**Stormwater Pollution Prevention Plan**

***For:***

Project Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Location: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

***Plan Prepared for ("Operator''):***

 Contracting Company:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Contact: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Address: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Phone Number: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 ***Authority Delegated to (See Appendix B):***

 Company: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 Title: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 Phone Number: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

***Plan Prepared by:***

Company Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Address:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Phone Number:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 Operator’s Signature Date

*Amendment Log*

**Date** **Description of Revisions**

Project Title:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Location:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Stormwater Pollution Prevention Plan

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**Policy and General Procedures**

Notice to the Operator

It is the responsibility of the Operator (as listed on the first page of this document and the Registration Statement submitted to City of Franklin; both entities/names must be exactly alike; the term "Operator" will refer to this definition henceforth) of this Stormwater Pollution Prevention Plan (SWPPP) to familiarize themselves with the latest edition of the Virginia Stormwater Management Program's General VPDES Permit for Discharges of Stormwater from Construction Activities (General Permit No.: VAR 10) as required by the Commonwealth of Virginia's Department of Environmental Quality (DEQ) and City of Franklin, the DEQ's authorized VSMP Authority for this project and the area within which this project takes place.

In many instances, the Operator is not the individual and/or entity completing the work mandated by the VSMP and this SWPPP; for instance, a property owner applies for VSMP coverage due to disturbance caused by the proposed development of their parcel. The property owner, who is also the Operator in this example, hires a contractor to complete all aspects of the site work associated with the proposed development. Though the Operator is not physically the one completing inspections or implementing the Pollution Prevention Plan (P2) and Stormwater Management Plans (SWM) contained in the SWPPP, they are still given the title of Operator as they are the owner of the project.

In another example, an Architect is hired by the land owner to design and complete the project instead of him or herself. The architect then subcontracts an engineering firm to prepare a SWPPP for the project. The plan preparer would then typically list the Architect as the Operator on the Registration Statement as they are the project owner. Essentially, the position or title of the Operator, with respect to the associated project, will likely differ from one project to the next yet all provisions of the VSMP and the SWPPP must be strictly adhered to.

The following subsection **(Policy,** Page 2) details the proper procedures for complying with all aspects of this SWPPP regardless of the Operator's role. It is of utmost importance for the Operator to understand these policies and procedures granted and required by General Permit coverage and it is of equal necessity for any Delegated Individual(s) and/or contractors working onsite for the development listed in this SWPPP to understand these same points.

The SWPPP is a "living document", meaning it is intended to be updated as necessary throughout the duration of the project as actual site conditions dictate at the time and as a result, the SWPPP has many moving and changing components which may seem convoluted or unclear at times; if any individual involved with implementing this SWPPP, whether the Operator, a site subcontractor, or anyone else involved, has questions or concerns regarding proper implementation or interpretation of the SWPPP, Company Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, (SWPPP preparer for this project) requests that these concerns be brought to their attention immediately; contact information for Company Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ may be found on the first sheet of this binder.

**Policy**

This SWPPP has been developed in accordance with the requirements contained in the Virginia Pollution Discharge Elimination System (VPDES) Stormwater General Permit for Discharges from Construction Activities (9 VAC 25-880). It is the responsibility of the Operator listed in this Stormwater Pollution Prevention Plan (SWPPP) to secure authority to discharge stormwater from land disturbing activities of one acre or greater in full conformance with the stormwater regulations of the Virginia Department of Environmental Quality (VDEQ or DEQ) as contained in 9 VAC 25-880. The Operator, delegated authorities and all subcontractors must comply with the requirements of the VSMP as contained in the DEQ VPDES Stormwater General Permit (9 VAC 25-880) and implementing the erosion and sediment control requirements of the DEQ as published in the Virginia Erosion and Sediment Control Handbook (current edition). These requirements are as follows:

1. The Operator must file a complete Registration Statement for coverage under the VPDES General Permit for Stormwater Discharges from Construction Activities with City of Franklin Community Development at least 15 days prior to commencement of construction. Verification of coverage received from the DEQ is required prior to the commencement of land disturbing activities. The appropriate filing fee in check form must be submitted to City of Franklin Community Development before the permit coverage will be issued. The amount of any required fees may be found in Appendix D after the Registration Statement.

