



**STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER AND WASTE MANAGEMENT
601 57th Street SE
Charleston, WV 25304-2345**

FACT SHEET

**GENERAL WATER POLLUTION CONTROL PERMIT
STORMWATER ASSOCIATED WITH OIL AND GAS RELATED
CONSTRUCTION ACTIVITIES**

1. NAME AND ADDRESS OF APPLICANT

An applicant is any establishment with discharges composed entirely of stormwater associated with oil and gas field construction activities or operations associated with exploration, production, processing or treatment operations or transmission facilities agreeing to be regulated under the terms of this General Permit (except as noted herein). Construction activities are defined as land disturbing operations such as grubbing, grading and excavating operations during site development for commercial or industrial purposes except for operations that result in the disturbance of less than one acre of total land area which are not part of a larger common plan of development or sale. A common plan of development is a contiguous construction project where multiple separate and distinct construction activities may be taking place at different times on different schedules but under one plan.

2. GENERAL WATER POLLUTION CONTROL PERMIT NO: WV0116815

3. COUNTY: Any WV county **RECEIVING STREAM:** Any WV stream

4. PUBLIC COMMENT PERIOD FROM: September 21, 18 - October 21, 18.

5. SIC CODE: 17

6. DESCRIPTION OF APPLICANT'S FACILITY OR ACTIVITY:

Oil and gas field activities or operations associated with exploration, production, processing or treatment operations or transmission facilities.

7. DESCRIPTION OF DISCHARGES:

Earthmoving and grading projects create conditions where accelerated erosion can cause large quantities of soil to be deposited into the streams and rivers of the state. The lack of vegetation, steepening of slopes, increased runoff, decreased infiltration, and other ill effects of construction can cause a 1,000-fold increase in the rate of erosion over pre-existing conditions. The erosion rates on construction sites can run into the hundreds of tons per acre. By volume, sediment is the number one pollutant in the state's waters and degrades more miles of stream than any other pollutant.

8. BACKGROUND

Rapidly expanding extraction of oil and gas from West Virginia's Marcellus, Utica, Ohio shale and other reserves, largely through horizontal drilling, has increased land disturbances in the State associated with extraction and transportation activities. Aside from actual well sites, development of oil and gas reserves is requiring construction of additional pipelines and processing facilities in West Virginia. It is expected that this activity will continue to increase in the next several years.

The State regulates certain aspects of oil and gas operations as established in Chapter 22, Article 6 of the West Virginia State Code. The Department of Environmental Protection (DEP) Office of Oil and Gas permits well sites and pit wastes discharges, as well as a new certification program for large pit or impoundments (greater than 5,000 barrels). Regulations have expanded under the recently passed House Bill 401 and associated Chapter 22, Article 6A. Natural Gas Horizontal Well Control Act. However, prior to this General Permit, stormwater discharges from several oil and gas related construction activities remained unregulated, notably pipelines, access roads, and construction of most transmission and processing facilities.

The West Virginia Water Pollution Control Act, Chapter 22, Article 11 establishes that permits are required for discharge of pollutants and 47 C.S.R. 10-3.2.c. provides that State permits not required by NPDES may follow the procedures set forth in 47 C.S.R. 10. The Agency found that establishing a State General Permit for stormwater discharges from oil and gas related construction activities benefits both the industry and water resource protection by providing for clear guidance and consistent application of pollution control measures for these activities, as well as establishing a level "playing field" for the industry.

9. GENERAL

DWWM, through its permitting system, is responsible for ensuring that wastewaters are identified, receive adequate treatment and are disposed of in accordance with state regulations. Usually this requires an individual permit based on a thorough review of the facility processes and the constituents of its waste stream. The issuance of an individual permit for any facility is a resource intensive and time-consuming process for both the permitting agency and the industry. Therefore, to streamline the process for the benefit of the Agency and industry, this General Permit has been reissued.

10. COVERAGE UNDER THE GENERAL PERMIT

The general permit proposes to provide coverage for any discharges composed entirely of stormwater associated with construction activities of oil and gas field activities or operations associated with exploration, production, processing or treatment operations or transmission facilities be regulated under the terms of the general permit except for:

- A. Operations that result in the disturbance of less than one acre of total land area, which are not part of a larger common plan of development.
- B. Stormwater discharges associated with land disturbing activities that may reasonably be expected to be causing or contributing to a violation of a water quality standard as determined by the Director.
- C. Activities regulated under the Department of Environmental Protection Office of Oil Gas (OOG).
- D. Activities covered under the WV NPDES Stormwater Construction General Permit.

