milestone Date, and Measure of Successful Delivery will be included.

Action Items	Responsible Department	Initiation Date (Year)	Milestone/ Completion Date (Month, Year)	Measure of Successful Delivery
Post the Design Standards for Contractors on the Facilities Management website. See Appendix C for details.	CPD	Dec-10	Dec-10	Successful if the Design Standards are available for contractors.
General Supplemental Conditions requiring SW Pollution Prevention Plan. See Appendix C for details.	CPD	Dec-10	Dec-10	Successful if the Design Standards are provided to contractors. As part of pre-construction.

Hold pre-construction training with Contractors (of projects with sites 1 acre or larger).	EHS	Dec-10	Ongoing	Successful if the trainings are entered into the EHS training database.
Email wet season (spring/fall) reminders to open construction projects on campus.	EHS	Dec-15	Ongoing	Successful if information is provided by email.

BMP Fact Sheet

Staff – Education Materials

(Departments: Environmental Health and Safety, Plumbing Shop, Motor Pool, Campus Support, Landscape Maintenance, Paint Shop, Carpentry Shop and Others)

Measurable Goal: The desired result is to meet the permit requirements outlined in section 4.2.1.1, and 4.2.1.2. The information is provided covers such topics as general storm water pollution prevention, specific pollutants of concern, and the University's prohibitions against illicit discharges and improper disposal of waste. Focused topics are specifically targeted at the audience in question.

- Storm water pollution prevention
- Minimization of use of salt or other deicing materials
- Proper management of waste materials and dumpsters
- Proper management of parking lot surfaces
- Specific SOPs for O&M activities that could impact storm water
- Illicit Discharge Detection and Elimination
- Construction and Design phase requirements for projects 1 acre or greater in size
- LID requirements

Rationale: Environmental protection information is made easily accessible to O&M staff, designers and project managers, and other employees through website pages and an annual emailed articles, and department targeted seasonal emails. Mandatory annual storm water pollution prevention and IDDE training and review of SOPs are handled online through the University's Bridge system.

Objectives & Goals: Address the target pollutants (TSS, oils, grease, and floatables, etc.) and pollutant sources (parking lots and etc.) through education of the specified audience. The University makes it clear to Operations and Maintenance staff that storm water pollution prevention is important to the Institution by the methods we promote to reduce runoff and improve water quality.

Measure of Success: Quizzes and surveys have been used in the past with limited consistency. The University is seeking to apply online surveys and pre/post training quiz questions to track changes in knowledge and behavior during the 2021-2025 permit period, planning to use this data to create a baseline.

For each Action Item the Responsible Department, Initiation Date, Milestone Date, and Measure of Successful Delivery will be included.

Action Items	Responsible Department	Initiation Date (Year)	Milestone/ Completion Date (Month, Year)	Measure of Successful Delivery
Online annual training on illicit discharges and storm water P2. Include a record of who has received the training. See Appendix F for details.	EHS	Dec-11	Time of Hire, Annually	Successful if the EHS training database notes that Department employees have received the training. Pre/Post presentation quizzes used to track responses.
Employees are trained when hired and annually thereafter on Standard Operating Procedures designed for storm water pollution protection, including Nitrogen and Phosphorus reduction. See Appendix B and D for details.	EHS, Plant Ops	Dec-11	Time of Hire, Annually	Successful if department Supervisors provide training and include documentation as part of new hire process.
Online SWP2 and LID information to designers and project managers. See Appendix F for details.	EHS	Dec-11	Annually	Successful if Construction and Design Process (including LID requirements) storm water training is presented annually.
Email outreach to specific departments at a seasonal interval, such as reminder to Snow Plow operators to sweep excess salt following a storm, or for the Grounds crew to use as little fertilizer as possible during the spring.	EHS	Dec-16	2-3 times a year, depending on topic	Successful if departments receive emailed information via University network.

Policy 3-201: Physical Facilities Community Impact

I. Purpose & Scope

To establish a process for planning and construction of physical facilities on the university campus which minimizes any adverse impact on nearby residents, businesses and local government.

II. Definitions: *[reserved]*

III. Policy

A. Derivation of Authority

The University of Utah is not subject to the planning and zoning authority of municipalities or other local governmental units in which it is located (Utah Code 10-9-29), but as an institution of the state, it is subject to control and direction by its governing boards, the State Division of Facilities Construction & Management, the State Building Board, and the state legislature. However, it is the policy of the university to address in each stage of its physical facilities planning and construction activities those pertinent factors which would ordinarily be considered in municipal planning and zoning processes.

B. Community Impact

When planning and constructing physical facilities on campus, the university shall seek to minimize any adverse impact on adjacent neighborhoods and/or the community in a manner consistent with the attainment of its missions and goals.

C. Consultation with Municipalities

The university shall consult with planning and zoning authorities of affected municipalities about proposed or impending physical facilities construction projects when changes to traffic volume and patterns, health and safety, noise, parking, land use, impact on utilities systems and other municipal services and similar matters may substantially affect the municipality or the off-campus residential/business community. The university administration shall meet regularly with appropriate municipal authorities to share campus facilities master plans and other pertinent data, such as traffic studies and consulting reports. The university administration shall receive and consider comments and recommendations offered by municipal authorities.