City of Franklin Community Development is the VSMP Authority and will be the entity which must receive the General Permit Registration Statement for Discharges from Construction Activities and applicable fee(s) from the Operator prior to development. These items must be sent to or delivered to the following address:

City of Franklin, Virginia

 Community Development Office

Environmental Services Division/ VSMP Authority

207 West Second Avenue

Franklin, VA 23851

Phone: (757)562- 4515

All forms, permits, and Notice of Termination submissions must be completed upon project completion and submitted to City of Franklin Community Development at the address listed above. It is the Operator's responsibility to ensure the proper Permit Fee is paid.

1. A copy of the Registration Statement and the actual coverage letter issued by the DEQ must be kept with this SWPPP and must be located onsite at all times throughout the duration of this project. Land disturbing activities cannot commence until verification of coverage is received by the Operator from DEQ and/or City of Franklin Community Development.
2. A complete copy of the SWPPP, including copies of all inspection reports, plan revisions,etc., must be retained by the Operator at the project site at all times during working hours and

kept in the Operator's permanent project records for at least three years following submission of the Notice of Termination (see Item N, below).

1. The Operator must provide names and addresses of all contractors working on this project who will be involved with all construction activities that disturb site soil. Said contractors must complete the required information in Appendix C and by virtue of their inclusion on that sheet certify by law that they will comply with all aspects of the SWPPP and the General Permit. This information must be kept with the SWPPP and shall be incorporated into the construction contract.

 **Elsewise**

1. The Owner/Operator of this SWPPP must sign the Authority Letter provided in Appendix B delegating authority to the *individual or individuals* (whether said individual(s) works for the same organization as the Operator) completing the required inspection reports,

constructing the pollution prevention measures, etc. ifthe Operator listed on the

Registration Statement will not physically be the one completing these tasks him or herself; additionally, **Delegated Individual(s) must sign the sheet contained in Appendix C certifying that they are familiar with the General Permit and all components of the SWPPP.**

1. As described below, the Operator (or delegated authorities) shall conduct regular inspections to determine effectiveness of the SWPPP. The SWPPP shall be modified by the Operator or delegated authorities as needed in order to prevent pollutants from discharging from the site. The Operator's inspector must be both a person familiar with the site and the nature of the major construction activities and must also be qualified to evaluate both overall system performance and individual component performance. Additionally, the Operator's inspector must either be someone empowered to implement modifications to this SWPPP and the pollutant control devices, if needed, in order to increase effectiveness to an acceptable level, or someone with the authority to cause such things to happen.

Again, this authority must be delegated to the inspector by using the enclosed Authority Letter in Appendix B signed by the Operator naming the person or position responsible for undertaking these tasks on behalf of the Operator and said person(s).

1. This SWPPP shall be updated each and every time there are modifications to the pollutant prevention systems. The Operator or delegated authority shall make an effort to coordinate changes with the VSMP authority unless immediate action is necessary to prevent unauthorized discharges. If immediate Operator action is needed, then the Operator shall notify the governing reviewing agency of the action as soon as practicable.

Changes to the SWPPP may be performed by the Operator, delegated authorities, and/or City of Franklin Community Development and shall be noted on the Amendment Log. Changes to the SWPPP do not require reprinting the SWPPP or any included plan sheets and may be reflected simply by handwriting revisions, adding addenda, inserting new sketches/maps, and/or revising drawings. In these instances, it is recommended to initial and date at the location of the revision within the SWPPP as well as including a brief description

in the Amendment Log.

H. Discharge of oil or other hazardous substances into the stormwater is subject to reporting and cleanup requirements. Refer to Part III.G of the VPDES General Permit (Appendix E) and the *Spill Prevention and Control* sectionfor additional information.

I. A record of the dates of land disturbing and stabilizing activities must be noted and kept in the SWPPP. If a section or phase of the project reaches final stabilization prior to the entire project site reaching final stabilization, then that section shall be clearly marked on the site maps (where applicable) and the date of said final stabilization recorded in Appendix H. Areas so marked are no longer required to be inspected as a part of permit compliance.

1. This SWPPP is intended to control water-borne and liquid pollutant discharges by some combination of interception, filtration, and containment. The Operator and all contractors implementing any component of this SWPPP shall remain alert to the need to periodically refine and update the SWPPP in order to accomplish the intended goals. Refer to Item G, above.
2. Annual permit maintenance fees may be required for projects which intend to utilize General Permit coverage for periods greater than one year. Contact City of Franklin Community Development Office Environmental Service Division for details on these maintenance fees.