Determination of the disturbed area is made by totaling all disturbed area directly related to construction of the entire project. Offsite waste and borrow sites contiguous to or nearby the construction site or consisting of one or more acres are included in the total disturbance unless borrow sites are covered by other permits.

The Electronic Submission System is used for submitting applications describing the planned project and is used by the Director to review the plans. The public may view the plans at any time by using the Public Query function of the system.

Minor Construction projects are defined as those disturbing one to less than 3 acres of land. Large Construction projects are those that disturb 3 or more acres. Public notice is required for projects discharging to Tier 3 waters, or for land disturbances of 100 or more acres. Also, Public Notice is required for Large Construction projects with a grading phase lasting a year or more.

11. MONITORING REQUIREMENTS

Monitoring is not required as construction activities are usually of short duration and the pollutant associated with construction is primarily sediment. The measures used to minimize sediment related pollution in stormwater related to land disturbing activities are preventative i.e., best management practices (BMPs) and considered to be the best approach to minimize pollutants.

12. WHEN TO APPLY

Applications for Minor Construction Projects shall be submitted 20 days before the anticipated date construction is to begin. Applications for Minor Construction Projects requiring Public Notice shall be submitted 50 days before the anticipated date construction is to begin.

Applications for Large Construction Projects shall be submitted 60 days before the anticipated date construction is to begin. Applications for Large Construction Projects requiring Public Notice shall be submitted 100 days before the anticipated date construction is to begin.

13. SECTION-BY-SECTION RATIONALE

Section A. Terms of Permit

This section is self-explanatory.

Section B. Compliance Requirements

Compliance with this General Permit the approved Stormwater Pollution Prevention Plan (including the sequence of events) and the Groundwater Protection Plan is required upon the beginning of the construction project.

Section C. Management Conditions

This section is boilerplate language essentially extracted from Title 47, Series 10 of the West Virginia Legislative Rules.

Section C.12 describes receiving waters and explains when Enhanced BMPS are required.

Section D. Operation and Maintenance

This section is boilerplate language essentially extracted from Title 47, Series 10 of the West Virginia Legislative Rules modified to meet the requirements of stormwater discharges.

Section E. Definitions

Several definitions are included which relate to the stormwater permitting program.

Section F. Reporting

Section F.1. is boilerplate language essentially extracted from Title 47, Series 10 of the West Virginia Legislative Rules. F.2. contains the spill alert phone number and criteria for immediate reporting. F.2.a. addresses emergency reporting conditions.

Section G. Other Requirements

This section encompasses the requirements specific to the stormwater permitting program and those sites subject to regulation under the general permit.

G.1. This paragraph simply depicts the situations for which the Director may require a facility covered by the General Permit to be covered by a different permit or when such facility may approach the Director on its own initiative to obtain coverage by a different permit.

G.2. This section contains prohibition for non-stormwater discharges and states that an Underground Injection Control Well Permit is required if discharging stormwater into the underground such as through a sinkhole.

G.3. This paragraph details reporting requirements for hazardous substances.

G.4. This section lays out the application requirements, in general, for Large and Minor construction projects.

This general permit establishes minimum standards of practices -BMPs- for specific situations rather than specific effluent limitations for stormwater discharges. This means the BMPs must be appropriate for the site. This General Permit requires the proper installation and maintenance of appropriate BMPs. The application and plans detailing the permittee's schedules and intended BMPs must be submitted for approval. Compliance with the plan must begin prior to earth disturbance.

The development and implementation of the SWPPP is one of the most important parts of this permit and is critical to the successful control of stormwater pollution. The SWPPP must be modified as necessary to include additional or alternate BMPs designed to correct specific problems identified. These adaptive management techniques are designed to result in permit compliance and prevent stormwater discharges that could cause a violation of state water quality standards. The SWPPP must also be modified whenever there is a change in design, construction, operation, or maintenance at the construction site that has, or could have, a significant effect on the discharge of pollutants to waters of the state.

Permittees are required to develop a Groundwater Protection Plan (GPP). For construction sites, the areas of concern will be equipment maintenance yards, including fueling and refueling areas, and product storage facilities. GPPs should address groundwater protection and maintenance of pollution controls.