D. Meetings with Community Residents, Businesses, Community Councils and Other Organizations

1. To promote meaningful participation by off-campus residents, businesses and other organizations likely to be affected by proposed additions or changes to the university's physical facilities and operations, the Board of Trustees will sponsor an annual public meeting for the purpose of:

    a. Presenting current and proposed campus facilities master plans.

    b. Presenting general information and pertinent data, i.e., probable sites, building size, number of expected occupants, functions to be housed, incremental traffic to be generated, etc., for new campus facilities projects reasonably expected to be funded during the next five years.

        i. Emphasis shall be on projects expected to be initiated during the ensuing year.

    c. Providing information relating to proposed major renovation of buildings and campus infrastructure which is expected to have a significant impact on traffic levels, parking requirements, noise levels and similar factors.

    d. Identifying potential community impacts, as well as mitigating actions, which might result from proposed physical facilities projects.

    e. Informing participants of expected changes in student enrollment, university employment and any major anticipated changes in public services, which can reasonably be expected to result in increased motor vehicle traffic, changes to existing traffic patterns, or other changes which may significantly affect nearby residents, businesses and other entities.

    f. Informing participants of the university's intentions to request approval of governing boards and the legislature for the planning and/or construction of specific physical facilities projects.

    g. Receiving verbal comments and recommendations from interested participants during the meeting and written comments and recommendations within 20 days after the meeting regarding the university's physical facilities programs, its operations and their effects on residential and business neighborhoods.

        At least 45 days prior to the meeting date, the Board of Trustees shall make public the date of the meeting and the agenda and individually notify in writing the following persons:

Salt Lake City Council members

Salt Lake City Mayor

Community Council Chairs whose districts are adjacent to the university campus

Salt Lake City Transportation Division Director

Salt Lake City Planning and Zoning Director

Salt Lake City Communications Director

2. Interim meetings shall be scheduled by the university administration to inform the adjacent community of proposed major changes to the physical facilities master plan, construction schedules, student enrollment, public services and the university's missions, when such information was not available at the time of the last annual meeting and it is not prudent to delay planning activities or the dissemination of the information until the next scheduled annual meeting. A minimum of 10 days advance notice of the meeting will be provided in writing to the following persons:

    Salt Lake City Council members

    Salt Lake City Mayor

    Community Council Chairs whose districts are adjacent to the university campus

    Salt Lake City Transportation Division Director

    Salt Lake City Planning and Zoning Director

    Salt Lake City Communications Director

    Comments and recommendations will be sought and received from interested participants regarding the facilities projects and programs presented.

3. Comments and recommendations received from residents, businesses, municipal officials, and others who participate in the annual and interim meetings will be evaluated and considered in the planning and construction of physical facilities and in the development or revision of the university's operating plans.

E. Presentations to Governing Boards

Annually the university administration shall present for approval of the Board of Trustees and the Board of Regents its campus facilities master plan, proposed construction projects, anticipated changes in enrollment and operations, together with minutes of all

public annual and interim meetings and a summary of written comments and recommendations received from interested persons. It will also include minutes of scheduled meetings with municipal authorities, as described in this policy.

F. Actions of Governing Boards

After due consideration of public comment the University shall exercise final decision-making authority to proceed with physical facilities projects and to implement changes to its operations and programs as directed by its governing boards.

IV. Rules, Procedures, Guidelines, Forms, and other related resources

A. Rules *[reserved]*

B. Procedures *[reserved]*

C. Guidelines *[reserved]*

D. Forms *[reserved]*

E. Other related resource materials *[reserved]*

V. References

A. 53B-6-101, Utah Code Annotated 1953

B. 53B-20-101, Utah Code Annotated 1953

C. 63-l-33 to 63-1-35, Utah Code Annotated 1953

D. 63-1-36 to 63-1-44, Utah Code Annotated 1953

E. Policy 3-205 (/administration/3-205.php), Remodeling and Construction Policy

VI. Contacts

Acting as the Policy Owner, the Office of the Associate Vice President of Facilities Management (http://www.regulations.utah.edu/info/#3) is responsible for answering questions and providing information regarding the application of this policy. Acting as the Policy Officer, the Vice President for Administrative Services (http://www.regulations.utah.edu/info/#3) is responsible for representing the University's interests in enforcing this policy and authorizing any allowable exceptions.

VII. History

Approved, Institutional Council: January 16, 1990 [MO1]

Approved, Board of Trustees: August 14, 1990

Signed in as: **Christian Buehler** (Log out)

Storm Water Management Program Plan

Updated plan: May 2015

The purpose of this Storm Water Management Plan Program (SWMPP) is to comply with Utah Department of Environmental Quality's general permit for the discharge of storm water from the Municipal Separate Storm Sewer System of the University of Utah Campus.

The general permit became effective on August 1, 2010 and expires on July 31, 2015. The University desires to discharge under that permit and thus has completed the Notice of Intent and an update to their SWMP in accordance with Part II and Part IV of the permit.

Downloads: University of Utah Storm Water Program Plan - May 2015 (PDF, 22MB)

additional information

Site Map



Emergency contacts

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Call **801-585-2677** to contact police for other than an emergency

In Case of Emergency (PDF)
Fill this out and post it in your workspace

Report a hazard

Report a hazard or safety concern on campus

Injury or accident

Follow these instructions

Signed in as: **Christian Buehler** (Log out)

Storm Water Pollution Prevention

The University of Utah is a Small Municipal Separate Storm Sewer System (MS4) with a discharge permit issued by the Utah Division of Water Quality (DWQ) in April 2003. The permit requires a program with six Minimum Control Measures (MCMs), Best Management Practices (BMPs) for each MCM, and Measurable Goals for each BMP. The University's Storm Water Management Program Plan describes the MCMs, BMPs, measurable goals, target dates, and our program rationale. The University of Utah's first Storm Water Management Program Plan (SWMPP) was completed and submitted to the Utah Division of Water Quality (DWQ) on May 18, 2005.

