

**Stormwater Pollution Prevention Plan (SWPPP)
for**

Vinton Public Works Main Facility:

Fueling Center

Parking Areas

Secondary Containment Area

Vehicle Maintenance Bay

Workshop Area

804 3rd Street
Vinton, VA 24179



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Table of Contents

1.0	INTRODUCTION	4
1.1	Organization of the Stormwater Pollution Prevention Plan	4
1.2	Stormwater Regulatory Framework	5
1.3	Review and Revision of the Stormwater Pollution Prevention Plan.....	6
1.4	Location of the Stormwater Pollution Prevention Plan (SWPPP)	7
2.0	SITE DESCRIPTION AND INITIAL FACILITY INSPECTION	7
2.1	Site Facilities.....	8
2.1.1	Outside Public Works Department Main Building	8
2.1.2	Inside Main Building.....	9
2.2	Pollution Prevention Team	11
2.3	Pollution Prevention Through Best Management Practices (BMPs)	12
2.3.1	What are BMPs?.....	12
2.3.2	Source Control BMPs	12
2.3.3	Good Housekeeping BMPs (ADM, PW, HR, PZ).....	14
2.3.4	Preventive Maintenance BMPs (ADM, PW, HR, PZ).....	14
2.3.5	Proper Materials Handling and Storage BMPs (PW, HR, PZ)	15
2.3.6	Proper Waste Handling BMPs (PW, HR, PZ).....	15
2.3.7	Spill Prevention and Response (PW, HR, PZ).....	16
2.4	Employee Training	16
3.0	NON-STORMWATER DISCHARGES	17
3.1	Authorized Non-Stormwater Discharges	17
4.0	Significant Materials, Activities, and Potential Pollutants	18
4.1	Significant Materials.....	18
5.0	Facility Inspections.....	19
5.1	Quarterly Inspections.....	19
5.2	Annual Facility Assessments	19
APPENDICES		21
APPENDIX A.....		22
Municipal Yard Inspection Checklists.....		22
APPENDIX B.....		26
Annual Facility Stormwater Assessment.....		26

Forms and Checklists.....	26
APPENDIX C.....	29
Training Documentation	29
APPENDIX D.....	30
SWPPP Amendment Log	30
APPENDIX E.....	32
Municipal Separate Storm	32
Sewer System (MS4) Permit.....	32
APPENDIX F	33
Facility Photographs.....	33

INTRODUCTION

This document is the Stormwater Pollution Prevention Plan (SWPPP) for Town of Vinton's Public Works Facility, located at 804 3rd Street, Vinton, VA 24179.

This facility falls under the requirements of the Town's General Permit for Discharges from Small Municipal Separate Storm Sewer Systems (MS4), General Permit No. VAR040026, with an effective date of July 1, 2013 and an expiration date of June 30, 2018. The permit is designed to reduce the discharge of pollutants from stormwater that leaves the regulated MS4 area within the Town and subsequently enters the Commonwealth of Virginia's receiving waters, such as the Roanoke River and its tributaries.

According to the United States Environmental Protection Agency (US EPA), polluted stormwater runoff is a leading cause of impairment to nearly 40 percent of surveyed U.S. water bodies that do not meet water quality standards. Whether travelling by overland flow or through stormwater conveyance systems, polluted stormwater runoff is discharged into local receiving waterways. Such untreated water pollution can result in the destruction of fish, wildlife, and aquatic life habitats; it can also cause a loss of aesthetic value, and can threaten public health due to its potential to contaminate food, drinking water supplies, and recreational waterways.

The MS4 Permit aims at reducing pollutants in stormwater runoff by focusing on six Minimum Control Measures (MCMs), as follows: (1) Public Education and Outreach on Stormwater Impacts, (2) Public Involvement and Participation, (3) Illicit Discharge Detection and Elimination, (4) Construction Site Stormwater Runoff Control, (5) Post-Construction Stormwater Management in New Development and Redevelopment, and (6) Pollution Prevention and Good Housekeeping for Municipal Operations. Within each MCM, there are numerous Best Management Practices (BMPs) being implemented by the County of Roanoke.

This SWPPP has been created to satisfy the conditions of BMP 6-6 of MCM 6, entitled Stormwater Pollution Plans for Municipal Facilities, which requires Town of Vinton to identify all of its high-priority facilities that have a high potential to discharge pollutants into stormwater and develop, implement, and maintain a SWPPP for each of them.

1.1 Organization of the Stormwater Pollution Prevention Plan

Section 1 of this SWPPP provides information regarding stormwater regulations, the requirements of the 2013 MS4 Permit, review and revision of the SWPPP, and availability of the SWPPP as a public document. Section 2 briefly describes the Public Works facility, the Pollution Prevention Team responsible for compliance with the MS4 Permit, and the results of the initial site inspection. The section also provides a general discussion of Best Management Practices (BMPs) and identifies those BMPs that are implemented throughout the facility.

Section 3 contains the definition and categories for both authorized and unauthorized non-stormwater discharges. Section 4 identifies the activities conducted, significant materials stored, potential pollutants, and the measures taken to eliminate or reduce the discharge of pollutants to stormwater drainage systems from the facility.

1.2 Stormwater Regulatory Framework

In 1972 the Federal Water Pollution Control Act (known as the Clean Water Act) was amended to effectively prohibit discharge of pollutants to “waters of the United States” from any point source unless the discharge is in compliance with a National Pollutant Discharge Elimination System (NPDES) Permit. The United States Environmental Protection Agency (US EPA) delegated administration of the NPDES Program within Virginia to the Department of Environmental Quality (DEQ), and DEQ administers it as the Virginia Pollutant Discharge Elimination System (VPDES) Permit Program. The 1987 amendments of the Clean Water Act added Section 402(p) to the federal regulations, which established the framework for regulating discharges of pollutants via stormwater from industrial activities and MS4s. Section 402(p) required the US EPA to develop permitting regulations for stormwater discharges from MS4s and from industrial facilities, including construction sites.

In Virginia, discharges from municipal separate storm sewer systems are regulated under several programs: the Virginia Stormwater Management Act, the Virginia Stormwater Management Program (VSMP) Permit regulations, and the Clean Water Act (through the VPDES Permit Program) as point source discharges. MS4 regulations were developed and implemented in two phases. Implementation of the first phase began in the early 1990s and required that operators of MS4s serving populations of greater than 100,000 people (per the 1990 decennial census) apply for and obtain an individual permit to discharge stormwater from their outfalls. The second phase of MS4 regulations became effective March 23, 2003, and required that operators of small MS4s in "urbanized areas" (as defined by the latest decennial census) obtain coverage under a general permit to discharge stormwater from their outfalls. Town of Vinton is classified as a small MS4, and thus operates under the General MS4 Permit.

