

#### CONTROL OF INVASIVE PLANTS

During maintenance activities, check for the presence of invasive plants and remove in a safe manner as described on the following pages. They should be controlled as described on the following pages.

Invasive plants are introduced, alien, or non-native plants, which have been moved by people from their native habitat to a new area. Some exotic plants are imported for human use such as landscaping, erosion control, or food crops. They also can arrive as "hitchhikers" among shipments of other plants, seeds, packing materials, or fresh produce. Some exotic plants become invasive and cause harm by:

- becoming weedy and overgrown;
- killing established shade trees;
- obstructing pipes and drainage systems;
- forming dense beds in water;
- lowering water levels in lakes, streams, and wetlands;
- destroying natural communities;
- promoting erosion on stream banks and hillsides; and
- resisting control except by hazardous chemical.

# UNIVERSITY of NEW HAMPSHIRE Methods for Disposing COOPERATIVE EXTENSION Non-Native Invasive Plants

Prepared by the Invasives Species Outreach Group, volunteers interested in helping people control invasive plants. Assistance provided by the Piscataquog Land Conservancy and the NH Invasives Species Committee. Edited by Karen Bennett, Extension Forestry Professor and Specialist.



Tatarian honeysuckle

Lonicera tatarica

USDA-NRCS PLANTS Database / Britton, N.L., and
A. Brown. 1913. An illustrated flora of the northern

United States, Canada and the British Possessions.

Vol. 3: 282.

Non-native invasive plants crowd out natives in natural and managed landscapes. They cost taxpayers billions of dollars each year from lost agricultural and forest crops, decreased biodiversity, impacts to natural resources and the environment, and the cost to control and eradicate them.

Invasive plants grow well even in less than desirable conditions such as sandy soils along roadsides, shaded wooded areas, and in wetlands. In ideal conditions, they grow and spread even faster. There are many ways to remove these nonnative invasives, but once removed, care is needed to dispose the removed plant material so the plants don't grow where disposed.

Knowing how a particular plant reproduces indicates its method of spread and helps determine

the appropriate disposal method. Most are spread by seed and are dispersed by wind, water, animals, or people. Some reproduce by vegetative means from pieces of stems or roots forming new plants. Others spread through both seed and vegetative means.

Because movement and disposal of viable plant parts is restricted (see NH Regulations), viable invasive parts can't be brought to most transfer stations in the state. Check with your transfer station to see if there is an approved, designated area for invasives disposal. This fact sheet gives recommendations for rendering plant parts nonviable.

Control of invasives is beyond the scope of this fact sheet. For information about control visit <a href="https://www.nhinvasives.org">www.nhinvasives.org</a> or contact your UNH Cooperative Extension office.

#### New Hampshire Regulations

Prohibited invasive species shall only be disposed of in a manner that renders them nonliving and nonviable. (Agr. 3802.04)

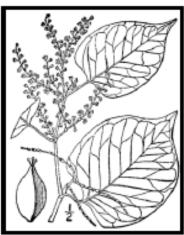
No person shall collect, transport, import, export, move, buy, sell, distribute, propagate or transplant any living and viable portion of any plant species, which includes all of their cultivars and varieties, listed in Table 3800.1 of the New Hampshire prohibited invasive species list. (Agr 3802.01)

### How and When to Dispose of Invasives?

To prevent seed from spreading remove invasive plants before seeds are set (produced). Some plants continue to grow, flower and set seed even after pulling or cutting. Seeds can remain viable in the ground for many years. If the plant has flowers or seeds, place the flowers and seeds in a heavy plastic bag "head first" at the weeding site and transport to the disposal site. The following are general descriptions of disposal methods. See the chart for recommendations by species.

Burning: Large woody branches and trunks can be used as firewood or burned in piles. For outside burning, a written fire permit from the local forest fire warden is required unless the ground is covered in snow. Brush larger than 5 inches in diameter can't be burned. Invasive plants with easily airborne seeds like black swallow-wort with mature seed pods (indicated by their brown color) shouldn't be burned as the seeds may disperse by the hot air created by the fire.

Bagging (solarization): Use this technique with softertissue plants. Use heavy black or clear plastic bags (contractor grade), making sure that no parts of the plants poke through. Allow the bags to sit in the sun for several weeks and on dark pavement for the best effect.



Japanese knotweed
Polygonum cuspidatum
USDA-NRCS PLANTS Database /
Britton, N.L., and A. Brown. 1913. An
illustrated flora of the northern United
States, Canada and the British
Possessions. Vol. 1: 676.

Tarping and Drying: Pile material on a sheet of plastic and cover with a tarp, fastening the tarp to the ground and monitoring it for escapes. Let the material dry for several weeks, or until it is clearly nonviable.

Chipping: Use this method for woody plants that don't reproduce vegetatively.

Burying: This is risky, but can be done with watchful diligence. Lay thick plastic in a deep pit before placing the cut up plant material in the hole. Place the material away from the edge of the plastic before covering it with more heavy plastic. Eliminate as much air as possible and toss in soil to weight down the material in the pit. Note that the top of the buried material should be at least three feet underground. Japanese knotweed should be at least 5 feet underground!

Drowning: Fill a large barrel with water and place soft-tissue plants in the water. Check after a few weeks and look for rotted plant material (roots, stems, leaves, flowers). Well-rotted plant material may be composted. A word of caution- seeds may still be viable after using this method. Do this before seeds are set. This method isn't used often. Be prepared for an awful stink!

Composting: Invasive plants can take root in compost. Don't compost any invasives unless you know there is no viable (living) plant material left. Use one of the above techniques (bagging, tarping, drying, chipping, or drowning) to render the plants nonviable before composting. Closely examine the plant before composting and avoid composting seeds.