L. **A rain gauge shall be installed on site** in order to determine if an inspection triggered by a qualifying rainfall event has occurred. Qualifying rainfall events are those which produce a minimum of 0.25" rainfall in a 24-hour period; should such a rainfall event occur, an inspection must be performed and logged in this SWPPP. Qualifying rainfall events must be recorded in Appendix I.

1. A copy of the plan associated with this project and approved by City of Franklin Community Development is required to be kept with this SWPPP onsite at all times. The plan is listed as Appendix A but is often kept at the front of the binder due to the size of the plans.
2. Once the site reaches final stabilization, the Operator shall complete and submit to City of Franklin Community Development two copies of the Notice of Termination for activities on site (Appendix J). Alternatively, if construction extends past the effective date of Permit coverage, a new registration statement and associated fees may be required to be resubmitted. If this situation occurs, contact City of Franklin Community Development for further guidance.

**General Procedures**

This SWPPP has been prepared for all activities associated with the construction of on Project and Location:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and shown on a site plan approved by the City (included in **Appendix** A or front of the binder). This SWPPP includes the elements necessary to comply with the Stormwater General Permit issued by the DEQ under the VPDES and local governing agency requirements. This SWPPP shall be implemented at the start of construction.

Construction phase pollutant sources anticipated at the site are:

* + Disturbed (bare) soil
	+ Vehicle fuels and lubricants
	+ Various fertilizers associated with landscaping

Without adequate control there is the potential for each type of pollutant to be transported by stormwater.

The project will consist of the following basic activities:

* + Site grading
	+ Earth working operations
	+ Saturation Methods

**Purpose**

The major goal of pollution prevention efforts during project construction is to control soil and pollutants that originate on the site and prevent them from flowing to surface waters of the Commonwealth . The purpose of this SWPPP is to provide requirements for achieving that goal. The successful pollution prevention program also relies upon careful inspection and adjustments during the construction process in order to enhance its effectiveness.

**Scope of the SWPPP**

This SWPPP must be implemented when land disturbing activities begin on the site. This SWPPP will be made available for public inspection upon public request on site during normal business hours for the term of the permit authorization for the site. The SWPPP Construction Site Notice as well as a copy of the DEQ Coverage Letter must be posted conspicuously and readable from a public right of way at the job site.

This SWPPP primarily addresses the impact of storm rainfall and runoff on areas of the ground surface disturbed during the construction process. In addition, there are recommendations for controlling other sources of pollution that could accompany the major construction activities.

Permit coverage is terminated as of the date the lot is transferred to a new owner, coverage under a new VPDES permit is obtained, or as of the date another Operator assumes control over portions of the site not stabilized. In these situations, coverage under the permit terminates at midnight the date the Notice of Termination (NOT) is filed. Where the Operator seeks to terminate coverage because the site has reached final stabilization, termination will become effective upon concurrence by the VSMP Authority, or after 60 days from the submittal of the NOT, whichever occurs first.

Forms required to implement the SWPPP are included in the Appendices to this document.

The VPDES General Permit for Stormwater Discharges from Construction Activities prohibits most non-storm water discharges during the construction phase. Allowable non-storm water discharges that may occur during construction on this project, which would therefore be covered by the General Permit, include:

* Discharges from firefighting activities
* Fire hydrant flushings
* Water used to wash vehicles or control dust where detergents are not used
* Water flowing from potable sources and water line flushing
* Water used to control dust
* External building wash down which does not use detergents
* Runoff from pavement wash down where spills or leaks of toxic or hazardous materials have not occurred (unless all spilled material has been removed) and where detergents have not been used
* Uncontaminated air conditioning or compressor condensate;
* Springs and uncontaminated groundwater;
* Foundation or footing drains where flows are not contaminated with process materials such as solvents
* Uncontaminated excavation dewatering
* Landscape irrigation

Discharges from fire hydrant flushing or other potable water sources must be managed in a manner to avoid in-stream impact in downstream waters. Impacts could be caused by the discharge temperature difference with the receiving water, the concentration of chlorine or chloramines in the discharge, discharge of fresh waters in high volumes to saline waters, scour from discharges of high velocities to small streams, etc.

The techniques described in this SWPPP focus on providing control of pollutant discharges with practical approaches that utilize readily available expertise, materials, and equipment.

