

DEPARTMENT OF ENVIRONMENTAL PROTECTION
Office of Oil and Gas Management

DOCUMENT NUMBER: 800-2100-008

TITLE: Policy for Erosion and Sediment Control and Stormwater Management for Earth Disturbance Associated with Oil and Gas Exploration, Production, Processing, or Treatment Operations or Transmission Facilities.

EFFECTIVE DATE: December 29, 2012

AUTHORITY: The Clean Streams Law (35 P. S. §§ 691.1--691.1001); the 2012 Oil and Gas Act (58 Pa.C.S. §§ 3201-3274); Sections 1905-A, 1917-A and 1920-A of The Administrative Code of 1929 (71 P. S. §§ 510-5, 510-17 and 510-20); regulations at 25 Pa. Code Chapter 102 (relating to erosion and sediment control) and 25 Pa. Code Chapter 78 (relating to oil and gas wells).

POLICY: The Department of Environmental Protection (DEP) and County Conservation Districts will follow the guidance presented in this document to implement Chapter 102 requirements for earth disturbance activities associated with and gas exploration, production, processing, treatment operations or transmission facilities (Oil and Gas Activities) as well as requirements from Chapter 78 and the 2012 Oil and Gas Act.

PURPOSE: The purpose of this guidance is to inform those engaged in earth disturbance activities associated with oil and gas exploration, production, processing, treatment operations or transmission facilities how to comply with the requirements of Chapter 102 and 78 and the 2012 Oil and Gas Act.

APPLICABILITY: This document is DEP's guidance for evaluating when a person must obtain an E&S Permit for earth disturbance activities associated with Oil and Gas Activities. This document also provides guidance regarding permitting, implementation of post construction stormwater management and site restoration requirements.

DISCLAIMER: The policies and procedures outlined in this guidance document are intended to supplement existing requirements. Nothing in the policies or procedures shall affect regulatory requirements.

The policies and procedures herein are not an adjudication or a regulation. There is no intent on the part of DEP to give these rules that weight or deference. This document establishes the framework, within which DEP will exercise its administrative discretion in the future. DEP reserves the discretion to deviate from this policy statement if circumstances warrant.

PAGE LENGTH: 18 pages

EROSION & SEDIMENT CONTROL FOR EARTH DISTURBANCE ACTIVITIES ASSOCIATED WITH OIL AND GAS ACTIVITIES

I. Permit Requirements

All persons performing earth disturbance activities associated with oil and gas activities must implement and maintain Erosion and Sediment Control Best Management Practices (E&S BMPs) to minimize the potential for accelerated erosion and sedimentation. A person proposing earth disturbance activities must develop and implement a written Erosion and Sediment Control Plan (E&S Plan) when earth disturbance activities will result in total earth disturbance of 5,000 square feet or more, the earth disturbance activity has the potential to discharge to water classified as High Quality or Exceptional Value water under 25 Pa. Code Chapter 93 (relating to water quality standards), or if the person is required to develop an E&S Plan under 25 Pa. Code Chapter 102 or other DEP regulations (e.g. 25 Pa. Code Chapter 105, relating to water obstructions and encroachments and dam safety). A person proposing oil and gas activities that involve five acres or more of earth disturbance over the life of the project must obtain an Erosion and Sediment Control Permit (E&S Permit) prior to commencing the earth disturbance activity.

II. Permit Process

A. Notices of Intent for Coverage under the E&S General Permit for Oil and Gas Activities (NOIs)

An applicant seeking an E&S General Permit for Oil and Gas Activities should submit an NOI to either the Conservation District, DEP Regional Waterways Engineering and Wetlands Program, or DEP Regional Oil and Gas Program depending on the proposed activity to be authorized. All applicants must submit a complete and acceptable application package that contains all of the items listed in the **INSTRUCTIONS FOR A NOTICE OF INTENT (NOI) FOR COVERAGE UNDER THE EROSION AND SEDIMENT CONTROL GENERAL PERMIT (ESCGP) FOR EARTH DISTURBANCE ASSOCIATED WITH OIL AND GAS EXPLORATION, PRODUCTION, PROCESSING OR TREATMENT OPERATIONS OR TRANSMISSION FACILITIES** (DEP Document # 5500-PM-OG0005).

Prior approval from DEP or Conservation District is required for all major modifications to the approved E&S Plan or PCSM/Site Restoration (SR) Plan. Major modifications include but are not limited to new or additional earth disturbance activity and the creation of a new discharge location. All major modifications to the approved E&S Plan require the submittal of a new NOI.