# Suggested Disposal Methods for Non-Native Invasive Plants

This table provides information concerning the disposal of removed invasive plant material. If the infestation is treated with herbicide and left in place, these guidelines don't apply. Don't bring invasives to a local transfer station, unless there is a designated area for their disposal, or they have been rendered non-viable. This listing includes wetland and upland plants from the New Hampshire Prohibited Invasive Species List. The disposal of aquatic plants isn't addressed.

Woody Plants	Method of Reproducing	Methods of Disposal
Norway maple (Acer platanoides) European barberry (Berberis vulgaris) Japanese barberry (Berberis thunbergii) autumn olive (Elaeagnus umbellata) burning bush (Euonymus alatus) Morrow's honeysuckle (Lonicera morrowii) Tatarian honeysuckle (Lonicera tatarica) showy bush honeysuckle (Lonicera x bella) common buckthorn (Rhamnus cathartica) glossy buckthorn (Frangula alnus)	Fruit and Seeds	Prior to fruit/seed ripening Seedlings and small plants Pull or cut and leave on site with roots exposed. No special care needed.  Larger plants Use as firewood. Make a brush pile. Chip. Burn.  After fruit/seed is ripe Don't remove from site. Burn. Make a covered brush pile. Chip once all fruit has dropped from branches. Leave resulting chips on site and monitor.
oriental bittersweet (Celastrus orbiculatus) multiflora rose (Rosa multiflora)	Fruits, Seeds, Plant Fragments	Prior to fruit/seed ripening Seedlings and small plants  Pull or cut and leave on site with roots exposed. No special care needed.  Larger plants  Make a brush pile.  Burn.  After fruit/seed is ripe Don't remove from site.  Burn.  Make a covered brush pile.  Chip – only after material has fully dried (1 year) and all fruit has dropped from branches. Leave resulting chips on site and monitor.

Non-Woody Plants	Method of Reproducing	Methods of Disposal
garlic mustard  (Alliaria petiolata)  spotted knapweed  (Centaurea maculosa)  Sap of related knapweed can cause skin irritation and tumors. Wear gloves when handling.  black swallow-wort  (Cynanchum nigrum)  May cause skin rash. Wear gloves and long sleeves when handling.  pale swallow-wort  (Cynanchum rossicum)  giant hogweed  (Heracleum mantegazzianum)  Can cause major skin rash. Wear gloves and long sleeves when handling.  dame's rocket  (Hesperis matronalis) perennial pepperweed  (Lepidium latifolium)  purple loosestrife  (Lythrum salicaria)  Japanese stilt grass  (Microstegium vimineum)  mile-a-minute weed  (Polygonum perfoliatum)	Fruits and Seeds	Prior to flowering Depends on scale of infestation Small infestation Pull or cut plant and leave on site with roots exposed.  Large infestation Pull or cut plant and pile. (You can pile onto or cover with plastic sheeting). Monitor. Remove any re-sprouting material.  During and following flowering Do nothing until the following year or remove flowering heads and bag and let rot.  Small infestation Pull or cut plant and leave on site with roots exposed.  Large infestation Pull or cut plant and pile remaining material. (You can pile onto plastic or cover with plastic sheeting). Monitor. Remove any re-sprouting material.
common reed (Phragmites australis) Japanese knotweed (Polygonum cuspidatum) Bohemian knotweed (Polygonum x bohemicum)	Fruits, Seeds, Plant Fragments Primary means of spread in these species is by plant parts. Although all care should be given to preventing the dispersal of seed during control activities, the presence of seed doesn't materially influence disposal activities.	Small infestation  Bag all plant material and let rot.  Never pile and use resulting material as compost.  Burn.  Large infestation  Remove material to unsuitable habitat (dry, hot and sunny or dry and shaded location) and scatter or pile.  Monitor and remove any sprouting material.  Pile, let dry, and burn.

January 2010

# Appendix O

# Stormwater Pollution Prevention Plan

# **Stormwater Pollution Prevention Plan**

## for:

Granite State Landfill
172 Douglas Drive
Dalton, New Hampshire 03598
603-869-3366

# **SWPPP Contact(s):**

Facility Owner Contact: Joe (John) Gay
1855 Vt Route 100
Hyde Park, VT 05655
802-651-5454
John.gay@casella.com

SWPPP Coordinator: Bruce Grover 172 Douglas Drive Dalton, New Hampshire 03598 603-869-3366 bruce.grover@casella.com

# **SWPPP Preparation Date:**

October 2023

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# SECTION 1: FACILITY DESCRIPTION AND CONTACT INFORMATION

# 1.1 Facility Information.

Facility Information Facility Name: Granite State Landfill Street/Location: 172 Douglas Drive		
City: <b>Dalton</b> County or Similar Government Subdivision: <b>Coos</b> NPDES ID (i.e., permit tracking number): <b>TBD</b>	State: NH	ZIP Code: <b>03598</b>
Primary Industrial Activity SIC code, and Sector and Subsection SIC Code = 4953, Sector = L, Subsector = L1 and L2	tor (2021 MSGP, A	ppendix D and Part 8):
Co-located Industrial Activity(s) SIC code(s), Sector(s) and S None	Subsector(s) (2021	MSGP, Appendix D):
Is your facility presently inactive and unstaffed and are there to stormwater? $\ \square$ Yes $\ \boxtimes$ No	no industrial mater	ials or activities exposed
	ongitude: 1.6939 ° W (decima	al degrees)
Method for determining latitude/longitude (check one):	·2000'_)	□GPS
Horizontal Reference Datum (check one):  □ NAD 27 □ NAD 83 □ WGS 84		
Is the facility located in Indian country?   Yes   If yes, provide the name of the Indian tribe associated with the Indian reservation, if applicable).		ountry (including name of
Are you considered a "federal operator" of the facility?  Federal Operator – an entity that meets the definition of department, agency or instrumentality of the executive, le government of the United States, or another entity, such department, agency, or instrumentality.	egislative, and judicia	I branches of the Federal
Estimated area of industrial activity at your facility exposed to (to the nearest quarter acre)	o stormwater: <b>20</b> (a	cres)