The Operator referred to in this SWPPP is the entity noted on the VSMP registration statement. The Operator and their subcontractor(s) will construct the site development improvements in accordance with the approved plans and this SWPPP.

Project Site Overview

###### **Project Site Information**

###### Project Site Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

###### Project Street/ Location:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

###### City:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ State:\_\_\_\_ Zip Code:\_\_\_\_\_\_

###### County:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

###### Parcel ID:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

###### Latitude (DMS):\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

###### Longitude (DMS):\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

###### Private/ Public/ Federal/ State:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

###### Residential/ Commercial/ Industrial/ Other (specify):\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

###### City Site Plan Number (if applicable):\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

###### Receiving Waters:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

###### TMDL Waters:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

###### Total Site Area:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

###### Disturbed Area:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

###### **Existing Site Conditions**

The project site ("the site") lies within the Location:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ watershed. All project site work is located in open space away from existing structures. The site is located within FEMA flood zones Click here to enter text..

**Proposed Maintenance**

Proposed maintenance associated with this project will be the Brief Project Description: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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Sequence of Construction

This sequence of construction is per the approved Site Plan for the Brief Sequence of Construction: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Deviations from this sequence of construction shall be brought to the attention of City of Franklin officials and may require a revised Stormwater Pollution Prevention Plan, among others, prior to execution.

Note: Refer to the approved Plan found in **Appendix** A/the front of this binder for approved E&S control measure locations. Refer to **Appendix** A for locations of potential non-sediment pollution prevention measures.

**Pollution Prevention & Control**

Potential Sources of Pollution

*Potential sediment to stormwater runoff*

* Minimal site clearing, grubbing activities
* Grading activities
* Vehicle tracking
* Landscaping
* Earth working activities

*Potential pollutants (non-sediments) to stormwater runoff*

* Staging area -equipment maintenance, sanitary facilities, and hazardous waste storage.
* Materials storage area -building materials, solvents, paints, adhesives, aggregates, trash, brick pavers, paving materials, etc.
* Construction activity -Paving, mortar, stucco, building materials, fertilizers, etc.
* Concrete items, including washout area

|  |  |  |  |
| --- | --- | --- | --- |
| **Material/Chemical** | **Physical Description** | **Stormwater Pollutants** | **Location** |
| Pesticides (insecticides), fungicides, herbicides, etc.) | Various colored to colorless liquid, powder, pellets, grains | Chlorinated hydrocarbons, organophosphates, carbonates, arsenic | Landscaped areas |
| Fertilizer | Liquid or solid grains | Nitrogen, phosphorus | Newly seeded areas |
| Plaster | White granules or powder | Calcium sulphate, calcium carbonate, sulfuric acid | Building construction areas |
| Cleaning Solvents | Colorless, blue, or yellow-green liquid | Perchloroethylene, methylene chloride, trichloroethylene, petroleum distillates | Equipment cleaning (to be done offsite) |
| Asphalt | Black solid | Oil, petroleum distillates | Roofing, entrance, h/c parking spaces |
| Concrete | White solid/ grey liquid | Limestone, sand, pH, chromium | Sidewalks and curb islands |
| Glue, Adhesives | White or yellow liquid  | Polymers, epoxy | Building construction areas |
| Paint | Various colored liquids | Metal oxides, Stoddard solvent, talc, calcium carbonate, arsenic | Building construction areas |
| Curing Compounds | Creamy white liquid | Naphtha | Sidewalks, curbing |
| Wood Preservatives | Clear amber or dark brown liquid | Stoddard solvent, petroleum distillates, arsenic, copper, chromium | Building construction areas |
| **Material/ Chemical** | **Physical Description** | **Stormwater Pollutants** | **Location** |
| Hydraulic oil/ Fluids | Brown oily petroleum hydrocarbon | Mineral oil | Leaks or broken hoses from equipment |
| Gasoline | Colorless, pale brown or pink petroleum, hydrocarbon | Benzene, ethyl benzene, toluene, xylene, MTBE | Staging area (largely completed offsite) |
| Diesel Fuel | Clear blue-green to yellow liquid | Petroleum distillates, oil and grease, naphthalene, xylenes  | Staging area (largely completed offsite) |
| Kerosene | Pale yellow liquid petroleum hydrocarbon | Coal oil, petroleum distillates | Staging area (largely completed offsite) |
| Antifreeze/ Coolant | Clear green/ yellow liquid | Ethylene glycol, propylene glycol, heavy metals (copper, lead, zinc) | Leaks or broken hoses (equipment) |
| Sanitary Facilities (toilets) | Various colored liquid | Bacteria, parasites, viruses | Staging area |