All minor modifications to the E&S Plan or PCSM/SR Plan should be noted on the plan that is available at the site and initialed by DEP or Conservation District staff. DEP should be notified when minor changes to the E&S plan are made. Minor changes to the E&S Plan or the PCSM/SR Plan may include adjustments to BMPs and locations within the permitted boundary to improve environmental performance within the scope of the approved E&S Plan or the PCSM/SR Plan, change in ownership or address, typographical errors and field adjustments on-site such as the addition or deletion of BMPs to address unforeseen circumstances.

Transmission Facilities

NOIs for activities involving construction of transmission facilities should be submitted to Conservation Districts, as defined in Section 3(c) of the Conservation District Law (3 P.S. § 851(c)), which have the authority under a delegation agreement executed with DEP to administer and enforce all or a portion of the erosion, sediment, and stormwater management programs in this Commonwealth. For activities proposed in a county that is not delegated, the review and processing of the E&S General Permit for Oil and Gas Activities will be conducted by the Waterways Engineering and Wetlands Program in the appropriate DEP regional office. Transmission facilities include: transmission lines, transmission system compressor locations, gas purification and scrubber locations that are located “downstream” of the gathering line system.

Conservation Districts will be responsible for inspection and complaint response for all transmission facility earth disturbances. For non-delegated counties, the appropriate regional DEP Waterways Engineering and Wetlands Program shall have this responsibility.

It is the policy of DEP to require only one permit for each construction activity. Projects occurring in two counties should be processed in the County Conservation District where the greater amount of project acreage is located. Coordination of the technical review letter must occur between the two Conservation Districts, with DEP assistance, if necessary. Each district is authorized to charge a plan review fee; however, the processing district retains the administrative filing fee.

Unless otherwise authorized by DEP, construction activities that occur in three or more counties within one DEP regional office are processed by the DEP regional office. In this case, the DEP regional office retains the administrative filing fee. Each Conservation District will review the E&S Plan for their respective counties, and submit the plan review findings to the DEP regional office, which will then generate the plan review letter incorporating the plan review findings and recommendations from each Conservation District.

If, for example, a transmission line crosses more than one regional boundary, each region would get a separate complete ESCGP permit application package for its respective region, and process their own respectively. Again, each district would receive a copy of the E&S Plan for their respective county, and would submit to the regional office their technical deficiency comments. Each region would receive the administrative filing fee.

In regions where it only affects two counties in that region, the county with the majority of the project would receive the complete application package instead of the region and retain the permit filing fee. The county with the least amount of disturbance would coordinate their technical review letter with the other county.

In certain instances, DEP may elect to issue separate permits for extensive linear projects, including, but not limited to, pipeline construction projects. Typically, separate permits will be issued for each county, or other identifiable segment. However, in no case will subdividing the project exempt any portion of the project from permit coverage.

All NOIs submitted for activities involving construction of transmission facilities will be reviewed using a standard review process under DEP's Implementation of the Permit Review Process and Decision Guarantee Policy (Document No. 021-2100-001).

Exploration, Production, Processing or Treatment Facilities

NOIs for activities involving exploration, production, processing or treatment facilities including, but not limited to, well sites, gas gathering or production lines, gathering system compressor stations, impoundments and access roads for these facilities should be submitted to the Oil and Gas Program at the appropriate DEP regional office. Additionally, the Oil and Gas Program field staff is responsible for inspection and complaint response for all earth disturbance activities associated with exploration, production, processing, and treatment facilities.

NOIs submitted for activities involving exploration, production, processing or treatment facilities are reviewed using a standard review process under DEP's implementation of the Permit Review Process and Decision Guarantee Policy (Document No. 021-2100-001), except when an applicant requests and qualifies for permit coverage through the expedited review process as described below.

Expedited Review Process

DEP offers an optional expedited permit process to persons seeking an E&S General Permit. Applicants that qualify for and request permit coverage through the expedited review process will be provided with an acknowledgement of coverage within 14 business days from the submission of a complete and acceptable NOI.