According to the Town’s MS4 Permit, the following types of high-priority facilities require SWPPPs:

- Debris/Leaves Disposal Site
- Equipment storage and maintenance facilities
- Materials storage yards
- Public works yards
- Salt storage facilities
- Vehicle storage and maintenance yards

In addition, facilities in which any of the following materials or activities occur and are expected to have exposure to stormwater resulting from rain, snow, snowmelt or runoff also require a SWPPP:

1. Areas where residuals from using, storing or cleaning machinery or equipment remain and are exposed to stormwater;
2. Materials or residuals on the ground or in stormwater inlets from spills or leaks;
3. Material handling equipment (except adequately maintained vehicles);
4. Materials or products that would be expected to be mobilized in stormwater runoff during loading/unloading or transporting activities (e.g ., rock, salt, fill dirt);

5. Materials or products stored outdoors (except final products intended for outside use where exposure to stormwater does not result in the discharge of pollutants); or
6. Particulate matter or visible deposits of residuals from roof stacks, vents or both not otherwise regulated (i.e., under an air quality control permit) and evident in the stormwater runoff.

Based on the above requirements, the following Town-owned facilities have been determined to be high-priority facilities that have a high potential to discharge pollutants. Table 1.1 shows the schedule by which the individual SWPPPs for each facility will be prepared. Map 1.1 shows the location of the identified facilities listed in Table 1.1.

Table 1.1 High-Priority Town Facilities and Associated Activities

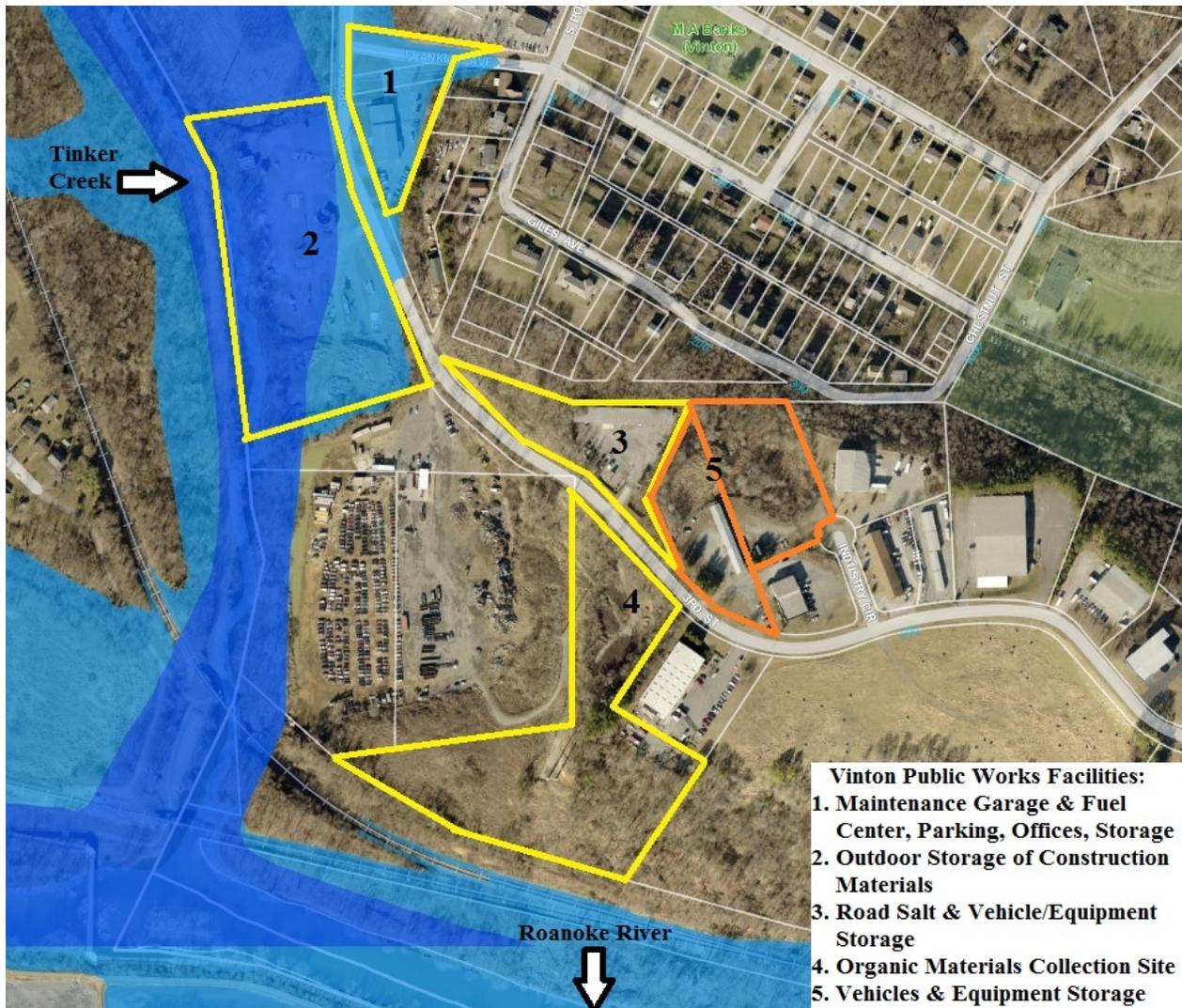
Name of High-Priority Facility	Activities that Make It High-Priority	High Potential of Discharging Pollutants (Yes or No)	Reasons for High Potential/Or Not	Scheduled SWPPP Development
1. Public Works Building: Fueling Center; Parking Areas; Storage Areas; Garage/Service Bay; Workshop/Maintenance Area	Fueling Area; Parking Areas; Inside/Outside Storage Areas; Vehicle/Equipment; Maintenance Area	Yes	Fueling activities; parking areas; storage areas; vehicle/equipment maintenance;	By July 1, 2015
2. Outdoor Storage of Construction Materials	Outdoor Storage	Yes	Outdoor storage of construction materials	By July 1, 2016
3. Road Salt and Vehicle/Equipment Storage	Storage of salt and vehicle/equipment	Yes	Chemical and storage of vehicle/equipment	By July 1, 2016
4. Organic Materials Collection Site	Outdoor storage	Yes	Organic leachate	By July 1, 2017
5. Vehicles/Equipment Storage	Indoor and outdoor storage	Yes	Storage of vehicles/equipment	By July 1, 2017

1.3 Review and Revision of the Stormwater Pollution Prevention Plan

The SWPPP will be reviewed at least annually to determine if any revision is necessary to reflect changes in the facility or changes in the activities conducted that:

- May significantly increase the quantities of pollutants in stormwater runoff;
- Cause a new area of the facility to be exposed to stormwater or authorized non-stormwater discharges; or
- Start-up of an activity that would introduce a new pollutant source at a facility.