*\*The presence of a certain material/chemical pollutant in the table above does not imply that that material/chemical pollutant will be present during this project (e.g. cleaning solvents). The table is comprehensive of a variety of* *commonly-used chemicals on small commercial construction operations such as the proposed construction associated with this project. If a chemical/pollutant source not listed above becomes necessary for use onsite, this plan shall be revised to reflect the usage and procedure and the amendment log at the front of the SWPPP updated.*

**Erosion & Sediment Control Measures**

*All measures listed within this section shall be applied, constructed, and maintained in accordance with the latest edition of the* Virginia Erosion and Sediment Control Handbook (VESCH). *Refer to the noted section within the* VESCH (e.g. VESCH 3.18) *for more detailed information. In general, all measures shall be inspected weekly and after each rainfall event for sediment buildup and repaired/cleaned out as needed.*

*Stone Construction Entrance (VESCH 3.02)*

A stabilized stone (VDOT #I course aggregate) pad with filter fabric under liner shall be

provided at the entrance (point of ingress and egress) to the site in order to reduce the tracking of mud onto paved right-of-ways by vehicles entering and leaving the site. Washing of vehicle wheels will also occur on the construction entrance (CE).

The CE shall be maintained in a condition which prevents the tracking of mud and/or sediment onto paved right-of-ways. This may be achieved through addition of stone, washing/reworking existing stone, and/or cleanout of sediment buildup, as necessary. (Note: water trucks may not be used at any time).

*Silt Fence (VESCH 3.05)*

Synthetic filter fabric stretched across and attached to supporting posts are entrenched around the perimeter of portions of the construction site in order to intercept and detain small amounts of sediment from disturbed areas which would otherwise leave the project site.

As per the approved site plan, all silt fence installed on this project shall be super silt fencing meeting all other requirements of VESCH 3.05.

The silt fence (SF) shall be repaired should undercutting occur, fabric decomposes, or the fence becomes ineffective. Upon removal of the SF, any sediment buildup remaining shall be restored to finish grade and seeded/stabilized.

*Permanent Seeding (VESCH 3.32)*

The primary role of permanent seeding and final stabilization with respect to pollution prevention is the ability of this seeding and stabilization to protect disturbed areas from erosion and thus decreasing sediment yield at the first level. Permanent seeding is crucial to pollution prevention and has many specific details; refer to the VESCH and the approved site plan for proper seeding techniques and practices.

*Mulching (VESCH 3.33)*

The use and application of mulch(ing) shall be performed *wherever permanent seeding (above) is applied.* Various types of mulch may be utilized depending on various factors (see *Table 3.35- A* of the VESCH for appropriate/approved mulching media) but all serve the purpose of preventing erosion via protection of the underlying soil and/or to enable the growth of vegetation by increasing available moisture and providing insulation against extreme heat/cold.

*Tree Preservation* & *Protection (VESCH 3.38)*

Tree preservation and protection is to be used to protect desirable trees from mechanical and other injury during land disturbing and construction activity. Tree protection is utilized to ensure the survival of desirable trees where they will be effective for erosion and sediment control, watershed protection, landscape beautification, dust and pollution control, noise reduction, and other environmental benefits while the land is being developed.

*Maintenance of Control Measures*

In general, all erosion and sediment control measures will be checked daily and after each significant rainfall. The following items will be checked in particular:

* + 1. The silt fence barrier will be check regularly for undermining or deterioration of the fabric. Sediment shall be removed when the level of sediment deposition reaches half way to the top of the barrier.
		2. Any/all seeded areas will be checked regularly to ensure that a good stand is maintained. Areas should be fertilized, mulched and reseeded as needed.