The six minimum control measures are:

1. Public Education and Outreach on Storm Water Impacts
2. Public Involvement
3. Illicit Discharge Detection and Elimination
4. Construction Site Storm Water Runoff Control
5. Post-Construction Storm Water Management
6. Pollution Prevention/Good Housekeeping for Municipal Operations

Each measurable goal has a target date associated with it. The EHS department tracks the University's progress toward meeting its goals, and reports this progress to the DWQ in the University's annual Storm Water Report.

Our current SWMPP and annual reports are available for viewing or downloading from this website. If you would like to comment on the SWMPP please complete a comment form, also available for download from this website.

External sites

- **Utah Division of Water Quality**
- **Utah Department of Air Quality**
- **EPA Region 8 - Water**
- **EPA Region 8 - Air**

For program information, to report illegal dumping activity, if you have any suggestions, or want to help with the storm water pollution prevention program contact the EHS Environmental Engineer at 801-585-1617.

One of the greatest things you can do is to educate others about storm water pollution prevention!

More...

- **Storm Water Management Program Plan**
- **Annual Reports**
- **Preventing Illicit Discharges (Illegal Dumping)**

- Household Hazardous Waste and Disposal

additional information

Site Map



Emergency contacts

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Signed in as: **Christian Buehler** (Log out)

Annual Reports

- Annual Report 2004
- Annual Report 2005
- Annual Report 2007
- Annual Report 2008
- Annual Report 2009 - 01
- Annual Report 2009 - 02
- Annual Report 2010
- Annual Report 2011
- Annual Report 2012
- Annual Report 2013
- Annual Report 2014

additional information

Site Map



Emergency contacts

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Appendix F

Training

- **Storm Water Training Class Overview**
- **Class Roster**
- **Stormwater P2 Training Material Example**
- **IDDE Training Material Example**

TRAINING CLASSES OVERVIEW

Training Class	Topics Covered	Target Audience(s)	Frequency	Permit
Construction SWP2	• Development of SWPPPs • and BMPs selection • Reducing adverse impacts from storm water runoff • Enforcement procedures	Construction Contractors	At start of construction project.	4.2.1.4
Storm Water P2 Training	• Protecting water quality • O&M requirements • Prevent or minimize impacts • Reporting concerns • Illicit discharges	HVAC Plumbing shop RBG Horticulture Staff Heavy Equipment Dept. Motor pool Landscape Maintenance Waste Management Team Leads University Student Apartments O&M Staff EHS Staff (w/SW responsibilities)	Time of hire and annual thereafter.	4.2.6.10
Illicit Discharge Detection and Elimination (IDDE)	• Identification of illicit discharges • Investigation • Termination • Cleanup • Reporting	HVAC Plumbing shop RBG Horticulture Staff Heavy Equipment Dept. Motor pool Landscape Maintenance Waste Management Team Leads University Student Apartments O&M Staff EHS Staff (w/SW responsibilities)	Time of hire and annual thereafter.	4.2.1.5, 4.2.3.11
Campus Planners and Project Managers Annual Refresher	• Low Impact Development practices • Green Infrastructure • Specific requirements of Post-Con controls • Construction Program Elements	Construction Project Delivery Project Managers Campus Planning	Time of hire and annual thereafter.	4.2.1.6
Post-construction BMPs maintenance (as SOP review)	• Fundamentals of long-term storm water management structural/non-structural control methods via SOP annual review	Plumbing Shop Landscape Maintenance Heavy Equipment	Time of hire and annual thereafter.	4.2.5.6
Construction Site Inspection/Enforcement SOPs and Erosion Control	• Inspection/enforcement process • Erosion Control Supervisor (UDOT) refresher • Other continuing education as needed	EHS Staff (w/SW responsibilities)	Time of hire and annual thereafter.	4.2.4.5