In determining if revision of the SWPPP is necessary, the SWPPP Implementation team, identified in Section 2.2, will review the Annual Facility/Activity Stormwater Assessment, which is described in Section 5.



Map 1.1 Map of Town of Vinton Public Works Facilities

1.4 Location of the Stormwater Pollution Prevention Plan (SWPPP)

The SWPPP shall be kept in the office of the Public Works Director, which is located in the main building of the Public Works Facility. A copy of the SWPPP will also be maintained by the Planning and Zoning Director, Department of Planning and Zoning located in the Vinton Municipal Building.

2.0 SITE DESCRIPTION AND INITIAL FACILITY INSPECTION

Vinton Public Works Department is located at 804 3rd Street, Vinton. The Public Works Department is responsible with several associated facilities located on 3rd Street and Industry Circle. As indicated in Map 1, the five facilities; Facility # 1, # 2, # 3, and # 4 are located on four different parcels that are owned by the Town. These facilities have been in operation as far back as in the 1970s with a combined size of 15.68 acres. Facility # 5 comprises of two parcels of 4.07 acres that the Town has been leasing

since 2007 from a private property owner for the indoor and outside storage of vehicles and equipment. All the Public Works facilities are zoned M-2 General Industrial.

Facility # 1 is located in the floodplain areas of Tinker Creek, Flood Insurance Rate Map (FIRM) panel 169 of 310, Map Number 51161C0169G, September 28, 2007. Tinker Creek is currently listed by Department of Environmental Quality (DEQ) as impaired for bacteria and sediment. Public Works Department administrative office; employees' break room, and the vehicle maintenance facility are located within one-story primary structure, which is about 8,584 square feet in size. The building was built in 1985 and is comprised of modular metal exterior and metal roof.

Stormwater from Vinton Public Works Department drains through underground piping across the 3rd Street, discharges onto open channel and town-owned property before discharges into Tinker Creek. Please see attached stormwater outfalls map.

Initial site visit of all the Vinton Public Works facilities was done on May 6, 2015 by Vinton Public Works Director and Planning and Zoning Director. On August 31, 2015, Public Works Director and Planning and Zoning Director conducted site inspection of all the facilities. After the two inspections, Planning and Zoning Director inspected Facility # 1 and Facility # 2 on September 1 and September 8, 2015 with Public Works Utility System Manager and Public Works Assistant Director, respectively.

2.1 Site Facilities

In addition to the administrative office mentioned above, there are several facilities of interest on the site, as described below.

2.1.1 Outside Public Works Department Main Building

Facility Type: Vehicle and Equipment Fueling Station

Facility Activities: Two underground storage tanks for unleaded and diesel were upgraded in 1998 with a capacity of 3,000 gallons each. The outdoor fueling station with two dispensers is under a canopy on a concrete slab. A spill kit is provided between the two fuel dispensers.

Required Actions: None at this time.

Facility Type: Vehicle and Equipment Parking Areas

Facility Activities: A paved parking lot for employees and visitors abuts the main building. A paved parking area for town vehicles are located to the south of the building and additional vehicular parking areas are located along Franklin Avenue to the north of the building. Several storm drain inlets capture runoff and underground storm pipes discharge it into nearby Tinker Creek. The storm drain inlet that is located in the parking area of the town vehicles has a catch basin which is cleaned on as needed basis. Additionally, a swale was constructed to the inlet to maximize stormwater being drained into the storm drain inlet.

Required Actions: The catch basin needs to be inspected and cleaned on regular basis. Additionally, town vehicles that are parked in the parking areas are in working condition to minimize leakage of motor oil from the vehicles.

Facility Type: Secondary Containment Area

Facility Activities: An enclosure attached to the south east of the Public Works building is divided into three storage spaces: (1) Storage of 35 gallon barrel of used oil; (2) Storage of Sodium Hypochlorite 12.5% in a plastic tank with a capacity of 250 kilograms; and (3) To be used as storage on as needed basis. The secondary containment is on a concrete slab with each space divided by concrete containment area to catch any spillage.

Required Actions: None at this time.

2.1.2 Inside Main Building

Facility Type: Garage/Service Bay for Vehicle and Equipment Minor Service, Repair, and Maintenance

Facility Activities: A garage/service bay for minor service, repair, and maintenance of Town vehicles. The grate drain is connected to the sanitary sewer in addition to a separator in the sanitary sewer line, which is cleaned on as needed basis. A trash can and a spill kit are provided in this garage/service area.

Required Actions: None at this time.

Facility Type: Workshop/Maintenance Area

Facility Activities: Construction and/or maintenance of needed amenities on as needed basis. A trash can and a spill kit are available in this area.

Required Actions: None at this time.

Map 2.1 Site Map – Vinton Public Works Storm Sewer Systems



2.2 Pollution Prevention Team

The Public Works Director shall have the primary responsibility to keep and maintain the SWPPP document, and to lead the SWPPP Implementation Team. The Assistant Director of Public Works shall be responsible to coordinate with the Public Works Director for quarterly inspections and annual inspections.