G.4.a.1. describes applications for Large Construction Projects.

G.4.a.2. describes applications for Minor Construction Projects.

G.5. contains the requirements for the SWPPP and the GPP.

G.5.a. requires signatures on the SWPPP and the GPP.

G.5.b. through G.5.b.4. describes the application deadlines prior to beginning construction.

G.5.b.5. through G.5.b.5.c. describes the sign to be posted near the entrance of the project or at a location convenient to the public.

G.5.c. addresses modifications to the SWPPP and the GPP. This section details general management conditions including preventive maintenance, good housekeeping and spill prevention and response.

G.5.d. through G.5.d.2. explains what the application requires, in addition to the SWPPP/GPP.

G.5.e. is the section details out how the applicant will describe the anticipated construction and stabilization project.

G.6. Discharges to Waters with Approved TMDL's.

Dischargers located in a watershed area where a sediment-related Total Maximum Daily Load (TMDL) has been developed are required implement Enhanced BMPs to demonstrate compliance with applicable waste load allocations.

H. This paragraph serves as a reopener mechanism to go back to an approved registration and place any additional requirements upon the project, as necessary, due to reasonable potential or realized water quality impacts by the stormwater discharges.

I. This section allows for changes in permit conditions in later general permits.

J. This section explains how to properly terminate permit coverage. The steps are: stabilize disturbed areas; verify fees are up-to-date; submit the Notice of Termination (N.O.T.) through the Electronic Submission System. If the Director finds unstabilized areas after receiving the N.O.T., permit coverage may continue, however the permittee must stabilize all areas, submit a new N.O.T., and pay fees during this period. Section J gives timeframes for the Director's staff to conduct the final inspection and allows the permittee the option of submitting a "stabilization certification" from a professional engineer or professional surveyor that will be honored in lieu of final inspections not conducted within the given timeframes.

Appendix A.

This section describes the inspection process and related information.

14. SUMMARY OF SIGNIFICANT CHANGES TO THE GENERAL PERMIT

The draft general permit includes several new or modified requirements and thus differs from the 2013 General Permit. The following list summarizes the significant changes:

A. Authorization to Discharge

"To Whom It May Concern" now contains a statement that the authorization to discharge occurs when the Director approves the application for registration under this general permit.

B. Continuing Coverage at time of Reissuance of the General Permit

The permit was altered to reflect the fact that the permit is being reissued, so the language relative to a first-time permit is out. Item 4 explains to existing permittees the steps to take to continue coverage.

The general permits are issued for 5 years, but applications submitted late in the permit term are subject to the expiration date of the permit and may only get coverage for a very short time frame. To compensate for brief coverage, rollover gives permittees more time to complete their projects without having to immediately apply for coverage under the reissued permit.

Permits must be reissued and permittees are given a new deadline for applying under the new permit, regardless of how little time was approved for a project under the expiring permit.

Permittees who were issued approvals from March 1, 2018 through the effective date are required to submit a certification agreeing to abide by the terms and conditions of the reissued general permit. Certifications will not impose application fees and will require updated progress maps in PDF form and updated timetable for major activities as found in G.5.e.1.A. If no land disturbance has taken place, the progress map is not necessary.

C. Management Conditions

Section C.9. now contains clear language that applicants are to provide any additional information related to the project to the Director; previously the item just referred to information the applicant realized was incorrect or missing. The new wording ensures the Director can obtain the necessary information on which to base an approval or denial of permit coverage.

Section C.11 changed to accommodate an error in the previous permit which only addresses modifications to Site Registration Applications for Large Construction Projects. Nothing was mentioned in C.11 about smaller projects.

Section C.12 "Water Quality" addresses how the permit addresses protection to Waters of the State as outlined in 47 C.S.R. 2 and how permittees are to demonstrate compliance with sediment-related waste load allocations in areas with established Total Maximum Daily Loads (TMDLs) for stormwater discharges related to construction.

C.12 introduces Enhanced BMPs as the approach the permit uses for anti-degradation and for waste load allocation compliance demonstration. The revised permit gives permittees 6 months, after notice from the Director, to comply with new sediment related TMDLs.

DWWM recently public noticed its intent to reissue its two general permits for stormwater discharges related to construction activities. WV0115924 is authorized by the National Pollutant Discharge Elimination System (NPDES) and the other is a state only permit for stormwater related to oil and gas construction activities, Number WV0116815.