Department of
Environmental Health and Safety
THE UNIVERSITY OF UTAH

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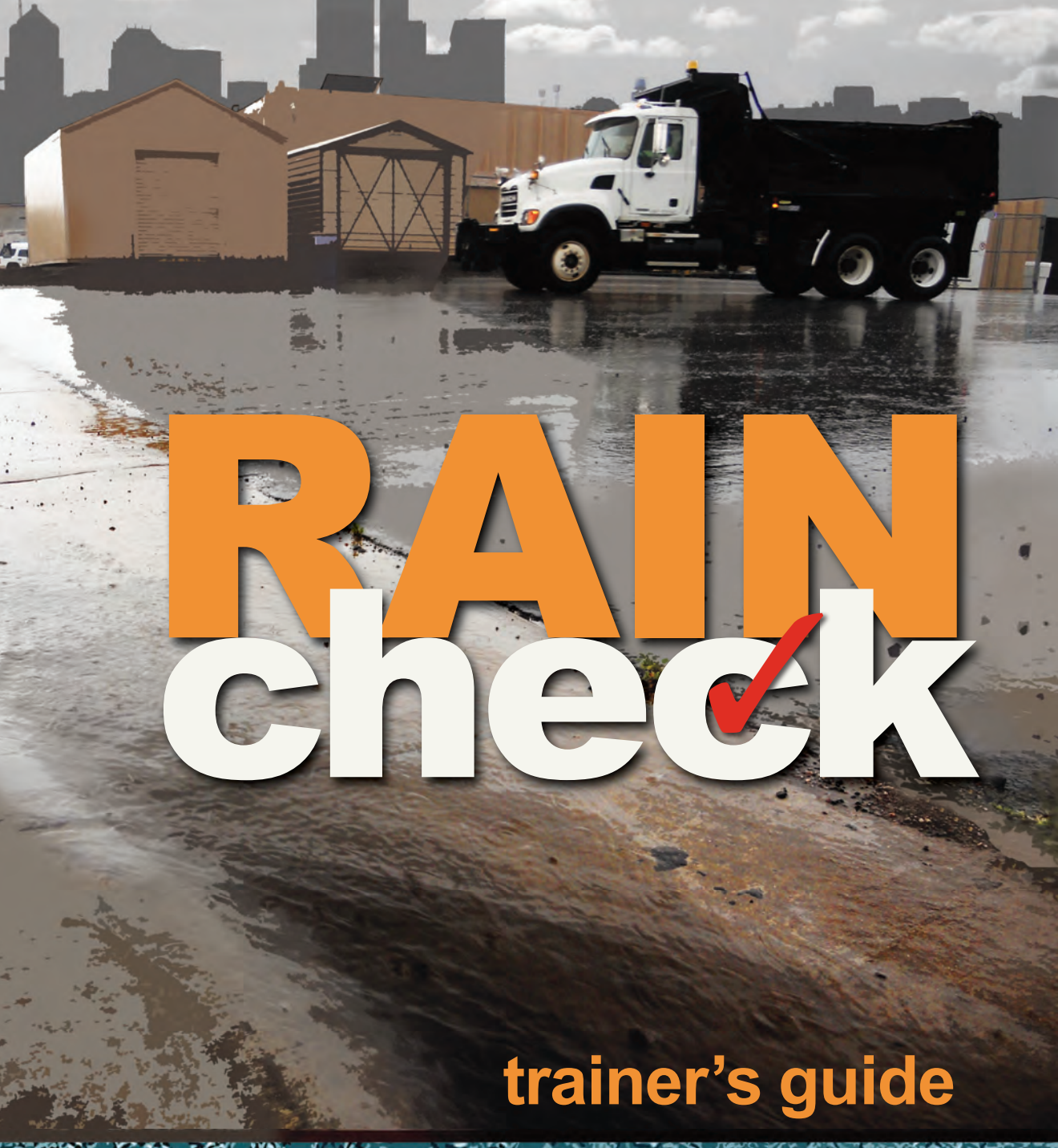
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Date:
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Location:

Instructor:
Name:
Environmental Health & Safety
(801) 581-6590

ON SITE REGISTRATION

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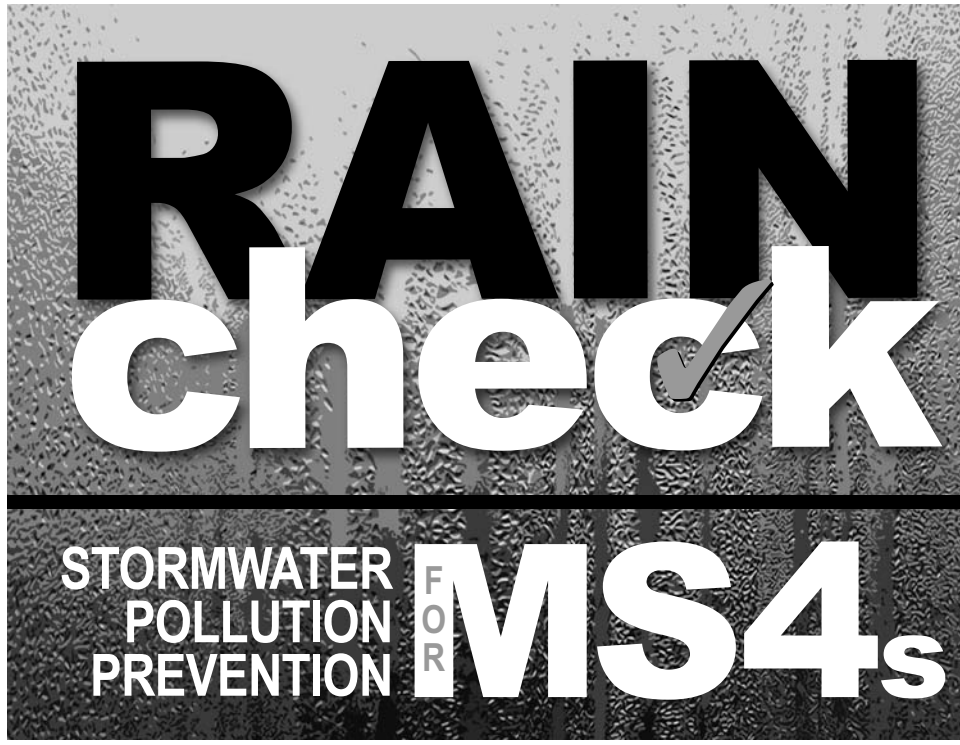
Name (first last)	***UNID***	***Specify if*** *Student, Staff, Faculty, Other*	***Email***	***Department*** *(specify College of Engineering, School of Medicine, Other)*	****Signature*** *(Signature confirms attendance)*
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RAIN check

trainer's guide

STORMWATER POLLUTION PREVENTION FOR MS4s



EXCAL VISUAL LLP
Training for EH&S Compliance

5721 Arapahoe Ave. A-2 • Boulder, CO 80303
P.O. Box 19094 • Boulder, CO 80308-2094
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Municipal Stormwater Regulations

Municipalities, urbanized areas of counties, universities, some military installations and certain other public entities that operate municipal separate storm sewer systems ("MS4's") must protect those systems from pollution. Pollution can result from exposure of stormwater run-off or snow melt to materials such as fuels, chemicals, raw materials, fertilizers, pesticides, and wastes.