Table 2.1 Pollution Prevention Team – Vinton Public Works Facility

POSITION	NAME	CONTACT INFORMATION	PRIMARY RESPONSIBILITIES
Town Manager	Christopher Lawrence	540-983-0607 clawrence@vintonva.gov	<p>SWPPP OVERSIGHT</p> <ul style="list-style-type: none"> • Provide the necessary resources to comply with the SWPPP. • Ensure assigned staff implements the SWPPP and all of its components. • Provide management support to staff.
Public Works Director	Gary Woodson	540-983-0646 gwoodson@vintonva.gov	<p>SWPPP IMPLEMENTATION</p> <ul style="list-style-type: none"> • Implement and administer the SWPPP. • Implement the Emergency Response Plan and Procedures (part of the Hazardous Waste Management Program). • Provide Stormwater Training for facility personnel. • Maintain the necessary records and files.
Public Works Assistant Director	Joey Hiner	540-983-0646 jhiner@vintonva.gov	
Human Resources Director	Donna Collins	540-983-0604 dcollins@vintonva.gov	
Public Works Director	Gary Woodson	540-983-0646 gwoodson@vintonva.gov	<p>CHEMICAL SPILL RESPONSE</p> <ul style="list-style-type: none"> • Minimize the threat of chemical spills to personnel and to the surrounding environment; and • Protect storm drain inlets and sanitary sewer drains from any spillage or contamination once personnel safety is assured.
Public Works Assistant Director	Joey Hiner	540-983-0646 jhiner@vintonva.gov	
Public Works Director	Gary Woodson	540-983-0646 gwoodson@vintonva.gov	<p>CONDUCT ROUTINE FACILITY INSPECTIONS</p> <ul style="list-style-type: none"> • Implement BMPs for respective area(s) of responsibility. • Conduct routine inspections of respective areas of responsibility to ensure BMPs are in place, operative, and effective at all times in and around the areas where activities that may impact stormwater are conducted. • Submit quarterly inspection reports, using the Municipal Yard Inspection Checklist, to the Planning and Zoning Director/Stormwater Program Manager.
Public Works Assistant Director	Joey Hiner	540-983-0646 jhiner@vintonva.gov	
Planning and Zoning Director	Anita McMillan	540-983-0601 amcmillan@vintonva.gov	<p>MS4 PROGRAM MANAGEMENT</p> <ul style="list-style-type: none"> • Prepare and revise the SWPPP, as necessary. • Conduct periodic facility inspections to assure compliance. • Collect training records. • Prepare and submit Annual MS4 Report. • Serve as a technical resource to other departments.

2.3 Pollution Prevention Through Best Management Practices (BMPs)

2.3.1 What are BMPs?

Best Management Practices, or BMPs, are the practices, procedures, policies, prohibitions, schedules of activities, structures, or devices that are implemented to prevent or minimize pollutants from coming into contact with precipitation, stormwater runoff, or non-stormwater flows. BMPs are also structures or devices that remove pollutants from stormwater runoff before the runoff enters a stormwater drainage system or surface water. Therefore, BMPs are often categorized as either “source-control” BMPs or “treatment-control” BMPs.

Source-control BMPs include all types of measures designed to prevent pollution at the source, that is, to keep stormwater from coming into contact with pollutants in the first place. Source-control BMPs are generally simple, low-maintenance, cost-effective, and broadly applicable. They may be categorized as non-structural or structural. Good housekeeping at a municipal yard is an example of a non-structural, source-control BMP; a canopy installed over a fueling island is an example of a structural, source-control BMP.

Treatment-control BMPs are devices or methods used to treat stormwater runoff to remove pollutants; these BMPs are frequently more costly to design, install, and operate than source-control BMPs. More importantly, treatment-control BMPs are typically not as effective as source-control BMPs, and the effectiveness is highly dependent on regular maintenance. Nevertheless, they can be appropriate and useful under certain conditions. However, treatment-control BMPs typically do not remove all pollutants from stormwater runoff and, therefore, should not be regarded as disposal systems.

2.3.2 Source Control BMPs

The following source-control BMPs will be employed for use at the Public Work Department at the designated facilities, and the responsible department is indicated using these abbreviations: ADM = Administration; PW = Public Works; PZ = Planning and Zoning; and HR = Human Resources.

Vehicle and Equipment Fueling Station (ADM, PW, HR)

- a) Train employees on proper fueling methods and spill cleanup techniques.
- b) Maintain the roof over the fueling island.
- c) Maintain absorbent spill cleanup materials and spill kits at the fueling island and on mobile fueling vehicles.
- d) Maintain containers for disposal of contaminated cleanup materials.
- e) Maintain a silt sock, sand bags, or other berm device(s) to block the nearby storm drain inlet in the event of a fuel spill at the island.
- f) Sweep the fueling station area and dispose debris in the trash can, do not hose down the area.

Vehicle and Equipment Parking Areas (ADM, PW, HR)

- a) Train employees to look for oil and other fluid leaks and trash in the parking lot, and to know what procedure to use when these items are noticed.
- b) Clean drainage inlets within the parking lot on a routine basis.

Material Storage Enclosure (ADM, PW, HR)

- a) Train employees to:
 - a. Look for chemical stains and fluid leaks under storage containers.
 - b. Clean up spilled oil using absorbent – stay dry/quick dry, sweep it up, and dispose of it in the trash.
- b) Train employees to use drip pans, clean them out after use, and properly store inside.
- c) Label contents of all containers.
- d) Keep enclosure area clear of debris and periodically dispose of unneeded items.

Garage/Service Bay for Vehicle/Equipment Minor Service, Repair, and Maintenance (ADM, PW, HR)

- a) Train employees to look for oil and other fluid leaks in the garage/service bay, and to know what procedure to use when these items are noticed.
- b) Train employees to use drip pans, clean them out after use.
- c) Clean grate drain on a routine basis.
- d) Maintain absorbent spill cleanup materials and spill kits at the service area.
- e) Maintain containers for disposal of contaminated cleanup materials.
- f) Keep garage/service bay clear of debris.

Workshop/Maintenance Area (ADM, PW, HR)

- a) Train employees to look for oil and other fluid leaks in the workshop/maintenance area, and to know what procedure to use when these items are noticed.
- b) Maintain absorbent spill cleanup materials and spill kits at the maintenance area.
- c) Maintain containers for disposal of contaminated cleanup materials.
- d) Keep workshop/maintenance areas clear of debris and periodically dispose of unneeded items.

2.3.3 Good Housekeeping BMPs (ADM, PW, HR, PZ)

Good housekeeping practices include activities that are intended to maintain a clean site and keep equipment in good working order to prevent pollutants from coming into contact with stormwater runoff. Daily cleanup and inspections are the most effective means of achieving good housekeeping. For the most part, good housekeeping practices should be incorporated into the day-to-day activities at the facility, as they foster a habit of good housekeeping, and they also help to assure worker safety. Employees shall be trained to understand the practices and to implement them on an ongoing basis.

The following good housekeeping BMPs will be employed for use at the Public Works Facilities:

- Tools and materials are returned to designated storage areas after use;
- All storage containers are properly labeled, to include warning labels if appropriate;
- All spills are immediately cleaned up;
- Spilled oil and grease is absorbed using absorbent material, which is then swept up and disposed of in the trash;
- Spills that escape the site are reported to the Roanoke County Emergency Communications Center at (540) 562-3265;
- Waste materials are collected and properly discarded after the completion of each job, shift, or day as appropriate;
- Indoor work areas are kept neat, uncluttered, and well-ventilated to discourage outdoor work that has the potential to generate pollutants and to allow leaks and spills to be quickly detected and controlled;
- Outdoor work areas are swept regularly (not hosed) and kept neat and clean;
- When outdoor work areas need cleaning beyond sweeping, all wash waters are contained, collected, and properly discarded;
- Outdoor waste or trash receptacles are kept covered and regularly emptied; adjacent areas are inspected for misplaced or wind-blown litter; and
- Employees are regularly trained on proper good housekeeping practices.