Based on comments received from the public, industry, and for the NPDES permit from the EPA, DWWM reviewed each permit in light of its authority for discharge of construction related stormwater into waters of the state.

According to WV 60 C.S.R. 5, protection shall be applied to all waters of the state.

Tier 1 protection applies to all waters, but other Tiers also apply in some cases. Tier 1 protection applies where the level of water quality is not sufficient to support recreation and wildlife and the propagation and maintenance of fish and other aquatic life, or where the water quality meets but does not exceed levels necessary to support recreation and wildlife and the propagation and maintenance of fish and other aquatic life.

Tier 2 - A water segment shall be considered a Tier 2 high quality water where the level of water quality exceeds levels necessary to support recreation and wildlife and the propagation and maintenance of fish and other aquatic life. Degradation for Tier 2 shall be deemed significant if

the activity results in a reduction in the water segment's available assimilative capacity (the difference between the baseline water quality and the water quality criteria) of ten percent or more at the appropriate critical flow condition(s) for parameters of concern.

Tier 3 Protection applies to Outstanding National Resource Waters (ONRW). In order to protect Tier 3 waters, the agency must determine that the proposed activity will be short term in nature and the changes in water quality will be temporary and limited, before the proposed activity may be authorized. Any proposed activity that would result in a permanent new or expanded discharge upstream of an ONRW segment is prohibited except where such source would improve or not degrade the existing water quality of the downstream ONRW segment.

DWWM's approach to construction general permits, whether for NPDES or its state permit follows the same path as EPA's own construction general permit, which relies on BMPs to control the discharge of sediment or sediment-related parameters.

General permits for construction projects are the most effective permitting scheme any state or the EPA has ever conceived.

After carefully reviewing each Tier and confirming general permits are in fact the correct path forward for permitting the largest number of projects, DWWM then considered which BMPs are the most appropriate to protect water quality in each of the Tiers.

To meet anti-degradation, EPA calls for more frequent inspection of BMPs to confirm they're working properly. Also, EPA calls for stabilization of disturbed soils to occur sooner. Increased filtration is the final approach EPA identified for protecting these most sensitive waters.

DWWM follows EPA's approach. Use of these "enhanced BMPs" will allow DWWM to meet its anti-degradation obligations for Tier 2 and Tier 3 waters.

DWWM considered the comments received on both permits regarding compliance with Total Maximum Daily Loads (TMDLs). TMDLs are plans that prescribe reductions to load and wasteload allocations which will result in the attainment of water quality standards. Representation of a wasteload allocation for construction stormwater permits has evolved over time. It is the DWWM's position that all waters subject to TMDLs for sediment or sediment related pollutants be assured the same protection through the construction stormwater permits as Tier 2 and Tier 3 waters.

Though its state-only permit is not subject to NPDES influence, state regulation 60CSR5 directs DWWM along the path to protecting waterbodies from degradation. WV Code §22-11-2 contained the state's policy on protecting its water and here, in the law, the word "reasonable" is found. "It is declared to be the public policy of the State of West Virginia to maintain reasonable standards of purity and quality of the water of the State consistent with (1) public health and public enjoyment thereof; (2) the propagation and protection of animal, bird, fish, and other aquatic and plant life; and (3) the expansion of employment opportunities, maintenance and expansion of agriculture and the provision of a permanent foundation for healthy industrial development."

DWWM determined that both its permits should use the same *reasonable* approach for anti-degradation of its Tier 2 and Tier 3 waterbodies as well as compliance with TMDLs and that is the use of enhanced BMPs. No other approach is “reasonable”.

EPA provides a detailed explanation in their 2017 Construction General Permit (CGP) fact sheet and in the previously issued 2012 CGP fact sheet for using enhanced BMPs.

EPA addresses construction stormwater permitting via a three-pronged approach which includes technology-based effluent limitations, water quality-based effluent limits (WQBELs) and Site Inspection Requirements and frequencies. Although it may sound as if specific limits are assigned to these discharges through technology-based limitations or WQBELs, what is addressed in these sections of their permit and explained in the fact sheet are BMP’s necessary to stop, minimize, and/or control sediment from leaving the disturbed area and discharging into a stream. These non-numeric effluent limitations are designed to prevent the mobilization and stormwater discharge of sediment or sediment-related parameters, such as metals and nutrients, and prevent or minimize exposure of stormwater to construction materials, debris, and other sources of pollutants on construction sites. Nationwide, source control through minimization of soil erosion is relied on as a pragmatic and effective way of controlling the discharge of these pollutants from construction activities.