The Applicant is responsible for submitting a complete and technically-adequate application which meets all applicable regulatory and statutory requirements and contains all information needed by DEP to make a final permit decision. Failure to do so will void any Permit Decision Guarantee. Applications that require revisions, additions, corrections or supplements take much longer to review, and thus DEP cannot provide certainty regarding the permit processing timeframe

The expedited permit process is not available for an E&S General Permit for the following earth disturbance activities:

- Projects located in or with the potential to discharge to waters that have a designated or existing use of High Quality (HQ) or Exceptional Value (EV) pursuant to Chapter 93 (relating to water quality standards). Waters that have attained a designated use are listed in Chapter 93. Waters that have attained an existing use are listed at the following website:

http://www.portal.state.pa.us/portal/server.pt/community/existing_use/10557

- Projects in which the area surrounding an oil or gas wellhead that is subject to earth disturbance and that is used or planned for use for the drilling, production or plugging of the well, including associated support activities (such as storage of chemicals, wastewater, drill cuttings, and equipment) will be constructed in or on

a floodplain. For the purposes of this policy a floodplain is the lands adjoining a river or stream that have been or may be expected to be inundated by flood waters in a 100-year frequency flood. *See* 25 Pa. Code § 105.1. Unless otherwise specified, the boundary of the floodplain is as indicated on maps and flood insurance studies provided by FEMA. In an area where no FEMA maps or studies have defined the boundary of the 100-year frequency floodplain, it is assumed absent evidence to the contrary, that the floodplain extends from (1) any perennial stream to 100 feet horizontally from the top of the bank of such perennial stream, and (2) from any intermittent stream to 50 feet horizontally from the top of the bank of such intermittent stream. *See* 58 Pa.C.S. § 3215(5).

- Earth disturbance activities on lands that are known to be currently contaminated by the release of regulated substances as defined in Section 103 of The Pennsylvania Land Recycling and Environmental Remediation Standards Act (Act 2), 35 P.S. § 6026.103.
- Transmission facility projects.

Permits that may be submitted through the expedited process include but are not limited to:

- Well sites, support facilities and associated access roads as described in Section III (A) where no portion of any of the earth disturbance associated with any contiguous well sites, support facilities or access roads meets the criteria listed above. Multiple well sites or support facilities connected via a common access road are considered contiguous.
- Pipelines and other service lines and their associated access roads and facilities that are part of the same common line as described in Section III (A) where no portion of the earth disturbance associated with the line meets the criteria listed above.

NOIs for coverage under an E&S General Permit submitted through the “expedited permit process” must be prepared and certified by a licensed professional (e.g. engineer, surveyor, geologist or landscape architect) who is registered in Pennsylvania and who has attended up-to-date training provided by DEP’s Office of Oil and Gas Management on erosion and sediment control and post construction stormwater management for oil and gas activities. DEP may update this training periodically to address applicable regulatory or policy revisions or revisions to technical guidance relating to erosion and sediment control or post construction stormwater management. When DEP updates this training, a trained licensed professional will need to attend this most current training to continue to prepare and certify NOIs for expedited review. DEP will publish a notice in the Pennsylvania Bulletin when it updates this training. Licensed professionals will have 1 calendar year to attend training after DEP’s notice is published.

The licensed professional is responsible for the development of a complete and acceptable NOI package, including an E&S Plan that specifies E&S BMP implementation and maintenance requirements and a site restoration plan with PCSM BMPs that meet regulatory requirements. All E&S Plan and PCSM/SR Plan drawings

and plan narratives submitted for the expedited review process must be sealed by the licensed professional that prepared the application and plans. The seal must be placed on the cover page of the plan drawings, each plan drawing and on the cover of the narrative.

If a licensed professional routinely submits deficient NOIs, DEP may determine that the licensed professional may no longer submit NOIs under the expedited process. DEP will notify in writing any licensed professional that it determines may no longer submit NOIs under the expedited review. Licensed professionals that have been notified that they are no longer eligible to submit NOIs under the expedited review may request to have their eligibility reinstated by DEP not less than 1 year after receipt of notification that they are no longer eligible. The request for reinstatement should include a demonstration of competency by the licensed professional. The demonstration of competency may include:

- Erosion and sediment control permits or plans that are technically sound and approved by DEP or a Conservation District after the date of suspension. These can include plans submitted for:
 - Standard Review ESCGP For Oil and Gas Activities
 - Chapter 105 Waterway Encroachment Permits
 - General and Individual NPDES Permits for discharges associated with construction
- If the licensed professional does not prepare any erosion and sediment control plans described above, the licensed professional may obtain certification as a Professional in Erosion and Sediment Control and submit that certification to DEP as a demonstration of competency.
- Another form of demonstration approved by DEP.

If, after being reinstated, a licensed professional routinely submits deficient NOIs, DEP may determine that the licensed professional may no longer submit NOIs under the expedited process. Licensed professionals that have been notified that they are no longer eligible to submit NOIs under the expedited process a second time will be permanently excluded from submitting NOIs under the expedited process.