Discharge Information
Does this facility discharge stormwater into a municipal separate storm sewer system (MS4)?  ☐ Yes ☐ No
If yes, name of MS4 operator:
Name(s) of surface water(s) that receive stormwater from your facility:  Unnamed Brook to Hatch Brook (NHRIV801030403-04) – Outfalls 001-005
Does this facility discharge industrial stormwater directly into any segment of an "impaired water" (see definition in 2021 MSGP, Appendix A)? $\boxtimes$ Yes $\square$ No
If Yes, identify name of the impaired water(s) (and segment(s), if applicable):  Unnamed Brook to Hatch Brook (NHRIV801030403-04)
Identify the pollutant(s) causing the impairment(s):  Mercury
Which of the identified pollutants may be present in industrial stormwater discharges from this facility?
Mercury is not anticipated to be present in stormwater discharges.
Has a Total Maximum Daily Load (TMDL) been completed for any of the identified pollutants? If yes, please list the TMDL pollutants: <b>Yes, a TMDL has been completed for Mercury.</b>
Does this facility discharge industrial stormwater into a receiving water designated as a Tier 2, Tier 2.5 or Tier 3 water (see definitions in 2021 MSGP, Appendix A)?  ☐ Yes (Tier 2) ☐ No
Are any of your stormwater discharges subject to effluent limitation guidelines (ELGs) (2021 MSGP Table 1-1)? ☐ Yes ☒ No If Yes, which guidelines apply?

#### 1.2 Contact Information/Responsible Parties.

#### **Facility Operator(s):**

Name: Granite State Landfill, LLC

Contact: Kevin Roy, Division Manager

Address: 172 Douglas Drive

City, State, Zip Code: Dalton, New Hampshire 03598

Telephone Number: (603) 869-3366 Email Address: kevin.roy@casella.com

Fax Number: (603) 869-2152

#### Facility Owner(s):

Name: Granite State Landfill, LLC Contact: John (Joe) Gay Address: 1855 VT Route 100

City, State, Zip Code: Hyde Park, Vermont 05655

Telephone Number: (802) 651-5454 Email Address: john.gay@casella.com

Fax Number: (603) 869-2152

#### **SWPPP Contact(s):**

SWPPP Contact Name (Primary): Bruce Grover

Telephone Number: (603) 869-3366 Cell Phone Number: (603) 991-5384

Email Address: bruce.grover@casella.com

Fax Number: (603) 869-2152

SWPPP Contact Name (Backup): Joe Gay Telephone Number: (802) 651-5454 Cell Phone Number: (802) 236-5973 Email Address: John.Gay@casella.com

Fax Number: (603) 869-2152

#### **GSL Environmental Consultant (SWPPP Developer):**

Name: CMA Engineers

Contact: Whitney Bouchard

Telephone Number: (603) 431-6196 Cell Phone Number: (207) 615-7116

Email Address: wbouchard@cmaengineers.com

Fax Number: (603) 431-5376

#### 1.3 Stormwater Pollution Prevention Team.

Permittees are required to identify a qualified individual or team of individuals to be responsible for developing, maintaining, and revising the SWPPP and assisting the facility manager in its implementation. The SWPPP Coordinator is responsible for developing the Team. If there are any pollution problems or issues at the site, the SWPPP Coordinator will delegate tasks to the appropriate personnel. Clear delineation of responsibilities will ensure every aspect of the SWPPP is addressed by a specified individual or group of individuals.

Staff Names	Individual Responsibilities	
Bruce Grover, SWPPP Coordinator	Designated person responsible for stormwater pollution prevention. Implements the preventative maintenance program, conducts inspections, oversees good housekeeping practices, and serves as spill response coordinator.	
Joe Gay, Backup SWPPP Coordinator	Assists SWPPP Coordinator with implementation of good housekeeping practices, preventive maintenance programs, and acts as back-up for inspections when necessary.	
CMA Engineers, SWPPP Developer	Responsible for developing the SWPPP in accordance with 2021 MSGP rules and regulations. Provides assistance with the SWPPP when necessary.	

#### 1.4 Site Description.

The Granite State Landfill (GSL) (Facility) is located off Douglas Drive in Dalton, New Hampshire. The overall property consists of two parcels totaling approximately 700 acres. The first cell of the landfill has a lined footprint of roughly 16 acres. The lined landfill property is bounded by a perennial stream and wetland complex to the south, a substantial wetland complex and surface water to the west, an intermittent stream and a soil mining operation to the west-northwest, steep mountainside slopes to the north, and a ridgeline representing a watershed divide to the east. The Facility's infrastructure area is located to the south of the landfill and includes the facility operations office, maintenance garage, truck scales, leachate tanks and loadout facilities, and landfill gas infrastructure including flares. The infrastructure area comprises approximately 5 acres. General Site Location maps are presented as **Attachment A**.

Surrounding properties include a gun club firing range (Alderbrook Sportsman's Association) to the south, an off-road and winter driving school to the north-northwest, and a former wood-fired power plant (Pinetree Power, Inc.) and log processing facility (Commonwealth Wood Preservers of NH) to the southeast. Steep slopes associated with the Dalton Mountain Range are positioned along the northwest, northern, and northeastern limits of the site. These steep slopes serve as a drainage divide between the Facility and Forest Lake, to the east. The more gently sloped areas within the site, west of the drainage divide, exhibit upland and wetland areas that serve as headwaters for Alder Brook, a tributary of the Ammonoosuc River.

Stormwater ponds are incorporated throughout the facility to control and treat surface water runoff primarily by infiltrating and directing flow though stormwater treatment swales.

The 8,000-foot-long Douglas Drive (private road) will be improved by paving throughout the length, widening to a minimum width of 32 feet, providing several new BMPs along the alignment, and constructing modifications to the site entrance and along Route 116 to provide save entry and exit from the Facility. The Douglas Drive connection at Route 116 is in the Town of Bethlehem.