Section 3.1 of the 2017 CGP states that “EPA expects that compliance with the conditions in this permit will result in stormwater discharges being controlled as necessary to meet applicable water quality standards”.

According to West Virginia’s Integration Implementation Procedures, found in 60CSR5, antidegradation involves protecting a stream’s designated uses at a Tier 1 level if the stream is impaired for a particular pollutant of concern, keeping high quality streams better than criteria unless a lowering of water quality is justified based on socioeconomic considerations (Tier 2) and providing for only short term degradation of Outstanding National Resource Waters (Tier 3).

As mentioned above, EPA’s approach, in the 2017 CGP, to address discharges to a water impaired for sediment or sediment-related parameters, and/or nutrients, or to a water that is identified by the state, as Tier 2, or Tier 3 for antidegradation purposes is to comply with increased inspection frequencies and stabilization deadlines outlined in the permit. As set forth in the EPA permit, the normal inspection frequencies are either to conduct a site inspection once every seven (7) calendar days or conduct a site inspection once every 14 days and within 24 hours of the occurrence of a storm event of 0.25 inches or greater. For a discharge to sensitive waters, EPA requires that the operator must conduct inspections once every 7 calendar days and within 24 hours of a storm event of 0.25 inches or greater. The operator must keep a record of rainfall measured in both instances.

Stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, but in no case more than seven days after the construction activity in that portion of the site has permanently ceased. It also requires that all erosion controls on the site are inspected at least once every seven calendar days and within 24 hours after any storm event of greater than 0.5 inches of rain per 24-hour period.

These standard requirements are more stringent than the standard requirements for the EPA permit and nearly as stringent and protective as the EPA permit requirements to address discharges to waters impaired for sediment or sediment-related parameters, and/or nutrients, or to waters that are identified by the state, as Tier 2, or Tier 3 for antidegradation purposes. The permits would require that additional protective measures be employed at crossings of and in proximity to Tier 3 streams. Additional measures including permanent seeding and mulching must be accomplished within 4 days of reaching final grade; temporary seeding and mulching must be accomplished within 4 days when areas will not be disturbed for more than 14 days; the use of reinforced filtration devices (defined as belted silt retention fence, triple stacked compost filter sock and/or super silt fence) at all downslope perimeters; stream crossings in these areas must be completed within as soon as practicable once the crossing has begun; and disturbance must be limited as much as possible. Additionally, the permit requires all erosion controls in these areas are inspected at least once every seven calendar days and within 24 hours after any storm event of greater than 0.25 inches of rain per 24-hour period.

Since EPA's 2012 CGP fact sheet determined that by imposing on operators that discharge to sensitive waters additional requirements to stabilize exposed areas faster and to conduct more site inspections than other sites does not result in a lowering of water quality, and since the additional requirements to stabilize exposed areas faster and to conduct more site inspections than other sites in the Construction Stormwater General Permit registration in sensitive waters are equal to or more stringent than those used by EPA, it is DWWM's position that following the requirements of the Construction Stormwater General Permit registration will not result in the lowering of water quality. Thus, compliance with the Construction Stormwater General Permit will be sufficient to satisfy Tier 2, and the additional controls outlined in the SWPPP associated with this registration, which exceed EPA required controls to satisfy Tier 3 antidegradation, are sufficient to not result in a lowering of water quality, making individualized Tier 2 or Tier 3 review unnecessary.

Further, specific to West Virginia law pursuant to per Section 3.7 of the Antidegradation Rule 60 CSR 5, a Tier 2 review is not required for general permit registrations. Section 3.7 states that "On or after July 2, 2001, the effective date of these implementation procedures, new and reissued WV/NPDES general permits will be evaluated to consider the potential for significant degradation as a result of the permitted activity. Regulated activities that are granted coverage by a WV/NPDES general permit will not be required to undergo a Tier 2 antidegradation review as part of the permit registration process."

Additionally, as discussed above, the standard requirements in the Construction Stormwater General Permit addressing stabilizing exposed areas and conducting site inspections are nearly as stringent as EPA's additional requirements that are used to meet a Tier 3 review, which allows no degradation. By implementing these controls on all disturbed area under the permit registration coverage, Tier 2 antidegradation is fully addressed and an individual Tier 2 review and its associated baseline water quality is not required.