2.3.4 Preventive Maintenance BMPs (ADM, PW, HR, PZ)

Preventive maintenance BMPs relate to maintaining equipment in good working order. Having equipment failures or using equipment that poorly functions may result in the discharge of pollutants to the storm drainage system. Therefore, to reduce the likelihood of breakdown or failure, major equipment should have a preventive maintenance schedule for inspection, repair, or replacement of fluids (e.g., hydraulic, lubricating, cooling), greases, seals, hoses, filters, pressure gauges, piping, etc. Paved and landscaped areas should not be allowed to degrade to the point where they erode and contribute

pollutants to stormwater runoff. Leaky roofs, broken doors, cracked pavement and berms, and any other enclosure or structural defects that may impact the quality of stormwater runoff should be promptly repaired. Structural BMPs and storm drains within facility boundaries also need to be regularly inspected and maintained.

2.3.5 Proper Materials Handling and Storage BMPs (PW, HR, PZ)

Materials handling and storage BMPs relate to controlling the potential for leaks, spills, and losses of materials delivered, used, and stored at a facility. Spills and leaks of materials can accumulate in soils or on surfaces and be carried away in stormwater runoff or in authorized non-stormwater discharges. These materials handling and storage BMPs will be employed:

Materials Use

- Only obtain the amount of materials needed to finish a particular job;
- Limit waste generation by keeping good records and reviewing activities;
- Recycle materials whenever possible; and
- Read and follow manufacturer directions for use of materials and review the associated Material Safety Data Sheet (MSDS) for each product.

Materials Storage

- Store materials indoors or in a covered area where exposure to rainwater is eliminated;
- Store lead-acid batteries indoors and within secondary containment;
- Use hazardous materials storage lockers with spill containment or flammable materials lockers when appropriate;
- Locate storage areas away from vehicle and equipment paths to reduce the potential for accident-related leaks or spills;
- Store drums or other containers away from storm drain inlets;
- Provide informational signing, labels, restricted access, locks, inventory control, overhead coverage, and secondary containment for all hazardous material storage areas or container units; and
- Conduct regular inspections for leaks and control dates.

2.3.6 Proper Waste Handling BMPs (PW, HR, PZ)

Waste handling BMPs relate to properly controlling, collecting, storing, and disposing of wastes that are generated at a facility. All facility personnel should be aware that the disposal of any waste (including wash water) into a storm drain inlet or stormwater conveyance (i.e., ditches or streets) is an illegal discharge. Likewise, disposing of waste (including wash water) onto a paved surface such that it may be carried to a storm drain inlet or stormwater conveyance (i.e., ditches, streets) is an illegal discharge.

The following waste handling BMPs will be employed for use at the Public Works Facilities:

- Sweep or vacuum (dry methods) work areas to collect metal, wood, and other particulates and debris frequently;

- Limit waste generation by keeping good records and reviewing activities;
- Recycle materials whenever possible;
- Separate and segregate different types of wastes;
- Store waste materials indoors or in a covered area where exposure to rainwater is eliminated;
- Continue using Safety Kleen or other service provider for regularly-scheduled waste disposal;
- Use hazardous materials storage lockers with spill containment or flammable materials lockers when appropriate;
- Locate the waste storage area away from vehicle and equipment paths to reduce the potential for accident-related releases;
- Provide informational signage, labels, restricted access, inventory controls, overhead coverage, and secondary containment for all hazardous waste storage areas or container units;
- Conduct regular inspections for leaks and control dates.

2.3.7 Spill Prevention and Response (PW, HR, PZ)

For spills, the old saying that “an ounce of prevention is worth a pound of cure” is appropriate. Spill clean-up can be labor-intensive and costly, as it involves containing the spill, collecting the spilled substance, properly disposing of the spilled materials, and filing of associated reports to regulatory agencies, not to mention possible monetary fines. Spills and leaks are some of the most significant sources of stormwater pollution and are, in most cases, avoidable.

Spill prevention and control procedures include:

- Placing bollards, berms and containment features around structures or areas where fluids are stored, so releases can be prevented, easily detected, and controlled;
- Using drip pans for maintenance operations involving fluids and under leaking vehicles and equipment awaiting repair;
- Placing spill kits in areas where fluids are stored or in areas where activities may result in a spill;
- Providing training for proper use of materials and equipment used during operations and maintenance activities;
- Providing training for proper use of spill response equipment and supplies; and
- Conducting outdoor maintenance activities on paved surfaces to allow for easy detection, control, and cleanup of spills.

Spill prevention, control, and cleanup apply to all materials and wastes - not only hazardous substances. The toxic water quality effects from spills of hazardous substances (e.g., acids, oils, greases, fuels, solvents, pesticides) are commonly understood. However, non-hazardous materials, such as sand, litter, and wash water, among others - can also greatly impact water quality in receiving waters.

2.4 Employee Training

Each department personnel identified in the Pollution Prevention Team for SWPPP Oversight (in Section 2.2) is responsible to ensure that all of their designated employees receive the appropriate Stormwater Management training on a biennial basis. The Town’s Human Resources Director will make such training available to the designated personnel via the Roanoke County’s intranet and/or another easily-accessible venue.

The Planning and Zoning Director and Human Resources Director will coordinate training related to stormwater management on at least a biennial basis and maintains all training records for inclusion in the Town's Annual MS4 Report, as submitted to DEQ.

The purpose of stormwater-related training is to educate workers on the day-to-day activities that may impart pollutants into stormwater discharges from the site, to help in the implementation of BMPs, to ensure understanding of the Town's Standard Operating Procedures (SOPs) for Water Quality, and to ensure employees understand what illicit discharges are and how to respond to them when they are witnessed.

Training attendance sheets and any other training documentation shall be kept in Appendix C.

The instructor's name, if applicable, date and time of training, location of training, training title, participants' names, and corresponding employee numbers will be listed.

All training records shall be kept for a period of no less than five years.

3.0 NON-STORMWATER DISCHARGES

A *non-stormwater* discharge is any discharge or flow to a stormwater drainage system that is not composed entirely of stormwater runoff. The Town's MS4 Permit prohibits the discharge of non-stormwater discharges into its Municipal Separate Storm Sewer System (MS4) and to the Waters of the U.S., unless the discharge is regulated under a separate VPDES or VSMP permit, as issued by the Virginia DEQ, or is classified as an *authorized* discharge, as listed below.