Regulated entities are issued a stormwater discharge permit by the state environmental agency or the US EPA. These permits all require the development and implementation of an operating and maintenance program to control stormwater pollution. This written program is often called the Stormwater Management Program (SWMP) and includes a written plan often called a Stormwater Management Plan or Stormwater Management Program document.

The Stormwater Management Program

The SWMP describes how a facility will protect stormwater that enters its MS4. The permit requires that small (Phase II) municipalities address six "Minimum Control Measures" (MCM's) in the Program.

These MCM's include:

#1 Public Education and Outreach
#2 Public Participation and Involvement
#3 Illicit Discharge Detection and Elimination
#4 Construction Site Run-Off Control
#5 Post-Construction Management
#6 Pollution Prevention and Good Housekeeping

Individual stormwater programs implemented by large and medium-sized MS4's ("Phase I") cover similar control measures though they may be referred to by different names. Once written, signed and accepted by the regulatory agency, any actions, structures, procedures or prohibitions described in the Program must be implemented throughout the jurisdiction.

REQUIREMENTS
Pollution Prevention and Good Housekeeping

MCM #6 requires that MS4s make sure that employees at their own operations and facilities prevent stormwater pollution. This means that municipal facilities such as maintenance facilities, garages, transportation terminals, parks, marinas, golf courses, streets and roads, fire and police stations and office buildings must take measures to protect the stormwater or snow melt leaving these facilities. The EPA calls the control measures that protect stormwater "best management practices" or "BMPs". Good housekeeping is one important BMP.

DEFINING BMPs
The Impact of Employee Training

BMPs are the structures and work practices ("non-structural" BMPs) that MS4's include in their Programs to protect stormwater. BMPs range from secondary containment structures under and around above-ground bulk storage tanks to stormwater detention ponds to good housekeeping and rapid clean-up of spills and leaks. There are many BMPs, and it is up to each municipal facility or operation to identify and implement the appropriate BMPs for that facility.

No two facilities are exactly the same, and the BMPs selected for each will be different. However, one BMP that will be important at virtually all facilities is employee training. Employee training is fundamental to effective stormwater protection. Without well-trained employees, no MS4 can effectively or reliably implement selected BMPs. Recognizing this, SWMPs specifically mandate that MS4s train their employees on stormwater pollution prevention.

REQUIRED TRAINING

In general, the only employees (full-time and part-time) who must be trained on stormwater BMPs are those that work outdoors (at any time) with materials that could contaminate stormwater run-off. Employees who only work indoors or who never handle any materials or wastes that could be exposed to stormwater need not be trained.

Employees who typically require training include workers in these areas:

- ✔ bus and train terminals and stations
- ✔ building maintenance (exterior)
- ✔ fire and police stations
- ✔ golf courses
- ✔ landscaping and grounds maintenance
- ✔ marinas, beaches and waterfront facilities
- ✔ new construction projects
- ✔ outdoor materials storage and handling
- ✔ parks and open spaces
- ✔ sanitation (trash collection operations)
- ✔ storm drainage maintenance
- ✔ street sweeping
- ✔ street maintenance and repair

- ✔ vehicle, fleet or equipment maintenance
- ✔ vehicle or equipment washing/fueling
- ✔ waste management facilities

BMPs & TRAINING MY EMPLOYEES

According to the National Menu of BMPs there are several types of BMPs that are often important, including training, at municpal facilities. Each chapter of *Rain Check* focuses on a specific type of BMP.

- ✔ Good Housekeeping & Spill Prevention
- ✔ Spill Control & Response
- ✔ Vehicle Fueling
- ✔ Vehicle & Equipment Maintenance
- ✔ Vehicle & Equipment Washing
- ✔ Materials Management
- ✔ Waste Management
- ✔ Municipal Facility Maintenance
- ✔ Parking Lots & Streets
- ✔ Storm Drain System Cleaning
- ✔ Landscaping & Grounds Maintenance
- ✔ Working Over or Near Surface Waters

It is recommended that the trainer consider presenting the entire *Rain Check* program to cover specific types of BMPs, however some facilities may wish to train employees only on the BMPs that are specifically applicable to that facility. This usually means basic BMPs as well as any specialty BMPs that apply. It is up to the trainer to decide which BMPs should be covered in each training session.

THE *RAIN CHECK* VIDEO

The *Rain Check* video program is available primarily in two formats: DVD and CD-ROM. How *Rain Check* is used for training will depend on which BMPs are included and how the trainer elects to present the training.

DVD FORMAT

The DVD opens with a menu of three main training options. The trainer can select the option that best fits the training needs of the employees at each facility or operation.

Option #1 Complete Program *(31 minutes)*

This presents all 14 chapters of training and includes basic and specialty BMP training. The following chapters are included:

CHAPTER 1: Introduction
CHAPTER 2: Good Housekeeping & Spill Prevention
CHAPTER 3: Spill Control & Response
CHAPTER 4: Vehicle Fueling
CHAPTER 5: Vehicle & Equipment Maintenance
CHAPTER 6: Vehicle & Equipment Washing
CHAPTER 7: Materials Management
CHAPTER 8: Waste Management
CHAPTER 9: Municipal Facility Maintenance
CHAPTER 10: Parking Lots & Streets
CHAPTER 11: Storm Drain System Cleaning
CHAPTER 12: Landscaping & Grounds Maintenance
CHAPTER 13: Working Over or Near Surface Waters
CHAPTER 14: Conclusion

Option #2 Basic BMPs *(19-1/2 minutes)*

At a minimum most employees should receive basic BMP training because these practices apply at the vast majority of municipal operations. Option #2 includes the Introduction, the basic BMPs (Chapter 2-8) and the Conclusion.