In waters with approved TMDLs for sediment, applicants will be required to employ the same anti-degradation BMPs. In waters listed as sediment impaired, where TMDLs have not yet been developed, applicants will utilize these same controls.

Section D. Operation and Maintenance

This section was modified to insert BMPs (appropriate for controlling sediment) in place of treatment facilities.

Section E. Monitoring and Reporting

The title of Section E. Monitoring and Reporting changed to Definitions, due to the fact that monitoring is not required. Also, Section E contained nothing about reports. The title was changed to Definitions and the section itself upgraded with more definitions and in some cases, definitions that are clearer.

Section F. Reporting

The previous permit did not provide for construction activities conducted in response to an emergency. This oversight has been corrected and Section F. addresses the reporting of critical potential slope failures. This is due to a review of pipeline construction projects by field staff who found 90 hillside slips, landslides, or mudflows on just 37 permitted projects. Over 3338 acres of land had been impacted by an average of 2.4 slides per project. These numbers do not include the damages done without purview of permit coverage: field staff found a total of 147 slips, landslides, and mudflows.

Section G. Other Requirements

G.2 Prohibition of Non-Stormwater Discharges was modified to include specific types of prohibited discharges, such as those containing oil or solvents, to help permittees understand the intent of the section and prepare better SWPPPs.

G.4. Now addresses, in general, the application requirements for Large and Minor Construction Projects.

G.5 now addresses SWPPPs and GPPs

To be consistent with its NPDES General Permit, DWWM included in G.5.a. that a person who is *Qualified* shall prepare the SWPPP. Also, the section asks that the GPP be submitted for review.

Reliance on groundwater as a source of drinking water is more prevalent in areas that have seen little development. Due to construction of pipelines and other facilities in such areas, protection of underground sources of drinking water should be explained in the GPP.

G.5.b.4. now gives DWWM extra days to review applications, especially those that go to public notice.

G.5.b.5. addresses posting a sign or notice and increases the time an applicant has to get the sign or notice in place. The reissued permit gives 72 hours to do so. Applicants told the DWWM that it was almost impossible to comply with the 24-hour deadline. Ordering a sign, taking delivery, and getting it to the site and posted takes longer than the previous permit provided. The

change was necessary to provide a reasonable time period, rather than forcing applicants into violation status.

The same section contains the requirements for the content of the sign or notice. The content was modified due to the fact that there wasn't enough space on the sign for all the required information. Less information is now required, but there is sufficient contact information for the public to make inquiries.

G.5.d.2. now states that other plans may not be incorporated by reference. Referencing is confusing to the public and DWWM staff spent considerable time on the phone explaining where to find elements of the SWPPP and GPP. Now, each plan will have its own clear, and separate forms to describe their elements.

G.5.e.1.B. no longer requires linear projects to estimate cut and fill, as these projects routinely end construction back to the approximate original contour. However, non-linear projects shall provide cross sections for planned fill areas. Fills should be provided subgrade measures to prevent saturation to provide for stability.

The reissued permit provides greater protection for water quality by having applicants provide more detail about their plans for preventing erosion and controlling sediment.

For offsite Waste and Borrow Sites, DWWM modified the permit to take a more realistic approach to small, non-contiguous sites.

G.5.e.1.B.2. explains what to do when encountering contaminated soils on the construction site.

G.5.e.1.C. The previous permit did not spell out exactly what information should be put on the map so the permit now lists the required contents of the map. It allows maps for non-linear projects to depict 10-foot contours as it's expensive to survey or obtain aerial mapping for 5-foot contours which is used for most of the mapping purposes, but, 10-foot contour maps are not allowed for projects located in areas with slope steepness of 3H:1V.

A Soils Report with map showing the proposed Limits of Disturbance and soil mapping units along with a table describing each unit is required since certain soils are more erosive than others. The applicant should use soils map when selecting sediment controls and the Director will review to verify the controls are appropriate for the type of soils, as depicted on the map.

Previously, maps provided limited information for reviewers, the reissued permit asks for shapefiles. Reviewers are expected to determine if adequate protections are proposed or if projects will be affected by Larger Common Plan of Development or Sale, but for pipeline projects that cross hills (and therefore cross watershed boundaries) it can be extremely difficult to perform a comprehensive review. Also, the public asks for information about portions of pipelines in specific areas of concern. Shapefiles are tools that will allow a thorough review and when all portions of a proposed project can be drawn on a map that's useful to professionals as well as the public, DWWM's reviews are done more quickly.