3.1 Authorized Non-Stormwater Discharges

The only non-stormwater discharges, or flows, that are allowed to be discharged into the Town's MS4 are listed below:

- a) Water line flushing;
- b) Landscape irrigation;
- c) Diverted stream flows or rising groundwater;
- d) Uncontaminated ground water infiltration;
- e) Uncontaminated pumped groundwater;
- f) Discharges from potable water sources;
- g) Foundation drains;
- h) Air conditioning condensate;
- i) Irrigation water;
- j) Springs;
- k) Water from crawl space pumps;
- l) Footing drains;
- m) Lawn watering;
- n) Individual residential car washing (this exemption does not include any commercial or business activity);
- o) Flows from riparian habitats and wetlands;
- p) De-chlorinated swimming pool discharges;
- q) Street wash water; and

- r) Firefighting activities.

4.0 Significant Materials, Activities, and Potential Pollutants

4.1 Significant Materials

A number of materials are used or stored on-site. Table 4.1 summarizes these materials, by department, and where they are received or stored at the facility.

Table 4.1 List of Significant Materials – Public Works Facility

PUBLIC WORKS FACILITY # 1				
Material Name	Typical Quantity	Receiving and Shipping Location	Handling Location	Frequency of Use
<i>EXAMPLE: Acid</i>	<i>12 gal</i>	<i>Maintenance Shop</i>	<i>Maintenance Shop</i>	<i>Twice weekly</i>
Acid	12 quarts	Garage/Service Area	Garage/Service Area	Quarterly
Acid	24 quarts	Custodial Storage	Custodial Storage	Semi-Annual
Acid	6 batteries	Garage/Service Area	Garage/Service Area	Rotate Weekly
Adhesives & Sealants	12 tubes	Garage/Service Area	Garage/Service Area	Daily
Adhesives & Sealants	8 tubes	Garage/Service Area	Garage/Service Area	Monthly
Brake fluid	3 pints	Garage/Service Area	Garage/Service Area	Quarterly
Coolant (new)	5 gallons	Garage/Service Area	Garage/Service Area	Weekly
Coolant (used)	20 gallons	Garage/Service Area	Garage/Service Area	Stored in Barrel
Diesel fuel	3 gallons	Garage/Service Area	Garage/Service Area	Weekly
Gasoline	5 gallons	Garage/Service Area	Garage/Service Area	Daily
Hydraulic fluid	50 gallons	Garage/Service Area	Garage/Service Area	Weekly
Lubricants	60 gallons	Garage/Service Area	Garage/Service Area	Daily
Motor oil (new)	40 gallons	Garage/Service Area	Garage/Service Area	Daily
Motor oil (used)	100 gallons	Garage/Service Area	Garage/Service Area	Stored
Paint Products	40 gallons	Garage/Service Area	Garage/Service Area	Quarterly
Paint Products	12 gallons	Garage/Service Area	Garage/Service Area	Monthly
Solvents	1 gallon	Garage/Service Area	Garage/Service Area	Quarterly
Solvents	15 gallons	Garage/Service Area	Garage/Service Area	Daily

Table 4.2 Significant Activities, Potential Pollutants, and BMPs

Activity	Description	Pollutants/Sources	BMPs
Vehicle and Equipment Fueling Station	Vehicle and Equipment Fueling is a potential source of stormwater pollution at the facility. Stormwater run-on has the potential to wash away any spills or leaked fluids located at the fueling area and subsequently drain into the nearby storm drain inlet.	<p><i>Fuels/Oils</i></p> <ul style="list-style-type: none"> • Spills caused by overtopping • Spills and leaks during deliveries • Hosing or washing down fuel area. • Rainfall running onto and off of fueling area 	<ul style="list-style-type: none"> • Train employees in proper fueling/cleanup procedures. • Discourage “topping off” of fuel tanks. • Install “shut-off” valves on nozzles. • Use absorbent materials on spills as opposed to hosing down. • Install covered spill kits next to fueling area. • Maintain canopy over fueling area.
Outdoor Material, Storage and Vehicle, and Equipment Parking	Outdoor Material Storage and the Parking of Vehicle, and Equipment have a potential for stormwater pollution. In particular, vehicles and equipment are susceptible to leaking and those that are stored outdoors, subject to weather, pose a pollutant risk. Rainfall at the facility will likely wash leaked fluids into the storm drain system.	<p><i>Antifreeze, oil, gas, solvents, etc.</i></p> <ul style="list-style-type: none"> • Container spills or leaks • Vehicle and equipment leaks 	<ul style="list-style-type: none"> • Minimize outdoor storage. Store materials indoors or under a roof whenever possible. • Conduct loading and unloading in dry weather if possible. Store materials in enclosed or covered areas. • Avoid placing storm drains in loading/unloading and storage areas. • Grade and/or berm the loading/unloading and storage areas to a drain that is connected to a dead-end. • Train employees in spill containment and cleanup present during loading/unloading. • Use drip pans under leaking vehicles and equipment. • Repair leaking vehicles and maintain equipment to prevent leaks.

5.0 Facility Inspections

5.1 Quarterly Inspections

At least once per quarter, the facility will be inspected using the Town’s Municipal Yard Inspection Checklist, found in Appendix A. The inspection shall be conducted by the Pollution Prevention SWPPP Implementation Team, identified in Section 2-2.

The purpose of these inspections will be to identify problems early so that they can be corrected in a timely fashion. All completed forms shall be placed in Appendix A by the Public Works Director or his/her designee; he or she shall also send a copy of such reports to the Planning and Zoning Director/Stormwater Program Manager for inclusion in the Annual MS4 Report, which is submitted to the Virginia Department of Environmental Quality (DEQ) by October 1 of each year.

5.2 Annual Facility Assessments

An “Annual Facility Stormwater Assessment” of the Public Works Facilities will be conducted by the Pollution Prevention SWPPP Implementation Team, identified in Section 2-2, to help assure that

significant changes in facilities or activities are identified and can then be reflected in the SWPPP. The Annual Stormwater Assessment will include:

- Visual inspection of all potential sources of pollutants that may enter the stormwater drainage system via stormwater or non-stormwater discharges;
- A review and assessment of all BMPs to determine whether the BMPs are adequate, properly implemented and maintained, or whether additional BMPs are needed; and
- Visual inspection of equipment needed to implement the SWPPP, such as spill response equipment, drip pans, brooms or vacuum sweepers, or containers for used absorbents.