CHAPTER 1: Introduction
CHAPTER 2: Good Housekeeping & Spill Prevention
CHAPTER 3: Spill Control and Response
CHAPTER 4: Vehicle Fueling
CHAPTER 5: Vehicle & Equipment Maintenance
CHAPTER 6: Vehicle & Equipment Washing
CHAPTER 7: Materials Management
CHAPTER 8: Waste Management
CHAPTER 9: Conclusion

Option #3 Specialty BMPs: Employees in certain types of operations will benefit from BMP training that is specific to their job duties. The trainer can select specialty BMP training related to the employee's tasks. Each specialty BMP section include the basic BMPs.

For Building Maintenance Employees

- Municipal Facility Maintenance *(21-1/2 minutes)*

For Street, Road & Bridge Employees

- Parking Lots & Street Cleaning/Storm Drain System Cleaning *(23 minutes)*

For Parks & Open Space Employees

- Landscaping & Grounds Maintenance *(23-1/2 minutes)*

For Marina, Harbor or Port Employees

- Working Over Surface Waters *(21-1/2 minutes)*

The DVD format also offers two other options, *All Chapters* and *Closed Captions*. *All Chapters* allows the trainer to view each chapter individually.

CD-ROM FORMAT

The CD-ROM offers the same options described in the DVD format, plus the option to build a custom program. This allows the trainer to individually select which BMP chapters to include in any training presentation. With the custom option the trainer can select and organize the presentation as needed for each audience. The selected curriculum can be saved and used repeatedly. It can also be changed as often as the trainer desires. *(Detailed instructions are provided on the CD).*

TRAINING SESSIONS

There are many ways to structure employee BMP training sessions. What follows is one good approach, but there are others as well. Employee training is usually divided into initial training and refresher training. Initial training must be delivered to all employees before they assume any duties that might threaten stormwater. Initial training is usually delivered to current employees when the municipality is first issued a permit and then to new employees shortly after hiring.

Initial training should cover all the BMPs applicable at that facility. Any practices, procedures, prohibitions, testing, monitoring or recordkeeping contained in the facility SWMP that involves employees at that facility should be covered in the training.

An effective training session could be organized as follows:

I. PREPARE

The *Rain Check* kit contains a SiteCast™ CD, created with PowerPoint® presentation software. This template allows the trainer to add site/facility specific information to any training session. Prior to delivering training, the trainer should edit the training template provided on the SiteCast™ CD based on the stormwater needs of the facility/audience.

The SiteCast™ CD has 43 slide templates organized into chapters in the same order as shown in the *Rain Check* video. The trainer may delete any chapters or slide templates that do not apply to the facility. In editing, the trainer can enter additional text or replace the existing graphics and/or photos with images from the facility at which the training will be conducted. Once edited, the trainer can save the edited template onto a disk or hard drive for use in future training sessions.

Note that each SiteCast™ CD contains two templates. One uses the PowerPoint® *.ppt* format and the second uses the *.pptx* format. Users of PowerPoint® 2007 (and later versions) will usually use *.pptx*. Users of earlier PowerPoint® versions will generally use *.ppt*.

Prior to delivering a training session, the trainer wll also need to determine which video training option will be presented: Option #1 (Complete Program), Option #2 (Basic BMPs), Option #3 (Specialty BMPs) or Custom Training (CD-ROM users only). Trainers that purchase a CD-ROM format and wish to create a custom program can refer to the detailed instructions provided on the CD to prepare the presentation prior to training.

II. INTRODUCE

To start each training session, the trainer should introduce the topic of the session: Stormwater Pollution Prevention for MS4s. Describe

briefly what the training session is about and that the training is part of a program that is required by regulation.
(Time: 2 minutes)

III. SHOW

Show the training video: *Rain Check: Stormwater Pollution Prevention for MS4s.*
(Time: 20-31 minutes depending on the program option selected)

IV. PRESENT SITE-SPECIFIC INFORMATION

Present the SiteCast™ CD presentation that was edited and prepared before the training session. The trainer must verbally narrate the content during the SiteCast™ training presentation.
(Time: Depends on length of the presentation but typically 10-15 minutes)

V. INVITE

Invite the trainees to discuss the video and site-specific information and what it means at their facility or operation. Allow time for employees to comment and ask questions about their particular situations and issues. If employees do not initiate discussion, the trainer might pose questions such as: 'What types of materials do we handle here that are of concern to stormwater pollution? Where are the spill response kits and what's in them? What work activities in our organization are most likely to result in stormwater pollution? Are the lids on outdoor dumpsters kept closed? If vehicles and equipment are cleaned or washed outdoors, how is the waste water kept out of stormwater?'

There are many provocative questions that can be posed to get the employees to think about stormwater pollution and how their work affects it. **(Time: typically 15-20 minutes)**

VI. ADMINISTER QUIZ

The *Rain Check* kit offers the trainer the opportunity to handout a standard paper quiz provided in the kit or a custom quiz created with a quiz generator program. In the standard quiz, the quiz questions are organized as Basic BMPs and Specialty BMPs, with specific topics listed under each section. The trainer will need to direct the trainees to complete the quiz sections related to the training they received. At minimum, all employees should be directed to complete the Basic BMPs section. The trainer may wish to add site-specific questions to the quiz as well.