DEP will review NOIs, including E&S Plans and PCSM/SR Plans to ensure that applicants have submitted complete and acceptable applications. The Applicant is responsible for submitting a complete and technically-adequate application which meets all applicable regulatory and statutory requirements and contains all information needed by DEP to make a final permit decision. Failure to do so will void any Permit Decision Guarantee. Applications that require revisions, additions, corrections or supplements take much longer to review, and thus DEP cannot provide certainty regarding the permit processing timeframe.

B. Permit Fees

Fees for review and authorization of new permits and major modifications to previously authorized earth disturbance for Oil and Gas Activities include an administrative filing fee of \$500 plus an additional fee of \$100 for every acre of proposed disturbance. For major modifications, the disturbed acreage fee should only be for the disturbed area being added to the permit. For example, increasing from 100 to 105 disturbed acres with a major modification would require payment for only the additional 5 acres. Fees are not required for authorization of minor modifications to previously authorized earth disturbance for Oil and Gas Activities. A NOI for a phased project should be submitted with an administrative fee of \$500 plus an additional fee of \$100 for every acre of the first phase of the project. Subsequent phases should be submitted with a fee of \$100 for every acre of proposed disturbance for that phase. The administrative filing fee will not need to be paid with each subsequent phase submittal. Acreage fractions greater than or equal to 0.5 should be rounded up to the nearest whole number and acreage fractions less than 0.5 should be rounded down to the nearest whole number. Conservation Districts may charge additional fees in accordance with Section 9(13) of the Conservation District Law, 3 P.S. § 857(13). *See* 25 Pa. Code § 102.6(b).

For NOIs submitted directly to DEP, checks must be made payable to “Commonwealth of Pennsylvania, Clean Water Fund”. All checks are to be dated within 10 days of the application submittal date and sent with the NOI directly to the Oil and Gas Program in the appropriate DEP District Oil and Gas Operations office.

For NOIs submitted directly to a Conservation District, two checks are required. A check for the administrative filing fee of \$500 made payable to “(Name of delegated County Conservation District), Clean Water Fund”. Conservation Districts may charge an additional fee pursuant to 25 Pa. Code § 102.6(b)(3). The second check submitted with the NOI is for the “per acre disturbance fee” of \$100/acre of earth disturbance and should be made payable to “Commonwealth of Pennsylvania, Clean Water Fund.” Both checks must be dated within 10 days of the application submittal date.

C. Co-Permittees

Pursuant to 25 Pa. Code § 102.5(h), operators that are not permittees must be included as co-permittees on the NOI. Section 102.1 defines “operator” as a person who has one or more of the following: (1) oversight responsibility of earth disturbance activity on a project site or a portion thereof who has the ability to make modifications to the E&S plan, PCSM Plan or site specifications; or (2) day-to-day operational control over earth disturbance activity on a project site or a portion thereof to ensure compliance with the E&S Plan or PCSM Plan. Accordingly, for projects that involve earth disturbances associated with the preparation of a well site, the well operator should be included as a co-permittee if the operator is not the permittee.

D. Preconstruction Meetings

Pursuant to 25 Pa. Code § 102.5(e), DEP will conduct a preconstruction meeting for all earth disturbances authorized by an E&S Permit, unless the permittee has been notified otherwise in writing by DEP. The permittee shall invite DEP to attend the

preconstruction meeting and provide at least 7 days' notice of the preconstruction meeting to all attendees. Where notice of a preconstruction meeting has been provided to DEP and the preconstruction meeting is held pursuant to § 102.5(e), but DEP's representatives do not attend the scheduled preconstruction meeting, the earth disturbance activities approved under the erosion and sediment control general permit may proceed. DEP will develop a priority process for conducting preconstruction meetings and use its best efforts to follow that process. Priority projects may include:

1. Projects located in, or with the potential to discharge to, water that have a designated or existing use of High Quality or Exceptional Value pursuant to Chapter 93 (relating to water quality standards);
2. Earth disturbance conducted in or on the following sensitive areas:
 - a. Highly erodible conditions (soils in combination with percent slope) as follows:
 - i. 3% to 8% slope with soil K factor greater than 0.37;
 - ii. 8% to 15% slope with soil K factor greater than 0.28; or
 - iii. 15% slope with soil K factor greater than 0.18
 - b. Geological formations that present a risk to public health, safety and the environment, including:
 - i. Sinkhole development;
 - ii. Land sliding; or
 - iii. Formations with significant potential to cause or contribute to pollution when disturbed including acid, radioactive, and arsenic bearing formations
 - c. Projects located in wetlands or floodplains;
 - d. Well sites that are located on a slope with a cut or fill that has a final vertical height greater than or equal to 40 feet from toe of fill slope to the well site elevation.
 - e. Lands that are currently contaminated from a spill or release or a hazardous material, or hazardous, toxic, or other regulated substance, as those terms are defined in Pa. Code 25 of the Pennsylvania Code, that pose a risk or threat to public health, safety, or the environment;
3. Earth disturbance conducted by a person who is in continuing violation of Chapter 102 (relating to sediment and erosion control) or an E&S Permit for earth disturbance associated with Oil and Gas Activities, where notice of violations or