The Annual Stormwater Assessment will be documented by the Public Works Director as follows:

- Identification of personnel performing the evaluation
- The date(s) of the evaluation
- Findings of the evaluation
- Recommended modifications of the SWPPP
- Schedule for implementing SWPPP revisions
- Any incidents of non-compliance and the corrective actions taken

Following the evaluation, revisions to the SWPPP, if needed, will be completed within 90 days. Blank assessment forms are located in Appendix B, and completed assessment forms shall be placed there by the Public Works Director.

Table 5.1 may be used to track annual assessments and follow-through on recommendations. The Planning and Zoning Director/Stormwater Program Manager and Human Resources Director are available for technical assistance during the Assessment Process, if needed.

Table 5.1 Assessment Log

Assessment Date (mm/dd/yyyy)	Assessor (Name & Position)	Revisions Required? (Y/N)		Follow Through? (Date or n/a)
		Yes	No	

APPENDICES

APPENDIX A

Municipal Yard Inspection Checklists



Town of Vinton Municipal Yard Inspection Checklist

Public Works Department is responsible for conducting quarterly Inspections, at minimum, of its own facilities. Please submit completed forms to: Anita McMillan, Planning and Zoning Director/Stormwater Program Manager

Date: _____ **Time:** _____ **Inspector:** _____

Facility Name and Location: _____

Description of Activities: _____ **Receiving Waterway:** _____

Fueling Areas

Comments

Proper use of spill overflow protection	
Roof over fueling area	
Dry cleanup methods used for fuel spills	
Tank certified by PBCDERM	
Leak detection system for fuel tanks	
Fueling pad graded for minimum run-on of stormwater	
Fueling pad discharges into a sump pump, not into a storm drain	

Vehicle and Equipment Maintenance

Comments

Proper storage & disposal of greasy rags, oil/air filters, batteries, spent coolants	
Labeling & tracking for the recycling of hazardous waste materials	
Hazardous materials stored properly without evidence of spills	
Inventory of materials maintained onsite & Material Safety Data sheets	
Wrecked and "part" vehicles drained of all fluids	
Stored liquids and batteries have secondary containment	
Liquid waste disposed of properly and not being poured into storm system/sinks	
Empty drip pans are cleaned and properly stored	
Floor drains discharge into a storage sump with an oil/water separator	

Outdoor Vehicle and Equipment Storage

Comments

Ground free of visual stains from oil or other vehicle fluids	
Drip pans used during vehicle maintenance	
Drip pans cleaned and properly stored	
Storage are covered and properly maintained	

Painting Areas**Comments**

	Paint and paint thinner stored and properly labeled	
	Spray paint booths properly operate and have an OSHA-approved hood	
	Personal protection devices/clothes cleaned and properly stored	
	Proper painting equipment being used and is properly cleaned/stored	
	Recycling of used paints, paint thinner, and solvents	
	Employees trained on proper painting and cleaning procedures	

Vehicle and Equipment Washing Areas**Comments**

	Area designated for cleaning activities	
	Wash waters are contained & recycled, sumps clean & properly used	
	Proper grading for wash pad	
	Parts and equipment washed within designated cleaning area	
	Employees trained on proper washing procedures	

Liquid Storage in Above-Ground Storage**Comments**

	Installed per design with no leaks (pipes, pumps, valves, hoses, flanges)	
	Storage containers maintained in good condition	
	Safeguards installed (such as secondary containment)	
	System regularly inspected	
	Chemicals are stored with compatible chemicals	
	Container labels can be easily read; containers are properly labeled	
	Employees trained on proper filling and transfer procedures	

Improper Connections to Storm Drainage System**Comments**

	Floor drains connected to sanitary sewer system, not to storm drains	
	Runoff from wash, maintenance, storage, and fueling areas are not directed to storm drains	
	Facility has updated plumbing schematics to accurately reflect discharge locations	
	All underground storage tanks are maintained with proper safeguards	
	Employees trained on proper disposal of all materials used onsite	

General Site**Comments**

	Emergency Response Plan onsite	
	Employees trained for emergency procedures	
	Material Safety Data sheets maintained in a convenient location for emergency response	
	Stockpiles properly maintained to prevent runoff	
	Proper litter control (container lids are closed, containers are upright)	
	Vegetated areas properly maintained and erosion-free	
	Site is routinely inspected for indication of illicit discharges	

APPENDIX B

Annual Facility Stormwater Assessment Forms and Checklists

**Annual Facility Stormwater Assessment
Public Works Facility**

1) Name of Building or Operation: _____

2) Facility Representative: _____

3) Position: _____ Phone No.: _____

- | | | | |
|---------------------------------------------------------------------------------------------------------------------------------|--------------------------|--------------------------|--------------------------|
| a) Facility's SWPPP is easily accessible in each building? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b) Awareness of SWPPP by facility personnel? (Random survey of onsite employees.) # Employees Surveyed _____ | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c) Facility's Emergency Response Plan is easily accessible in each building? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| d) Awareness of Emergency Response Plan by facility personnel? (Random survey of employees on site.) # Employees Surveyed _____ | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| e) Assessment Checklist (page 2 of 2) is completed? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| f) Was any stormwater pollution prevention training conducted during the year? If yes, provide records in Appendix C. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| g) Were non-stormwater discharge visual observations conducted? List Dates: _____ | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| h) Were stormwater discharge visual observations conducted? List Dates: _____ | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Evaluation Notes: _____

Corrective Measures Recommended: _____

Evaluation Conducted By: _____ Date: _____

This completed evaluation was reviewed with me on: _____ (Date)