(Time: 10-15 minutes)

Paper Quiz

The *Rain Check* kit contains quiz sheets with 40 questions. Questions 1-26 are related to Basic BMPs training. Questions 27-40 are related to Specialty BMPs training. Depending on which chapters were shown in the training session, the trainer can administer different quizzes. The trainer will direct the trainees to the questions related to the training received. In cases where all the chapters were shown, the trainer may direct the trainees to complete the entire quiz. The quizzes in the kit may be copied as often as needed. The trainer should pass out applicable quiz sheets to all employees.

Quiz Generator

The quiz generator allows the trainer to configure custom quizzes by selecting the maximum number of questions, the chapters to be covered and the method of selecting the questions. The quiz generator is a web application and can be accessed through links in the QuizGen folder on the DVD, CD or SiteCast™ discs. Detailed instructions are also available through the QuizGen folder.

VII. CORRECT QUIZ (OPTIONAL)

Answers to the paper quiz are provided in the Quiz Answer Key on page 13 of this guide. The quiz generator generates an answer key with each quiz created. Many trainers prefer to allow employees to correct their own quizzes. This highlights any gaps in their understanding and shows them the correct information. Allow plenty of time for employees to ask questions about the quiz and to discuss their concept of the issues.

(Time: 5-10 minutes)

VIII. DISTRIBUTE POCKET REFERENCES

Included in the *Rain Check* kit are five Pocket References. These References summarize the *Rain Check* video in print form. They are meant to be carried by employees to remind them about the key stormwater pollution prevention practices. They can be distributed to trainees at the end of the class as handouts. If more Pocket References are needed, they may be ordered from Excal Visual.

DOCUMENTING EMPLOYEE TRAINING

When training is complete, the trainer should collect the quizzes and file them. These records will document that employee training was completed. If the trainer does not wish to administer quizzes, there are "Acknowledgment of Training" forms included in the kit. Trainees can simply sign and date those forms after each training session as documentation that training was attended. Many trainers file completed quizzes or Acknowledgment forms in their SWMP for convenience.

REFRESHER TRAINING

After all affected employees have received initial training, refresher training must be conducted periodically (usually annually). The SWMP will identify the schedule for refresher training. Refresher training may be a complete repeat of initial training or it may be shortened. In any case, it should focus attention on changes since the last training, and/or on shortcomings that have been noted during inspections, audits or other observations. As part of refresher training, the video may be shown either in whole or in part to emphasize and highlight correct practices.

ADDITIONAL EMPLOYEE TRAINING

MS4s must develop plans related to Illicit Discharge Detection and Elimination (IDDE) and train specific employees how to track and identify illicit discharges. Excal Visual offers an IDDE training program that is complimentary to *Rain Check*. We encourage you to preview this program as an additional training tool to meet the IDDE training requirements.

QUIZ ANSWER KEY

1. b	11. c	21. d	31. d
2. c	12. d	22. d	32. b
3. d	13. a	23. d	33. d
4. a	14. d	24. c	34. a
5. d	15. a	25. a	35. b
6. c	16. c	26. e	36. c
7. d	17. a	27. a	37. d
8. a	18. d	28. d	38. d
9. c	19. d	29. a	39. d
10. d	20. b	30. b	40. d

NOTICE and DISCLAIMER

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EXCAL VISUAL training aids include:

- Environmental Management Systems
- Environmental Awareness
- First Responder Awareness Level (HAZWOPER)
- Fuel Economy
- Hazard Communication (HazCom)
- Hazardous Materials Spill Response
- Hazardous Waste (RCRA) for LQGs
- Hazardous Waste (RCRA) for SQGs
- Hazardous Waste (California)
- Hazardous Waste for Laboratories & Research Facilities
- Pandemic Workplace Strategies
- Spill Prevention Control and Countermeasure (SPCC)
- SPCC for California
- SPCC for Electric Utilities
- Stormwater Pollution Prevention: Construction Sites
- Stormwater Pollution Prevention: General BMPs
- Stormwater Pollution Prevention: Industrial Facilities
- Stormwater Pollution Prevention: MS4s–Municipal Facilities
- Universal Waste

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IDDE

a grate concern

Illicit Discharge Detection & Elimination



trainer's guide



Illicit Discharge Detection & Elimination

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PURPOSE OF THIS TRAINER'S GUIDE

This Trainer's Guide is a companion document to the Excal Visual video training kit ***IDDE – a grate concern***. This guide shows trainers how to use the contents of the video kit to effectively train municipal employees on Illicit Discharge Detection & Elimination (IDDE). This guide is designed to lead a trainer through the process of developing, delivering and evaluating the effectiveness of employee IDDE training.

MUNICIPAL STORMWATER REGULATIONS & MS4s

Municipalities, urbanized areas of counties, universities, some military installations and certain other public entities that operate municipal separate storm sewer systems (MS4s) must protect those systems from pollution. Pollution can result from exposure of stormwater run-off or snow melt to materials such as fuels, chemicals, raw materials, fertilizers, pesticides and wastes.

Regulated municipalities are issued a stormwater discharge permit by the state environmental agency or the US EPA. Each of these permits describes all the requirements for compliance. These permits require the development and implementation of an operating and maintenance program to control stormwater pollution. This written program is called the Stormwater Management Program (SWMP) and includes a written plan often called a Stormwater Management Plan or Stormwater Management Program document.