compliance orders have been issued and the operator is not correcting those violations to the satisfaction of DEP.

III. Permitting Guidelines

A. Defining the Project

Pursuant to 25 Pa. Code § 102.5(c), a person proposing Oil and Gas Activities that involve five acres or more of earth disturbance over the life of the project must obtain an E&S Permit under Chapter 102 prior to commencing the earth disturbance activity. As used in § 102.5(c), DEP interprets “project” to be substantially connected well sites, access roads, pipelines, other service lines, support facilities, and/or other oil and gas activities. Well pads, impoundments and pipelines, etc., may be permitted separately but are considered together solely to determine whether the total project acreage limit of § 102.5(c) has been met and a permit is required. All portions of a project area of 5 acres or more must obtain permit coverage prior to commencing earth disturbance activity.

Well Sites

At a minimum, a well site project includes construction of the well site and access roads. Accordingly, the well site and the access roads are substantially connected and constitute a project for 25 Pa. Code § 102.5(c) solely for permitting purposes. For multiple well sites that are concurrently under construction with a common access road, the well sites and access road are substantially connected and constitute a project. Well sites constructed along a common access road are substantially connected to every other well site that is concurrently under construction along the common access road and constitute a project. For purposes of defining the project for permitting, DEP considers a well site to be under construction until DEP receives the well site’s restoration report.

Roads

Activities involving the construction or improvement of roadways used for the purpose of conducting *Oil and Gas Activities* as defined in § 102.1 that do not meet the definition of *Road Maintenance Activities* as defined in § 102.1 are *Oil and Gas Activities* and may be substantially connected to well sites, pipelines, other service lines or support facilities, and obtain permit coverage.

Activities meeting the definition of *Road Maintenance Activities* as defined in § 102.1 are not *Oil and Gas Activities* and are not substantially connected to well sites, new road construction, pipelines, other service lines or support facilities. However, according to 25 Pa. Code § 102.5(b), a person proposing a road maintenance activity involving 25 acres or more of earth disturbance must obtain an E&S Permit under Chapter 102 prior to commencing the earth disturbance activity.

Pipelines or Other Service Lines

Pipelines or other service lines constructed as part of the same common line or with contiguous earth disturbance are substantially connected and constitute a project. DEP considers pipelines and other service lines that are contiguous along the entire length of

the line from the point of origin to the point of termination to be part of the same common line. Intersection points between pipelines or other service lines may be considered the point of termination for all but one of the intersecting lines. In the case of pipelines, this will generally be the larger line.

Well sites, access roads, and pipelines or other service lines are substantially connected and part of the same project when the well sites are constructed with interconnecting pipelines or other service lines and construction of the interconnecting service lines is commenced prior to completing all of the following items:

- Submission of a restoration report for all well sites to DEP,
- Achievement of permanent stabilization of all disturbed areas, and
- Receipt of the notice of termination acknowledgement from DEP for any erosion and sediment control permits for the connected well sites and access roads.

Pipelines, other service lines, support facilities and/or access roads that are connected to multiple well sites and are constructed after completing all of the following items may be considered independent projects from the well sites:

- Submission of a restoration report for all well sites to DEP,
- Achievement of permanent stabilization of all disturbed areas, and
- Receipt of the notice of termination acknowledgement of any erosion and sediment control permits by DEP for the well sites and access roads

Support Facilities

A support facility, including but not limited to, an impoundment, staging area, tank farm, auxiliary road, parking lot, and borrow area or rock pit (borrow pit), that is within 900 feet of a well site is substantially connected to that well site and is thereby part of that well site project for § 102.5(c) permitting purposes. DEP presumes that borrow pits not regulated by the Non-Coal Surface Mining Conservation and Reclamation Act, permitted centralized wastewater impoundments and centralized freshwater impoundments are part of at least one well site for bonding and restoration requirements in § 78.302 and § 78.65, respectively. These requirements are held separate and independent from determinations of the scope of a project for erosion and sediment control permitting purposes. For additional information regarding mining permit requirements please see Borrow Pits for Oil and Gas Well Activities (Document No. 563-2111-115).