**Non-sediment Pollution Prevention**

*The contractor shall determine final location of each measure so long as this location meets or exceeds the pollution prevention capabilities set forth by the permit. Possible locations (i.e. demonstration of compliance with respect to location) are included on site maps in Appendix A.*

*In general, all BMPs shall be inspected for proper functionality every week and after each rainfall event.*

**Material Handling and Waste Management**

*Waste Materials*

All non-hazardous waste materials will be collected and disposed of into an approved metal trash dumpster. This dumpster shall be located in a location that does not receive a substantial amount of runoff from upland areas and is not located near a storm drain inlet. Provisions must be made for the covering of all waste receptacles at the end of each day with a water resistant cover or placing receptacles under another waterproof cover. Trash and construction debris shall be deposited in the dumpster and will not be buried onsite under any circumstance. Waste collection shall be scheduled to prevent the dumpster from overflowing; if overflowing occurs at any point in time, more frequent collection must be coordinated.

*Hazardous Waste Materials*

Hazardous waste materials include items such as oil filters, petroleum products, paint, and equipment maintenance fluids shall be stored in a structurally sound and sealed container. This container shall be clearly marked and separated from non-waste materials; ideally, the hazardous waste container is located near the waste material dumpster. Coordination with waste management authorities is required in order to facilitate proper disposal of hazardous waste. No hazardous waste materials are to be disposed of in the dumpster.

*Sanitary Waste*

A sanitary waste facility (port-a-john) shall be provided within the staging area, removed from any concentrated flow paths and traffic. All port-a-johns shall have secondary containment pans underneath the unit. A second facility may be provided within the staging facility at the contractor's option. Sanitary waste shall be collected three times a week, or more often as necessary. Regular inspections shall be performed for the detection of leaking holding tanks.

**Materials Storage and Staging**

*Materials Storage/Staging Area*

Construction equipment and maintenance materials shall be stored at the combined staging and materials storage area. Gravel bag berms shall be installed around the perimeter in order to designate this area as a staging and storage area. If the contractor opts to store small hand tools, small parts, and/or various other construction materials onsite, a sealed watertight container shall be used strictly for this purpose.

Non-hazardous building materials such as packaging material (wood, plastic, glass) and construction scrap material (brick, wood, steel, metal scraps, and pipe cuttings) shall be stored in a covered storage facility within the staging/storage area. Hazardous-waste materials shall be stored separate from non-hazardous materials in a sealed watertight container under adequate cover.

Large items such as framing materials and lumber shall be stored in the open of the materials storage area and must be elevated on wood blocks in order to minimize contact with runoff.

**Proper Equipment/Vehicle Fueling & Maintenance**

*Various vehicles and heavy equipment/machinery will be used onsite throughout the course of this project. All major fueling and maintenance shall be performed offsite if possible; however, emergency fueling and repair operations, if they are required onsite, shall adhere to the*

*provisions and practices of this section and Spill Prevention and Control.*

*Vehicle/Equipment Fueling and Maintenance*

Fueling to be completed onsite will be via a tank truck or similar container which is mobile and brought to the site. The fueling shall be completed in the staging area with secondary containment positioned to catch any possible spills and should be sized to contain at minimum the most likely volume of fuel which may spill during fueling. A spill containment pallet with waterproof cover shall house any secondary containment and properly disposed of when necessary.

Minor maintenance performed onsite shall occur within the staging area. All fluids generate from maintenance activities will be disposed of into designated drums on a spill containment pallet in hazardous waste area. Absorbent spill-cleanup material (e.g. kitty litter or sawdust) and spill kits shall be made available at the staging area. Any equipment receiving maintenance and any vehicles/equipment parked onsite overnight will have drip pans placed beneath them.

**Equipment/Vehicle Washing**

*Equipment/Vehicle Washing*

Primary equipment and vehicle washing (with detergents) will occur offsite. Should a decision to implement a vehicle wash area onsite is made, a large impervious surface must be provided on which to wash vehicles and a method of directing the wash water to the sanitary sewer must be developed. It is recommended to use high-pressure sprays with no detergent to wash vehicles and blowers or vacuums to dry them if washing becomes necessary.