STORMWATER PLAN

The Stormwater Management Plan describes how the municipality will protect stormwater that enters its MS4. Plans require that small (Phase II) municipalities address six Minimum Control Measures (MCMs). These MCMs are:

1. Public Education and Outreach
2. Public Participation and Involvement
3. Illicit Discharge Detection and Elimination
4. Construction Site Run-Off Control
5. Post-Construction Management
6. Pollution Prevention and Good Housekeeping

Individual stormwater plans implemented by large and medium-sized MS4s (Phase I) cover similar control measures though they may be referred to by different names. Once written, signed and accepted by the regulatory agency, any actions, structures, procedures or prohibitions described in the plan must be implemented throughout the jurisdiction. ***IDDE – a grate concern*** addresses training of municipal employees on **MCM #3.**

REQUIREMENTS OF ILLICIT DISCHARGE DETECTION AND ELIMINATION (IDDE)

Municipalities must develop plans to identify illicit discharges and then eliminate them. Illicit discharges are any discharges (accidental or on purpose) of anything other than stormwater (with some exceptions) into an MS4. Municipalities must map their stormwater drainage systems. They must then locate problem areas, trace discharge sources and remove or correct them.

MUNICIPAL EMPLOYEES THAT NEED IDDE TRAINING

Employees who track down illicit discharges (typically storm sewer maintenance staff) need specialized training covering the entire IDDE process. In addition, any employees who might be in a position to spot or identify an illicit discharge must be trained on detection. This training is required even if illicit discharge detection is not part of their normal duties. Employees who might be in positions to detect possible illicit discharges include street, road and bridge employees, sanitation, park and open space employees, police, fire and EMT personnel and others. Any employees who regularly visit or observe storm drain inlets or outfalls where illicit discharges could occur should be trained on detection.

TRAINING CONTENT OF THE KIT

IDDE – a grate concern shows employees who travel around the permitted jurisdiction how to spot a possible illicit discharge or signs of past discharges. It discusses direct and indirect discharges and shows employees what to look for at curb inlets, drop inlets and outfalls. It shows examples of the tell-tale signs often left by past illicit discharges. It encourages employees to be vigilant in watching for signs of illicit discharges and to report their suspicions to the storm drainage staff, Public Works Department or environmental staff who can then initiate the process of tracking the source of the discharge and eliminating it.

AN EFFECTIVE IDDE EMPLOYEE TRAINING PROGRAM

There are many ways to structure employee IDDE training. What follows is one good approach, but there are others as well. Employee training is usually divided into initial training and refresher training. Initial training must be delivered to affected employees before they assume any duties that might impact stormwater. Initial training is usually delivered to current employees when the MS4 is first issued its permit and then to new employees shortly after hiring.

An effective training session could be organized as follows:

I. INTRODUCE

Introduce the topic of the session: Illicit Discharge Detection and Elimination. Describe briefly what the training session is about and that the training is part of a regulatory program that is required for the MS4 by regulations.

Time: 2 minutes

II. SHOW

Show the training video: ***IDDE – a grate concern***.

Time: 14:21

III. INVITE

Invite the trainees to discuss the video and what it means in their daily work activities. Allow time for employees to comment and ask questions about their particular situations and issues.

Time: typically 15-20 minutes

IV. QUIZ

The ***IDDE – a grate concern*** kit contains quiz sheets with 15 questions. The quizzes in the kit may be copied as often as needed. The trainer should pass out quiz sheets to all employees and instruct them to answer the questions. All questions are multiple choice.

Time: 10-12 minutes

V. CORRECTING THE QUIZ (OPTIONAL)

Answers to all the quizzes are printed on page 8 of this guide. Many trainers allow employees to correct their own papers. This highlights any misperceptions or gaps in their understanding and shows them the correct information. Allow plenty of time for employees to ask questions about the quiz and to discuss their concept of the issues.

Time: 5-10 minutes

VI. DISTRIBUTE POCKET REFERENCE WORKBOOKS

Included in the training kit are five employee Pocket Reference Workbooks. These workbooks summarize the ***IDDE–a grate concern*** content in print form and can be carried by employees to remind them about key IDDE practices.

Employees in the field that observe an illicit discharge, discover evidence of past discharges or see or smell something that could indicate an illicit discharge can complete an Observation Report form in the back of the Pocket Reference. Recorded information includes the date, time, location, photo, possibly a license plate number and description.

Completed Observation Reports can be removed from the workbook and given to the employee's supervisor or to the designated MS4 contact person.

Distribute these workbooks to the employees at the end of the training session. Additional workbooks can be ordered from Excal Visual as needed.

On page 14 of the Pocket Reference Workbook the trainer can fill-in the MS4 contact information prior to training or have the employee enter this information during the training session.

PERIODIC REFRESHER TRAINING

After all affected employees have received initial training, refresher training should be conducted periodically. The Stormwater Plan will identify the schedule for refresher training. Refresher training may be a repeat of initial training or it may be shortened. In any case, it should focus attention on changes since the last training and/or on shortcomings that have been noted during inspections, audits or other observations. As part of refresher training, the video may be shown either in whole or in part to emphasize and highlight correct practices.

DOCUMENTING EMPLOYEE TRAINING

When training is complete, the trainer should collect the corrected quizzes and file them. These records will document that employee training was completed. If the trainer does not wish to administer quizzes, there are "Acknowledgment of Training" forms included in the kit. These forms may be copied as often as needed. Trainees can sign and date these forms after each training session as documentation that training was attended. Many trainers file **completed** quizzes or acknowledgment forms in their Stormwater Plan for convenience.

ADDITIONAL EMPLOYEE TRAINING

Excal Visual produces other employee training programs on stormwater and related environmental regulations. See our website at www.excalvisual.com for information about these training kits.

QUIZ ANSWER KEY

1. c	6. b	11. d
2. a	7. d	12. a
3. d	8. c	13. a
4. b	9. e	14. e
5. e	10. c	15. d

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