Support facilities that are not substantially connected to a well site may be independent projects from the well site project.

Once the earth disturbance activity, site restoration and permanent stabilization of a project are completed and the Notice of Termination is acknowledged by DEP, additional earth disturbance activity at the project site is a new project.

Permanent stabilization cannot be implemented intermittently in order to keep below the five acre threshold and avoid permit requirements.

IV. Stabilization and Restoration

A. Temporary Stabilization

According to 25 Pa. Code § 102.22(b), upon temporary cessation of an earth disturbance activity or any stage or phase of an activity where cessation of earth disturbance activities will exceed 4 days, the site must be immediately seeded mulched or otherwise protected from accelerated erosion and sedimentation pending future earth disturbance activities.

For the earth disturbance activity or any stage or phase of an activity to be considered temporarily stabilized, the disturbed area must be covered with either a minimum uniform coverage of mulch and seed with a density capable of resisting accelerated erosion and sedimentation or an acceptable BMP which temporarily minimizes accelerated erosion and sedimentation. *See* 25 Pa. Code § 102.22(b).

DEP considers earth disturbance activity to be ceased when earth disturbance activity is no longer occurring on a project site or portion of a project site in accordance with the sequence of BMP installation and removal in the E&S Plan.

B. Permanent Stabilization

According to 25 Pa. Code § 102.22(a), upon final completion of an earth disturbance activity or any stage or phase of activity, the site must have topsoil immediately restored, replaced, or amended, seeded, mulched or otherwise permanently stabilized and protected from accelerated erosion and sedimentation. For the earth disturbance activity or any stage or phase of an activity to be considered permanently stabilized, the disturbed area must be covered with a minimum uniform 70% perennial vegetative cover with a density capable of resisting accelerated erosion and sedimentation or an acceptable BMP which permanently minimizes accelerated erosion and sedimentation. *See* § 102.22(a)(2).

At a minimum all of the following standards should be met:

1. The work area around the well and access road is stabilized with an erosion resistant material such as durable crushed rock, aggregate, gravel or other suitable material, and is capable of supporting the weight of the equipment being used.
2. Appropriate BMPs, such as culverts, rock protected outlets and appropriate erosion resistant linings, are placed in channels, and roadside ditches.
3. The remainder of the disturbed area is stabilized with a minimum of 70% perennial vegetative cover with a density capable of resisting accelerated erosion and sedimentation or, seed and soil amendments are applied and the area is secured with appropriate BMPs such as mulch, erosion control blankets, or seed impregnated erosion control mats so that the required vegetation is established the next growing season. Applying seed and mulch to snow covered areas is not an

acceptable BMP. Seeding and mulching alone is not considered permanent stabilization. Where the vegetation is not compatible with the land use (e.g. cropland) an acceptable BMP that permanently minimizes accelerated erosion and sedimentation must be in place.

4. Temporary BMPs, such as mulch, filter fence, straw bale barriers, filter socks or rock filters, are installed and maintained until the minimum 70% vegetative cover is established.

C. Well Site Restoration

Pursuant to § 3126(a) of the 2012 Oil and Gas Act, each oil or gas well owner or operator must restore the land surface within the area disturbed in siting, drilling, completing and producing a well. This requirement is applicable within all areas of disturbance identified as part of the well site in the project's E&S Plan and PCSM Plan.

Restoration After Drilling

Pursuant to § 3216(c) of the 2012 Oil and Gas Act, within 9 months after completion of drilling of any well, the owner or operator must restore the well site, remove or fill all pits used to contain produced fluids or industrial wastes and remove all drilling supplies and equipment not needed for production. Drilling supplies and equipment not needed for production may be stored on the well site if express written consent of the surface landowner is obtained.

When multiple wells are drilled on a single well site, DEP interprets Section 3216(c) of the 2012 Oil and Gas Act to mean that post drilling restoration is required within 9 months after completion of drilling all permitted wells on the well site and/or the expiration of the all existing well permits on the well site, whichever occurs later in time. 58 Pa.C.S. § 3216(c).

Additionally, DEP interprets Section 3216(c) of the 2012 Oil and Gas Act to mean that post drilling restoration includes the restoration of any centralized wastewater or freshwater impoundments. Centralized wastewater or freshwater impoundments must be restored within 9 months of completion of drilling the last well served by the impoundment or expiration of the last well permit that the impoundment was intended to service.