**Spill Prevention and Control**

*Spill Prevention and Control Procedures*

* + - 1. Employee Training - All employees working onsite on this project must be trained in proper spill prevention and control techniques, both those contained in this plan and those generally accepted and Federally/locally mandated techniques not presented herein.
1. Vehicle Maintenance and Washing - Major vehicle washing and maintenance will occur offsite. Washing or maintenance which does occur will adhere to the principles within *Equipment/Vehicle Washing* and those generally accepted and Federally/locally mandated techniques not presented herein.

iii. Hazardous Materials Storage - Hazardous waste and materials must be handled, stored, and disposed of in accordance with all relevant requirements within this plan and those generally accepted and Federally/locally mandated techniques not presented herein.

iv. Spill Kits - Adequate and/or approved spill kits are required within the materials storage area and the concrete washout area.

v. Spills - All spills must be contained and cleaned immediately upon discovery. Waste generated from cleaning up spills (absorbent material, rags, etc.) will be taken off site and properly disposed of immediately after the spill is cleaned up. Spills of a large magnitude and those large enough to discharge to surface water must be reported to the USCG National Response Center at 1-800-424-8802.

va. A list of all materials and pertinent safety information shall be maintained onsite at all times.

**Stormwater Management**



This project is located within the Location:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. There are no existing stormwater management measures in place on this parcel. The proposed construction will result in the creation of\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

*Stormwater Quality:*

Current Design Information: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

*Stormwater Quantity:*

Current Design Information: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

##### Inspections

*Inspection sheets in Appendix Gshall be modified as necessary in order to meet the following requirements and shall be used only as a template for the specific inspection requirements demanded by this project, unless the unaltered form as provided by the United States Environmental Protection Agency (EPA) is deemed adequate.*

*From 2019 CGP VAR10 effective July 1.2019*

*All of the following inspection requirements (as they apply to this project) shall be met or exceeded.*

*Part I B*

1. The applicable SWPPP inspection requirements specified in Part II F 2 shall be amended as follows for projects discharging to surface waters identified as impaired in the 2016 Section 305(b)/303(d) Water Quality Assessment Integrated Report:
	1. Inspections shall be conducted at a frequency of (i) at least once every four business days or

(ii) at least once every five business days and no later than 24 hours following a measurable storm event. In the event that a measurable storm event occurs when there are more than 24 hours between business days, the inspection shall be conducted on the next business day;

and

* 1. Representative inspections used by utility line installation, pipeline construction, or other similar linear construction activities shall inspect all outfalls discharging to surface waters identified as impaired or for which a TMDL waste load allocation has been established and approved prior to the term of this general permit.

*Part II F*

1. Personnel responsible for on-site and off-site inspections. Inspections required by this general permit shall be conducted by the qualified personnel identified by the operator in the SWPPP. The operator is responsible for insuring that the qualified personnel conduct the inspection.

1. Inspection schedule for projects not discharging to surface waters identified as impaired in the 2016 Section 305(b)/303(d) Water Quality Assessment Integrated Report:
	1. Inspections shall be conducted at a frequency of: (1) At least once every five business days; or

(2) At least once every 10 business days and no later than 24 hours following a measurable storm event. In the event that a measurable storm event occurs when there are more than 24 hours between business days, the inspection shall be conducted no later than the next business day.

* 1. Where areas have been temporarily stabilized or land-disturbing activities will be suspended due to continuous frozen ground conditions and stormwater discharges are unlikely, the inspection frequency may be reduced to once per month. If weather conditions (such as above freezing temperatures or rain or snow events) make

discharges likely, the operator shall immediately resume the regular inspection frequency.

* 1. Representative inspections may be utilized for utility line installation, pipeline construction, or other similar linear construction activities provided that:
		1. Temporary or permanent soil stabilization has been installed and vehicle access may compromise the temporary or permanent soil stabilization and potentially cause additional land disturbance increasing the potential for erosion;
		2. Inspections occur on the same frequency as other construction activities;
		3. Control measures are inspected along the construction site 0.25 miles above and below each access point (i.e., where a roadway, undisturbed right-of-way, or other similar feature intersects the construction activity and access does not compromise temporary or permanent soil stabilization); and
		4. Inspection locations are provided in the report required by Part II F.
1. Inspection requirements
	1. As part of the inspection, the qualified personnel shall:
		1. Record the date and time of the inspection and when applicable the date and rainfall amount of the last measurable storm event;
2. Record the information and a description of any discharges occurring at the time of the inspection;
3. Record any land-disturbing activities that have occurred outside of the approved erosion and sediment control plan;
4. Inspect the following for installation in accordance with the approved erosion and sediment control plan, identification of any maintenance needs, and evaluation of effectiveness in minimizing sediment discharge, including whether the control has been inappropriately or incorrectly used:
	1. All perimeter erosion and sediment controls, such as silt fence;
	2. Soil stockpiles, when applicable, and borrow areas for stabilization or sediment trapping measures;
	3. Completed earthen structures, such as dams, dikes, ditches, and diversions for stabilization;
	4. Cut and fill slopes;
	5. Sediment basins and traps, sediment barriers, and other measures installed to control sediment discharge from stormwater;
	6. Temporary or permanent channel, flume, or other slope drain structures

installed to convey concentrated runoff down cut and fill slopes;