The Facility serves as a commercial landfill permitted to accept household refuse, construction and demolition debris, and special wastes (i.e., low impacted soils). Commercial haulers enter the Facility and proceed to the truck scale for weigh-in. Hauling vehicles then proceed to the working face of the landfill and deposit refuse, which is then graded and compacted. Prior to departure, the vehicle is weighed again to determine the weight of the off-loaded refuse.

Maintenance of facility vehicles and heavy equipment (including excavators, bulldozers, and compactors) is performed on-site within the maintenance building. Refueling occurs at a 3,000-gallon portable fueling station located within the landfill area, or with a 2,700-gallon fuel truck as needed. There have not been reportable quantity releases of petroleum products at the Facility.

#### 1.5 General Location Map.

The general location map for this facility can be found in **Attachment A**.

#### 1.6 Site Map.

The site map for this facility can be found in **Attachment B**.

## **SECTION 2: POTENTIAL POLLUTANT SOURCES**

## 2.1 Potential Pollutants Associated with Industrial Activity.

The following is a list of industrial activity areas and potential stormwater pollutants.

Industrial Activity	Associated Pollutants
Landfill Operations	Variable - may include total suspended solids, nitrate, oil, metals, low concentrations of petroleum hydrocarbons and inorganic/organic compounds.
Vehicle and equipment operation, petroleum bulk storage	Petroleum product or metals
Precipitation, wind, and surface disturbance	Total Suspended Solids

#### 2.2 Spills and Leaks.

The following list includes locations and discharge points which have potential to be affected by a spill related to industrial activities at the facility.

#### Areas of Site Where Potential Spills/Leaks Could Occur

Location	Discharge Points	
Steel H-AST/Kerosene (275 Gallons)	Outside by the office building	
Steel Drums/Contents Vary* (15x55 Gallons)	Inside maintenance garage	
Steel V-AST/Motor Oil (275 Gallons)	Inside maintenance garage	
Steel V-AST/Hydraulic Oil (275 Gallons)	Inside maintenance garage	
Steel H-AST/Used Motor Oil (275 Gallons)	Inside maintenance garage	
Steel H-AST/Used Motor Oil (275 Gallons)	Inside maintenance garage	
Steel Tanker Truck/Diesel (2700 Gallons)	Stored behind maintenance garage, used on site	
Steel H-AST/Used Oil (500 Gallons)	Inside maintenance garage	
Steel H-AST/Used Oil (250 Gallons)	Inside maintenance garage	
Steel H-AST/Diesel Fuel (3000 Gallons)	Active face of landfill	
Steel Portable Tank/Kerosene (100 Gallons)	Inside maintenance garage	
Steel AST/ Leachate (160,000 Gallons)	Load-out area on landfill	

H-AST = horizontal aboveground storage tank

A leak from one of the storage vessels located inside the maintenance garage would be captured by a trench drain located in the center of the concrete floor. The trench conveys captured liquids to an oil water separator, then to a 10,000-gallon steel UST. The tank is also used to capture vehicle washing fluids. The tank is monitored visually on a monthly basis and liquids are removed when 75 percent of the tank capacity is reached. The trench drain and 10,000-gallon UST are capable of containing greater than 100 percent of the largest tank capacity in the event the tank was to leak or rupture and the UST was at 75 percent capacity.

V-AST = vertical aboveground storage tank

<sup>\*</sup>antifreeze, diesel fuel supplement, DEF, transmission oil, gear oil, hydraulic oil, deodorizer, and defoamer

Petroleum storage containers are protected from contact with precipitation except for the No.2 heating oil AST located outside the office, and the portable diesel fuel tank for the off-road equipment. These structures are inspected at the start and finish of each workday for evidence of a leak or spill. Neither tank includes structural secondary containment. The portable 3,000-gallon AST is located within the landfill near the active face, and any leak would be contained within the double lined landfill.

#### **Description of Past Spills/Leaks**

No past spills or leaks have occurred at the site.

A search of the New Hampshire Department of Environmental Services (NHDES) Onestop Database identified an incident in May 2018 which involved an anonymous complainant reporting to the NHDES on illegal dumping on Douglas Drive in Bethlehem. The illegal dumping was said to include underground storage tanks, building demo, and contaminated soil from the Sunoco Gas Station demolition in Littleton, NH. The NHDES followed up on the anonymous report in June 2018 with a site visit and met with the Owner. The Owner stated that he only accepted two cleaned 10,000-gallon steel underground storage tanks, ten dump truck loads of clean sandy gravel, five dump truck loads of unscreened loam, and several steel I-beams from the former Littleton Sunoco facility. Owner said he was given permission by a state employee to take the materials and that he planned to reuse them at his property. No petroleum residual or vapors were detected in the materials. Incidental pieces of asphalt were observed within the piles of what appeared to be clean sandy gravel fill, along with three ~3-foot long pieces of 4" diameter piping that appeared to potentially contain asbestos. NHDES requested that the Owner not move or use the stockpiles of soil until the potentially asbestos-containing material was verified to contain or be free of asbestos. This piping is no longer present at the Facility.

See Attachment D for the Significant Spills & Leaks Worksheet.

### 2.3 Unauthorized Non-stormwater Discharges Evaluation.

Description of this facility's unauthorized non-stormwater discharge evaluation:

- Date of evaluation: Initial: TBD
- Description of the evaluation criteria used: Visual inspections of the facility's stormwater infrastructure are conducted to ensure maintenance is being completed in accordance with the site's BMP Inspection and Maintenance Manual as well as to look for unauthorized non-stormwater discharges. Swales, outfalls, conveyance pipes, berms, forebays, infiltration basins, rain gardens, detention ponds, and buffers will be inspected to address potential issues.
- List of the drainage points that were directly observed during the evaluation: Outfalls 001-005
- Action(s) taken, such as a list of control measures used to eliminate unauthorized discharge(s), or
  documentation that a separate NPDES permit was obtained. For example, a floor drain was sealed,
  a sink drain was re-routed to the sanitary sewer or an NPDES permit application was submitted for
  an unauthorized cooling water discharge: TBD

Should a non-stormwater discharge be identified, the source will be investigated, and the flow will be eliminated or addressed otherwise.