Facility Representative (printed name and title): _____

Facility Representative (signature): _____

Stormwater Assessment Checklist

Activities – Check each activity present at the site.	Effectiveness Rating*				
	NO	SO	MO	SC	VE
Vehicle and Equipment Fueling: 1. Fueling area is designed to prevent run-on of stormwater and the runoff of spills. 2. Employees are trained in proper fueling and cleanup procedures. 3. Absorbent materials are used on small spills rather than hosing down. 4. Daily inspections. 5. Pump island is inspected regularly for spills and/or leaks	<input type="checkbox"/>				
Vehicle Wash Bay for Garbage Trucks 1. Garbage trucks are only washed inside the bay. 2. Wash water in the containment area is routinely removed by the WWA. 3. No equipment or container washing occurs outside the wash bay.	<input type="checkbox"/>				
Vehicle and Equipment Maintenance and Repair 1. Maintenance is done in designated areas only. 2. Equipment is kept clean, with no build-up of oil and grease. 3. Drip pans, containers, or absorbent pads are used under items that may drip. 4. Used oil and oil filters, antifreeze, batteries, fluids, etc. are recycled.	<input type="checkbox"/>				
Outdoor Loading/Unloading of Materials 1. Delivery vehicles are parked so spills and leaks can be contained. 2. Loading/unloading areas are covered to reduce exposure of materials to rain. 3. Loading/unloading areas are designed to prevent stormwater run-on. 4. Fork lift operators are properly trained.	<input type="checkbox"/>				
Outdoor Container Storage of Materials 1. Materials are covered to protect from rainfall. 2. Materials are protected from run-on and runoff of stormwater. 3. Dumpsters and trash cans are covered. 4. Hazardous materials are stored in a properly-designed storage area and labeled.	<input type="checkbox"/>				
Outdoor Storage of Raw Materials/Products 1. Storage areas are covered with a roof. 2. Materials are covered with a temporary plastic covering, if outside. 3. Berms and curbing are used to prevent materials from entering the storm drain system. 4. Parking lots and/or other surface areas are swept regularly.	<input type="checkbox"/>				
Waste Handling and Disposal 1. Usage and disposal inventory is used to limit waste generation. 2. Materials are recycled whenever possible. 3. Wastes are segregated and separated. 4. Storage area is covered, enclosed and bermed.	<input type="checkbox"/>				
Contaminated or Erodible Surface Areas 1. Erosion can be controlled by preservation of natural vegetation. 2. Surface area is regularly inspected to determine if re-vegetation is needed. 3. Geosynthetics are used as an alternative for the surface area. 4. Sandbags or berms are needed to prevent stormwater pollution.	<input type="checkbox"/>				
Building and Grounds Maintenance 1. Pesticides and fertilizers are used and properly stored. 2. Paved areas are swept instead of washed down. 3. Wash water, sweepings, and sediments are properly discarded. 4. Planting of natural vegetation reduces water, fertilizer and/or pesticide needs.	<input type="checkbox"/>				
Building Repair, Remodeling and Construction 1. Materials used in repair and remodeling (paints, etc.) are stored properly. 2. Soil erosion control techniques are used. 3. Good housekeeping practices are used.	<input type="checkbox"/>				

* NO = No BMPs used and stormwater pollution likely.
 SO = Some BMPs used but not effective.
 MO = Some BMPs used and moderately effective.
 SC = Source-control BMPs used and very effective/structural BMPs needed.
 VE = All necessary BMPs used and very effective.

APPENDIX C

Training Documentation

APPENDIX D

SWPPP Amendment Log

APPENDIX E

Municipal Separate Storm Sewer System (MS4) Permit

APPENDIX F

Facility Photographs



Vinton Public Works Department/Administrative Office



Open Drainage Ditch Adjacent to Public Works Property



Storm Drain Inlet in the Town ROW across Public Works Facility



Storm Drain Inlet in the Vicinity of Public Works Facility



Underground Storage Tanks Access Point



Underground Storage Tank



Fueling Station under a Canopy



Emergency Fuel Shutoff Across the Fueling Station



Outside Storage and Town Vehicle Parking Areas



Town Vehicle Parking Areas



Drainage Inlet in the Town Vehicle Parking Areas with Separator



Secondary Containment Enclosure



Used Oil and Barrels Stored in the Secondary Containment Area



Sodium Hypochlorite Stored in the Secondary Containment Area



Materials Stored in the Secondary Containment Area



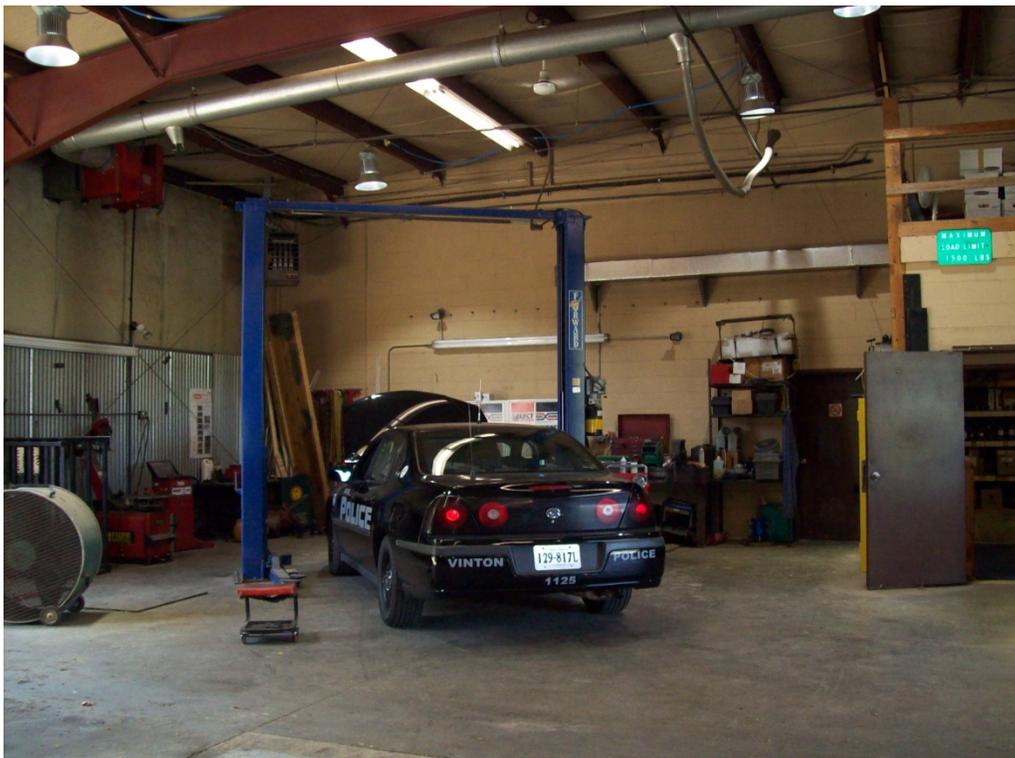
One of the Divided Space of the Secondary Containment Area Showing with Drainage Collection Area



Garage/Service Bay for Minor Service, Repair, and Maintenance of Vehicles and Equipment



Garage/Service Bay for Minor Service, Repair, and Maintenance of Vehicles and Equipment



Garage/Service Bay for Minor Service, Repair, and Maintenance of Vehicles and Equipment



Garage/Service Bay Area



Service Bay Grate Drain that is Connected to Sanitary Sewer with Separator



Workshop/Maintenance Area