* 1. Storm inlets that have been made operational to ensure that sediment laden stormwater does not enter without first being filtered or similarly treated; and
	2. Construction vehicle access routes that intersect or access paved roads for minimizing sediment tracking;
1. Inspect areas that have reached final grade or that will remain dormant for more than 14 days for initiation of stabilization activities;
2. Inspect areas that have reached final grade or that will remain dormant for more than 14 days for completion of stabilization activities within seven days of reaching grade or stopping work;

(7)

Inspect for evidence that the approved erosion and sediment control plan, "agreement in lieu of a plan," or erosion and sediment control plan prepared in accordance with department approved annual standards and specifications has not been properly implemented. This includes but is not limited to:

1. Concentrated flows of stormwater in conveyances such as rills, rivulets or channels that have not been filtered, settled, or similarly treated prior to discharge, or evidence thereof;
2. Sediment laden or turbid flows of stormwater that have not been filtered or settled to remove sediments prior to discharge;
3. Sediment deposition in areas that drain to unprotected stormwater inlets or catch basins that discharge to surface waters. Inlets and catch basins with failing sediments controls due to improper installation, lack of maintenance, or inadequate design are considered unprotected;
4. Sediment deposition on any property (including public and private streets) outside of the construction activity covered by this general permit;
5. Required stabilization has not been initiated or completed on portions of the site;

(t) Sediment basins without adequate wet or dry storage volume or sediment

basins that allow the discharge of stormwater from below the surface of the wet storage portion of the basin;

1. Sediment traps without adequate wet or dry storage or sediment traps that

allow the discharge of stormwater from below the surface of the wet storage portion of the trap and

1. Land disturbance outside of the approved area to be disturbed;
2. Inspect pollutant generating activities identified in the pollution prevention plan for the proper implementation, maintenance and effectiveness of the procedures and practices;
3. Identify any pollutant generating activities not identified in the pollution prevention plan; and
4. Identify and document the presence of any evidence of the discharge of pollutants prohibited by this general permit.
5. **Inspection report.**

Each inspection report shall include the following items:

* 1. The date and time of the inspection and when applicable, the date and rainfall amount of the last measurable storm event;
	2. Summarized findings of the inspection;
	3. The location(s) of prohibited discharges;
	4. The location(s) of control measures that require maintenance;
	5. The location(s) of control measures that failed to operate as designed or proved inadequate or inappropriate for a particular location;
	6. The location(s) where any evidence identified under Part II F 3 a (7) exists;
	7. The location(s) where any additional control measure is needed that did not exist at the time of inspection;
1. A list of corrective actions required (including any changes to the SWPPP that are necessary) as a result of the inspection or to maintain permit compliance;
2. Documentation of any corrective actions required from a previous inspection that have not been implemented; and
3. The date and signature of the qualified personnel and the operator or its duly authorized representative. The inspection report and any actions taken in accordance with Part II must be retained by the operator as part of the SWPPP for at least three years from the date that general permit coverage expires or is terminated. The inspection report shall identify any incidents of noncompliance. Where an inspection report does not identify any incidents of noncompliance, the report shall contain a certification that the construction activity is in compliance with the SWPPP and this general permit. The report shall be signed in accordance with Part III K of this general permit.
4. **Corrective actions.**
	1. The operator shall implement the corrective action(s) identified as a result of an inspection as soon as practicable but no later than seven days after discovery or a longer period as approved by the VSMP authority. If approval of a corrective action by a regulatory authority (e.g., VSMP authority, VESCP authority, or the department) is necessary, additional control measures shall be implemented to minimize pollutants in stormwater discharges until such approvals can be obtained.
	2. The operator may be required to remove accumulated sediment deposits located outside of the construction activity covered by this general permit as soon as practicable in order to minimize environmental impacts. The operator shall notify the VSMP authority and the department as well as obtain all applicable federal, state, and local authorizations, approvals, and permits prior to the removal of sediments accumulated in surface waters including wetlands.