## 2.4 Salt Storage.

The facility does not have salt storage and does not utilize salt-based roadway applications in the winter time.

## 2.5 Sampling Data Summary.

The sampling program will commence upon registering for coverage under EPA's Multi-Sector General Permit and operation of the Facility.

# **SECTION 3: STORMWATER CONTROL MEASURES (SCM)**

(See 2021 MSGP Parts 2.1.2, Part 8, and 6.2.4)

#### 3.1 Non-numeric Technology-based Effluent Limits (BPT/BAT/BCT)

The GSL complies with the following non-numeric effluent limits (except where otherwise specified in Part 8) as well as any sector-specific non-numeric effluent limits in Part 8.

#### 3.1.1 Minimize Exposure.

Landfill slopes which have reached final waste grades or areas of the landfill which are otherwise inactive are covered with intermediate cover, temporary geomembrane, or final cap and shed clean stormwater to the perimeter landfill swales which convey stormwater to stormwater infiltration basins and ponds. To the extent possible, all inactive areas are graded to divert all stormwater runoff away from entering the active area. All active areas of the landfill are graded so that all precipitation landing in the active area is collected as leachate.

The primary treatment for stormwater at the Facility is by passive means of detention and infiltration and through grass-lined swales or wooded buffers. These stormwater features also serve to restrict erosive peak flow rates to pre-development (or below) levels. Engineered stone outlet protection is provided at stormwater outlet locations. These structures also allow for visual observation of water quality and the opportunity to remove floating sheens, if required. The deep sump catch basins (infrastructure area only), vegetated swales, and vegetated filter strip (wooded area) also capture suspended sediment and filter it from the stormwater.

#### 3.1.2 Good Housekeeping.

The following is a list of good housekeeping practices that have been implemented to date:

- The floors inside the facilities building are swept regularly to keep dust and small debris down.
- The entrance is swept on a regular basis.
- The property is routinely checked for blown litter to minimize contact with stormwater.
- Fueling areas are kept free of staining.
- Fueling of vehicles and equipment is done on an impervious surface or on the landfill to avoid infiltration of spills to the environment. The attendant fueling the vehicle always remains with the vehicle, does not overfill the tank, and keeps the nozzle open using a method other than one's hand.
- Scales and scale house are kept free of litter, debris, and staining.
- Drip pans are used to collect leaking fluids from equipment awaiting repair.
- Areas around drop off metals and recycling storage areas are cleaned weekly to minimize exposure.
- All dumpster lids are closed when not in use.
- An organized inventory is maintained of all materials that could lead to pollution if spilled.

#### 3.1.3 Maintenance.

The facility has and will continue to do a routine preventative maintenance check to ensure that its industrial equipment and stormwater control measures are in effective operating conditions. A copy of the routine inspection form is attached as **Attachment G**. When a problem is discovered either in the routine facility inspection, or in routine daily activities it is addressed immediately and a repair is scheduled to be done at the next reasonable time. The following is a list of tasks which the facility does or will do to maintain its industrial equipment and stormwater control measures.

- Performing inspections and preventive maintenance of stormwater drainage, source controls, treatment systems, and plant equipment and systems that could fail and result in contamination of stormwater.
- Diligently maintaining non-structural control measures (e.g., keep spill response supplies available, personnel appropriately trained).
- Cleaning catch basins when the depth of debris reaches two-thirds (2/3) of the sump depth and keeping the debris surface at least six inches below the lowest outlet pipe.

Sediment accumulated in stormwater infiltration basins and ponds is dredged a minimum of once per year.

#### 3.1.4 Spill Prevention and Response Procedures.

(See 2021 MSGP Parts 2.1.2.4 and 6.2.5.1c)

Staff is trained on the procedures to quickly stop, contain, and or clean up leaks, spills or other unintentional releases. All staff are trained annually on changes to the procedure and are held accountable for being familiar with the requirements of this plan as well as the SPCC and the Facility Operating Plan which provide instructions in the event of a spill, leak, or other release.

Spill response procedures are set forth in the SPCC which describe required storage and handling procedures, including the use of secondary containment and barriers between material storage and traffic, or similar means to prevent discharge of pollutants from these areas.

Containers that house fluids and have the potential for spills or leaks are clearly labeled to ensure proper handling and facility rapid response if spills or leaks occur.

Spill kits are kept onsite where spills are likely to occur or can quickly be accessed.

The appropriate facility personnel will be notified when a spill, leak, or other unintentional release occurs. Emergency phone numbers are contained in **Attachment F** of this SWPPP to address most emergencies.

Additionally, GSL complies with the United States Environmental Protection Agency (USEPA) Tier 2 reporting requirements under the Emergency Planning and Community Right-to-Know Act (EPCRA) including the submission of chemical inventories for stored materials above reportable quantities. Materials included in the Tier 2 report include lead-acid batteries, diesel fuel, and motor oil. EPCRA was established to help communities plan for chemical emergencies.

#### 3.1.5 Erosion and Sediment Controls.

The areas of the facility that may be subject to significant erosion include:

- Areas under construction
- Haul roads
- Finished landfill slopes waiting to receive intermediate cover
- Areas with steep slopes
- Outfalls and culvert inlets and outlets
- Grass-lined swales

The Facility Operating Plan contains requirements for erosion control methods that are used including seeding, riprap, and stabilization of disturbed areas. The facility also uses velocity dissipation devices including stone check dams and riprap outlet protection.

Where there are unpaved surfaces on the site, erosion resistant cover is maintained. When potholes are made in gravel roads, they are filled to prevent erosion and sedimentation. Operators at the facility visually inspect stormwater outlet locations, which carry stormwater away from the site, for sedimentation. This frequent visual inspection cuts down on erosion and sedimentation associated with stormwater leaving the facility. The perimeter of the property maintains trees and shrub bushes to slow down and disperse water that runs off the site in the form of sheet flow.