Finally, DEP interprets Section 3216(c) of the 2012 Oil and Gas Act to mean that post drilling restoration includes the restoration of any borrow pit used to construct access roads or well sites. 58 Pa.C.S. § 3216(c). Borrow pits must be restored within 9 months of drilling the last well on a site that was developed using material obtained from the borrow pit. If additional well sites or access roads will be developed using material obtained from the borrow pit as evidenced by a new valid well permit for a site that was or will be developed from material obtained from the borrow pit within the 9 month restoration period, restoration of the borrow pit is not required until 9 months after the final well on a site developed with material obtained from the borrow pit is drilled.

Under to 25 Pa. Code § 102.8(n), the portion of a site restoration plan that identifies PCSM BMPs to manage stormwater from Oil and Gas Activities permitted in accordance with Chapter 78 may be used to satisfy § 102.8's PCSM Plan requirements if the PCSM/Site Restoration Plan meet the requirements of § 102.8, subsections (b), (c), (e), (f), (h), (i), (l) and when applicable (m).

Section 102.8(b) provides the requirements regarding general PCSM planning and design, including that the management of post construction stormwater must be planned and constructed to the extent practicable to prevent a net change in stormwater volume, rate, and quality when comparing preconstruction conditions to post construction conditions. *See* § 102.8(b)(2), (3). According to § 102.8(f)(8), a PCSM Plan must contain supporting calculations. To fulfill the requirements of § 102.8 subsections (b) and (f), a PCSM/SR Plan should include restoration of disturbed areas to original conditions or meadow in good condition or better. For disturbed areas not restored to meadow in good condition, the PCSM/SR Plan should include supporting calculations and analysis to demonstrate that there will be no increase in the peak rate of stormwater runoff for the 2-, 10-, 50- and 100-year/24-hour event when compared to preconstruction conditions. Additionally, for disturbed areas not restored to meadow in good condition, a PCSM/SR Plan should include supporting calculations and analysis to demonstrate that there will be no net increase in the volume of stormwater runoff for storms up to and including the 2-year/24-hour event the when compared to preconstruction conditions.

DEP considers a well site to be restored under Section 3216(c) of the 2012 Oil and Gas Act when the operator meets the following criteria 58 Pa.C.S. § 3216(c):

1. All permanent post construction stormwater control features as identified in the PCSM/SR Plan are in place.
2. Remaining impervious areas are minimized. *See* 25 Pa. Code § 102.8(b)(4). Impervious areas include but are not limited to areas where the soil has been compacted, areas where the soil has been treated with amendments to firm or harden the soil and areas where soil is underlain with a synthetic or other type of impermeable liner.
3. All areas of the site not needed for production are restored to approximate original conditions including preconstruction contours and capable of supporting the original land uses to the extent practicable. DEP considers the following areas as needed for production:
 - a. Areas used for service vehicle and rig access
 - b. Areas used for storage tanks and secondary containment facilities
 - c. Areas used for well head(s) and appurtenant processing facilities
 - d. Areas used for any necessary safety buffer (a safety buffer is a limited area surrounding equipment that is physically cordoned off to protect the facilities from accidental entry or intrusion)

- e. Areas used to store any supplies or equipment consented to by the surface land owner
- f. Areas used for implementation and management of long term PCSM BMPs
 - i. Pursuant to 25 Pa. Code § 102.8(m)(1) the permittee or co-permittee shall be responsible for long-term operation and maintenance of PCSM BMPs unless a different person is identified in the Notice of Termination and has agreed to long-term operation and maintenance of the PCSM BMPs.
 - ii. Pursuant to 25 Pa. Code § 102.8(m)(2) for any property containing a PCSM BMP, the permittee or co-permittee shall record an instrument with the recorder of deeds which will assure disclosure of the PCSM BMP and the related obligations in the ordinary course of a title search of the subject property. The recorded instrument must identify the PCSM BMP, provide for necessary access related to long-term operation and maintenance for PCSM BMPs and provide notice that the responsibility for long term operation and maintenance of the PCSM BMP is a covenant that runs with the land that is binding upon and enforceable by subsequent grantees and provide proof of filing with the notice of termination under 25 Pa. Code § 102.7(b)(5).

The disturbed area is covered with a minimum uniform 70% perennial vegetative cover with a density capable of resisting accelerated erosion and sedimentation or an acceptable BMP which permanently minimizes accelerated erosion and sedimentation.

Areas needed for production and the proposed final site layout including driveways, storage tanks, locations of wellheads and appurtenant gas processing facilities, safety buffer, equipment consented to by the surface owner and permanent PCSM BMPs should be shown on the site restoration plan drawings. The site should be organized in the most spatially efficient manner practicable to minimize any unrestored area.