G.5.e.1.D.1. addresses roads. DWWM staff learned that road construction can be a major source of eroded sediment, so the reissued permit contains revisions which are intended to not only prevent soils from being washed offsite, but avoid landslides, slips, and mudflows.

Due to construction-related landslides, hillside slips, and mudflows, certain projects (non-linear) now require the submittal of cross sections and profiles. The reissued permit recognizes that preventing erosion on steep slopes is difficult, so applicants are asked to provide cross sections and/or profiles to better illustrate how their proposed controls are meant to work.

G.5.e.1.G. asks for applications to describe construction next to water bodies. Low-water crossings, bridge construction, etc., are subjects of concern as working so close to the state's resource can be relatively difficult without causing sediment impacts.

G.5.e.2.A.1. Along with other controls, natural vegetated buffers provide protection against erosion and

G.4.e.2.A.i. has been expanded to explain when buffers are not required.

G.5.e.2.A.i.a. explains delays for stabilizing slips is no longer necessary. Section C.1.1.a. explains that work may be done prior to obtaining permit coverage during emergencies and this section's wording is added to make sure no confusion remains between the two sections.

G.5.e.2.A.2. Over the previous permit term, there has been confusion about substituting sediment and erosion controls for those that were in the approved application. Substitutions may or may not provide equivalent protection for state waters, but the revised permit intends to cut down on uncertainty by having professionals certify that certain major substituted controls meet the functional capability of the controls that were originally approved.

G.5.e.2.A.2.a. addresses the spillway design for sediment traps, which was inadvertently left out of the previous permit.

G.5.2.2.A.3. introduces a new concept, which is somewhat unique to the Oil and Gas construction activities seen over the past 5 years, and that is steep slope construction. This section asks for information regarding these projects.

G.5.e.2.B. was modified to include professional surveyors as those persons who may design and certify permanent structures. These requirements are the domain of certain local governments and entities and those authorities routinely work with engineers *and* surveyors.

G.5.e.2.C.3. was modified to include an explanation of requirements for constructing in vulnerable areas of karst terrain.

The previous permit did not tell permittees how long to maintain records or what type of records to keep. G.5.e.2.C.6. now explains which records to keep and how long (3 years from termination).

G.5.e.2.D. now includes the installation and maintenance of a rain gauge or another method of monitoring rainfall events. Inspections are based on timeframes and on rain. A rain gauge helps the Qualified Person responsible for inspections verify when to inspect after rain events.

G.6. Discharges to sediment related Impaired and TMDL Waters: revised language to require enhanced BMPs.

Section J. Terminating Permit Coverage has changed significantly. Once disturbed areas are permanently stabilized, most permittees want to terminate permit coverage as soon as possible. When DWWM field inspectors, due to lack of resources, are unable to perform the final inspections in an expedited manner, the permittees may either wait until DWWM does the inspection, or they may choose to use the services of a professional. The revised permit now contains a timeline for the Director's staff to conduct final inspections. For those instances when the Director's staff are unable to meet the inspection timeline, the permittee may submit a certification from a professional engineer or surveyor, which will be accepted in lieu of final inspections by DWWM staff.

This section ends the practice of prorating annual permit fees. In practical terms, prorating means that DWWM's accounting staff create an annual permit fee invoice for a portion of a year, based on the date the permittee asserted the site was stable.

Appendix A. This is a new addition to the permit and it describes inspections and inspection requirements. It was added to provide permittees with a thorough explanation of how to conduct proper inspections, when to inspect, and the record-keeping requirements for inspections.

The State of West Virginia, Department of Environmental Protection, Division of Water and Waste Management, has made a decision to reissue the state permit as listed on this fact sheet. Public participation on the proposed reissuance of the permit was received and considered as evidenced by the Responsiveness Summary, the following information was supplied in accordance with Title 47, Series 10, Section 11.3.e.2 and 3, of the West Virginia Legislative Rules.

The Director held a public hearing in addition to the Public Notice advertisements on issues relevant to the draft permit. Many comments were received, some being quite substantive and well intentioned. The draft permit was modified in response to some of these comments, and resulted in the final version signed this day, January 30, 2019.