#### 3.1.6 Management of Stormwater.

Stormwater which enters the landfill's active filling area drains through the landfill to the leachate collection system and is treated offsite as wastewater. The active area of the landfill is generally between 5 and 10 acres at any point in time and is minimized to the extent possible to limit leachate generation. Precipitation that falls onto the inactive, vegetated landfill areas sheet flows to intermediate drainage benches that drain to the perimeter toe swale and then to the stormwater infiltration basins and ponds. This stormwater infrastructure provides treatment via infiltration, solids settlement/removal, and uptake of nutrients through the vegetation. The basins and ponds also reduce off-site peak flows through controlled outlet structures.

In general, stormwater at the site drains east to west, towards the Alder and Hatch Brooks to the west of the landfill.

#### 3.1.7 Salt Storage Piles or Piles Containing Salt.

The facility does not have salt storage.

#### 3.1.8 Dust Generation and Vehicle Tracking of Industrial Materials.

The common roads where vehicles and equipment travel around the site are a combination of asphalt and hard-packed gravel to reduce the amount of dust during dry periods. The Facility uses a water truck to reduce dust generated from dry conditions when needed. Landfill equipment is regularly washed down and haul trucks are inspected by their driver prior to leaving the facility to minimize material track-out.

# 3.2 Numeric Effluent Limitations Based on Effluent Limitations Guidelines (ELGs).

Sampling for sector-specific numeric effluent limitation guidelines is required annually for outfalls that discharge contaminated stormwater. Contaminated stormwater is defined as "stormwater that comes into direct contact with landfill wastes, the waste handling and treatment areas, or landfill wastewater" per Section 8.L.4 of the MSGP, which can be found in **Attachment C**. This includes trucks, equipment, or machinery that has been in direct contact with the waste and waste dumping areas.

Since all stormwater within active landfilling areas is managed as leachate and all inactive areas are covered with intermediate cover and seeded or covered with temporary geomembrane, the likelihood for stormwater to become contaminated with waste or leachate is low. Any opportunities for stormwater to be contaminated are documented through the weekly inspections and corrected prior to the next storm. The weekly inspection forms are provided in **Attachment G**. Thus, **no numeric effluent sampling is required during normal landfill operations unless warranted through the inspection results.** 

In the unlikely event that landfill operations change so that stormwater becomes contaminated from contact with waste or leachate, the landfill numeric effluent sampling shall be conducted at that effected area annually. Should an operational change require numeric effluent sampling, this SWPPP shall be revised accordingly.

If a discharge sample shows an exceedance of the numeric effluent limitations, a corrective action must be taken to address the exceedance and follow-up monitoring of that location must be conducted within 30 calendar days of implementing a corrective action.

### 3.3 Water Quality-based Effluent Limitations and Water Quality Standards.

(See 2021 MSGP Part 2.2.1)

GSL conducts quarterly visual assessments of stormwater outlet locations and of the stormwater samples themselves. Additionally, routine facility inspections occur weekly for active landfill areas and monthly for stabilized landfill areas. Comprehensive site inspections occur annually to ensure that the facility is in compliance with the 2021 MSGP regulations. Control measures to meet water quality standards at this facility include, but are not limited to, vegetation maintenance, riprap stabilization, silt fences, compost sock, stormwater swales, covered stockpiled materials, check dams, stormwater infiltration basins, detention ponds, rain gardens, grass lined swales, concrete outlet structures, deep sump catch basins, and stone outlet protection. Procedures are in place for spill prevention and response (Sections 3.1.4 and 4.3), which can prevent spills that could contaminate stormwater. Other measures in place to prevent exceedances of water quality standards include diverting runoff from fueling areas, eliminating outdoor vehicle maintenance when possible, storing lubricants and hydraulic fluids indoors, installing temporary geomembrane cover over inactive areas of the landfill, and ensuring that stormwater falling on active landfilling areas is managed as leachate.

#### 3.4 Sector-Specific Non-Numeric Effluent Limits.

The following is a description of controls and procedures that are used at the facility to comply with Sector L- Landfills, Land Application Sites, and Open Dumps.

- Prevention Maintenance Program: The Facility Operating Plan addresses maintenance of the leachate collection and treatment system and the intermediate and final cover systems. The landfill is designed and operated to prevent commingling of leachate with stormwater and to minimize the effects of settlement and erosion.
- Erosion and Sediment Control: The erosion and sediment control measures described in Section 3.1.5 contain controls that address these sector-specific non-numeric effluent limits.
- Dust Generation: Water is used when appropriate to control dust created by the landfill.
- Vehicle and Equipment Storage Areas: Equipment at the facility is stored indoors to the extent practical.
- Material Storage Areas: Equipment at the facility is stored indoors to the extent practical.
- Vehicles and Equipment Cleaning Areas: Vehicles and equipment are washed in areas that drain to stormwater treatment practices including infiltration basins or stormwater ponds with forebays.
- Vehicle and Equipment Maintenance Areas: Vehicles and equipment are maintained indoors to the extent practical.

#### **SECTION 4: SCHEDULES AND PROCEDURES**

#### 4.1 Good Housekeeping.

General municipal solid waste generated at the office, scale house, and maintenance garage are picked up on a regular basis during normal daytime working hours.

All tanks, containers, and associated equipment are inspected regularly for malfunctions, deterioration, or operator errors which may cause or lead to spills of oil and other potentially hazardous substances. The inspection is conducted by personnel familiar with facility tank systems, equipment and other significant material listed in Section 1.4. Site inspections are completed regularly as described Section 4.6 to identify problems in time to correct them before a spill or release occurs.

#### 4.2 Maintenance.

#### 4.2.1 General

Facility inspection and maintenance is an ongoing activity. All personnel are expected to observe the condition of landfill facilities throughout their workday and notify the Landfill Manager of areas and equipment which may need repair and maintenance. Inspections of the active landfill face and leachate loadout area shall be performed weekly. Inspections of all other areas of the facility shall be performed monthly or quarterly, as indicated in Section 4.6. Additional inspections may be warranted following unusual climatic or operational events including, but not limited to, major rainstorms, flood, fire, hurricane, or earthquake. These inspections will follow the inspection forms in Attachment G. A description of the inspection items is discussed in the remainder of this section. The Operations Manager is ultimately responsible to ensure that the inspection and maintenance of all landfill facilities and equipment occurs.

#### 4.2.2 Waste Inspection

Waste arriving at the working face of the landfill for disposal is inspected and handled as described in the Facility Operating Plan. Wastes that are not permitted at the facility that are inadvertently dumped at the disposal area will be segregated until an appropriate disposal path is determined. The Operator shall barricade and isolate the waste to prevent the waste from being put into the landfill. The Operator shall notify the Landfill Manager who shall notify the owner of the haul vehicle. Arrangements to remove the waste shall be coordinated with GSL, NHDES-WMD, and the owner of the waste.

#### 4.2.3 Access Roads

The access roads to the landfill are maintained by Landfill Operators. Frequent inspections by the Landfill Manager, especially during the spring and winter months are made to ensure that these roads are maintained in safe condition.

Internal landfill access roads, including those within the landfill cells, are maintained as all-weather roads. Prompt attention to road repairs is the most cost-effective approach since deterioration becomes increasingly more rapid once it has begun.

#### 4.2.4 Equipment

Maintenance of equipment and landfill operations vehicles is critical for effective landfill operations. All equipment is subject to a comprehensive, preventive maintenance program, including recommendations specified in the manufacturer's specifications. Critical parts or replacement equipment will be identified and obtainable within a short period of time to maintain continuity of operations. Replacement parts with long lead times are purchased and kept on-site.

#### 4.2.5 Erosion Control Facilities

Open Areas – Disturbed areas outside of the landfill are seeded to prevent erosion after earthwork is complete. The seeding is performed in accordance with the seeding schedule contained in the landfill closure plan.

Stormwater Infiltration Basins – Stormwater infiltration basins have been designed and located around the perimeter of the landfill and the landfill infrastructure area to allow for infiltration of the water quality volume or the first 1-inch of a rain event. The purpose is to capture and infiltrate the "first flush" of the storm which the highest amount of contaminants, largely associated with vehicle traffic. For storm events larger than 1-inch, stormwater may drain out of the basin via an outlet control structure, which is designed to restrict off-site stormwater flows to pre-development levels, or lower. As required by NHDES-Alteration of Terrain Rules (Env-Wq 1508.06), basins are allowed an infiltration rate between 0.5 and 10 inches per hour as determined by field testing. Basins are sized to not overtop the spillways through the 50-year, 24-hour storm event. The locations of facility infiltration basins are depicted on the enclosed site plan. Other than the infrastructure area which uses deep sump catch basins, each infiltration basin utilizes a sedimentation forebay for pretreatment.

Detention Basin — There is one lined detention basin that manages stormwater from the leachate loadout area of the infrastructure area. If a spill were to occur in the leachate loadout area, it would not infiltrate to groundwater and could be collected from the basin before it is discharged from the site. The basin is designed to manage the 50-year storm event without overtopping the spillway. GSL staff will draw water from this pond for dust control. The stormwater feature utilizes a deep sump catch basin for pre-treatment.

Rain Gardens – Rain Gardens are the primary stormwater treatment feature along Douglas Drive and consist of a geomembrane-lined basin, soil media for treatment, and an outlet drain pipe. They are utilized in locations where infiltration basins are not feasible due to high groundwater. The Rain Gardens are generally sited in low areas of the road, adjacent to wetland areas where stormwater from the roadway collects.

Sedimentation Forebays – Forebays are provided immediately prior to infiltration basins and stormwater ponds to remove significant quantities of sediment so that the water entering the ponds/basins has less solids. Sedimentation basins need to have the sediment removed frequently to maintain their function.

Deep Sump Catch Basins – These structures are provided in the infrastructure area to allow for solids removal by sedimentation prior to draining to an infiltration or detention basin.

Outlet Structures - Outlet structures are provided in the infiltration basins and stormwater ponds to restrict peak flows out of the stormwater infrastructure such that they are below pre-development rates. Flow

through the structures is controlled via designed orifices (openings in the structure). The structures are inspected frequently to ensure there are no blockages of the orifices, top grate, and outlet pipe. Each of the outlet structures have protective trash racks over the orifice plates and top grates to minimize the amount of trash/debris entering the structure. The sumps of the structures are also inspected, and sediment and debris are removed as needed.

Stormwater Swales - Stormwater swales at the facility are either stone lined (NHDOT Type "C" stone) or grass-lined. All swales are repaired as necessary to minimize erosion which may include removal and replacement of stone, replacement of topsoil and vegetation and installation of an erosion matting. All swales, which are not rip-rapped or otherwise protected, are seeded and lined with erosion matting if erosion is observed. All debris and other blockages are removed from the swales to allow for unobstructed drainage. Reseeding of the grass-lined drainage swales is necessary from time to maintain sufficient growth to slow erosive velocities in the swale.

Intermediate & Final Cover System - Areas, which have received final cover, shall be reconditioned and reseeded as necessary. In areas which have eroded, the soil is replaced and seeded.

#### 4.2.6 Leachate Collection Piping

Leachate collection pipes have cleanouts along the perimeter of each cell of the landfill. These cleanouts provide an access point to the leachate piping to remove blockages within the piping systems, should they occur, and to allow for inspection and cleaning to maintain flow capacity. Leachate pipes are inspected on an annual basis or more frequently if necessary.

### 4.2.7 Leachate Conveyance & Storage

Leachate is stored in a 459,000-gallon AST. The 459,000-gallon AST is inspected once per month in accordance with the SPCC. In addition, the control valves, flow meters, and other associated equipment shall be inspected and maintained in accordance with the facility operating plan. The leachate tank is located in the leachate loadout area, to the south of the landfill. The tanks and all leachate piping outside of the landfill footprint are double-lined with leak detection capabilities.

#### 4.2.8 Liner Repair

If tears or punctures occur in the liner, they are repaired as soon as possible. Repairs will involve placement of an overlapping patch of HDPE geomembrane (6-inch minimum overlap) which is extrusion welded to the damaged underlying liner. A liner installer will be contacted to make all necessary repairs to the liner system. All liner repairs will be performed according to QA/QC liner procedures included in the most recent GSL development specifications.

## 4.2.9 Undeveloped Stages/Cells

During the life of the facility, new stages/cells will be constructed and remain undeveloped while current stages/cells are being filled. The leachate collection systems of the new stages/cells are designed to shed clean runoff to the stormwater management system until the cell becomes active.

Pumping of the ponded clean runoff to a stormwater swale may occur on an as-needed basis, typically after significant storm events.

#### 4.3 Spill Prevention and Response Procedures.

Per 40 CFR Part 112, the GSL maintains a Spill Prevention, Control, and Countermeasures (SPCC) Plan. Refer to the facility SPCC for issues specific to spill prevention and response. An Emergency Call List and Call Procedures are contained in **Attachment F** of this SWPPP to address most emergencies.

General spill prevention and response BMPs are as follows:

- Spill response equipment:
  - o Include Speedi-Dri and drip pans.
  - o Train all personnel in use and location(s).
- Immediately advise the pollution prevention team leader or the spill coordinator of all spills of hazardous materials or regulated materials, regardless of quantity.
- Evaluate spills:
  - o If there is a health hazard, fire or explosion potential, contact local EMS.
  - o If a spill is large or threatens surface waters, including storm drains, contact state or federal emergency response agencies.
- Contain spills to as small an area as possible:
  - o Dike areas with absorbent materials from the emergency spill kit.
- Construct dikes to protect swales or other stormwater conveyances.
- Protect any other stormwater collection structures (i.e., catch basins and pond outlet structures).

#### 4.4 Erosion and Sediment Control.

Erosion and sediment control inspections shall be performed weekly. Maintenance shall be done as needed and shall include:

- Removing any debris, siltation, and other obstructions to drainage.
- Maintaining all drainage structures to allow flow and prevent ponding of stormwater. Sediment shall be removed from level spreaders when accumulation exceeds 25% of the channel depth.

In addition, there are no polymers and or chemical treatments used to control erosion.

#### 4.5 Employee Training.

Employees involved in the operations at this site shall be fully familiar with the requirements of the SWPPP and shall have the ability to carry out the management practices described herein. Education is an important part of implementing BMPs and assuring their success at the GSL. The facility supervisor shall be responsible for ensuring all applicable personnel are trained or complete a training refresher based on the content and frequency listed in Table 1.

Topics should be reviewed on an annual basis and presented to all new facility employees. The topic(s) covered and employees attending (i.e., sign up lists) are required to be kept on-site for a minimum of three years after permit coverage expires or is terminated.

**Table 1: Employee Training** 

Content of training for applicable personnel	Frequency/schedule of training	Personnel who must receive training
<ul> <li>Overview of what is in the SWPPP</li> <li>Spill response procedures</li> <li>Good housekeeping</li> <li>Maintenance requirements</li> <li>Material management practices</li> <li>Location of all controls on the site required by this permit, and how they are to be maintained</li> <li>Proper procedures to follow with respect to the permit's pollution prevention requirements</li> <li>When and how to conduct inspections, record applicable findings, and take corrective actions</li> <li>Proper vehicle fueling techniques</li> <li>Used oil handling procedures</li> <li>Leaking vehicle reporting procedure</li> <li>Household Hazardous Waste handling procedures</li> <li>Universal waste handling procedures</li> <li>Stormwater runoff management</li> <li>Sediment and erosion control</li> </ul>	Annually (preferably in March of each year prior to snow melt and spring runoff)	<ul> <li>Those responsible for design, installation, maintenance, and/or repair of controls (including pollution prevention measures)</li> <li>Those responsible for storage and handling of chemicals and materials that could become contaminants in stormwater discharges</li> <li>Those responsible for conducting and documenting monitoring and inspections as required in Parts 3 and 6</li> <li>Those responsible for taking and documenting corrective actions as required in Part 4</li> </ul>

#### 4.6 Inspections and Assessments.

#### 4.6.1 Routine Facility Inspections.

Routine facility inspections are conducted for all areas where materials or activities might be exposed to stormwater. The landfill operator shall use inspection logs provided in the attachments of this SWPPP to document each inspection.

The locations that must be evaluated include, but are not limited to:

- Areas where industrial materials or activities are exposed to stormwater;
- Areas identified in the SWPPP and those that are potential pollutant sources (see SWPPP Part 2.1);
- Areas where spills and leaks have occurred in the past three years;
- Discharge points; and
- Control measures used to comply with the effluent limits contained in this permit.

During the inspection you must examine or look out for the following:

- Industrial materials, residue or trash that may have or could come into contact with stormwater;
- Leaks or spills from industrial equipment, drums, tanks and other containers;
- Offsite tracking of industrial or waste materials, or sediment where vehicles enter or exit the site;
- Tracking or blowing of waste materials from areas of no exposure to exposed areas;
- Control measures needing replacement, maintenance or repair.

During an inspection occurring during a stormwater event or discharge, control measures implemented to comply with effluent limits must be observed to ensure they are functioning correctly. Discharge points must also be observed during this inspection. If such discharge locations are inaccessible, nearby downstream locations must be inspected.

Table  $\bf 2$  lists the person(s) responsible, inspection locations, control measures, and objectives. A blank copy of the Inspection Form is contained in **Attachment G**.