Pursuant to 25 Pa. Code § 78.65(3), within 60 days after the restoration of the well site, the operator must submit a well site restoration report to DEP.

Interim Post Construction Stormwater Management

Pursuant to § 3126(g) of the 2012 Oil and Gas Act, the restoration period may be extended by DEP for an additional period of time not to exceed two years upon demonstration by the well owner or operator that:

- 1. The extension will result in less earth disturbance, increased water reuse or more efficient development of the resources; or

2. Site restoration cannot be achieved due to adverse weather conditions or a lack of essential fuel, equipment or labor.

The demonstration must include a site restoration plan that provides for the timely removal or fill of all pits used to contain produced fluids or industrial wastes and the removal of all drilling supplies and equipment not needed for production. In addition, the site restoration plan must include interim post construction stormwater management BMPs. The plan should include a demonstration of compliance with 25 Pa. Code § 102.8(a-m).

Restoration After Plugging

Pursuant to Section 3216(d) of the 2012 Oil and Gas Act, within 9 months after plugging a well, the owner or operator shall remove all production or storage facilities, supplies and equipment and restore the well site. 58 Pa.C.S. § 3216(d). DEP considers a well site to be restored under Section 3216(d) of the 2012 Oil and Gas Act) when the entire well site is restored to approximate original conditions, including preconstruction contours and capable of supporting the original land uses to the extent practicable. 58 Pa.C.S. § 3216(d). When multiple wells are drilled on a single well site, DEP interprets Section 3216(d) of the 2012 Oil and Gas Act) to mean that the 9 month timeframe for permanent restoration begins after plugging the final well on that site. 58 Pa.C.S. § 3216(d).

Pursuant to 25 Pa. Code § 78.65(2) if a well site is constructed and the well is not drilled, the well site shall be restored within 30 days after the expiration of the well permit unless DEP approves an extension application by the well owner or operator for reasons of adverse weather or lack of essential fuel, equipment or labor.

Other PCSM Provisions

If the earth disturbance is not a well site, PCSM requirements are applicable when an ESCGP permit is required.

Existing roads that have been improved (i.e. widened, grade adjusted, etc.) solely for the purposes of servicing oil and gas activities must be restored to their original condition or be provided with PCSM BMPs.

Earth disturbance caused during pipeline construction not restored to original condition must be provided with PCSM BMPs.

V. Phased Projects and Future Conceptual Activities

Under 25 Pa. Code § 102.5(c), “a person proposing oil and gas activities that involve 5 acres (2 hectares) or more of earth disturbance over the life of the project shall obtain an E&S Permit under Chapter 102 prior to commencing the earth disturbance activity.” In some cases, the life of the project as defined above may be a long term or large scale project and the operator may wish to develop the project over time or in phases.

If an operator plans to develop a phased project, but the exact location of wells in the subsequent phases cannot be determined until some wells are drilled, an operator may still seek an E&S General Permit for Oil and Gas Activities for a phased project so long as the operator identifies the anticipated scope, locations, and types of activities of such subsequent phases.

Under the phased project approach, a NOI can be submitted with the initial phase or phases accompanied with detailed construction plans and drawings. The subsequent phases can be submitted without detailed construction plans and drawings but with sufficient detail to describe the scope, location and type of activity to allow DEP to assess the total environmental impact of the project.

To qualify for a phased project, applicants need to submit the following:

A. For the entire project area

1. A completed NOI for ESCGP.
2. An application must be accompanied by a check with the appropriate permit application fee: a \$500 administrative filing fee, and \$100 for each disturbed acre of the first phase of the project.
3. Municipal notifications to all county(ies) and municipality(ies) and proof of receipt. Municipal notification should be made for all phases of the project site in the event that the phased project crosses municipal boundary lines.
4. Complete PNDI form and search receipt(s) for all phases of the project site.
5. An E&S Plan or PCSM/SR Plan containing the following information:
 - a. The existing topographic features for the project site and immediate surrounding area.
 - b. The types, depth, slope, locations and limitations of the soils.
 - c. A narrative description and plan drawings showing the locations and the characteristics of the earth disturbance activity including past, present and proposed land uses and a description of the planned physical alterations, earth disturbances and other construction activities, as well as a general description and location of anticipated BMPs, including BMPs for special protection waters.
 - d. The location of all surface waters which may receive runoff within or from the project site and their classification pursuant to 25 Pa. Code Chapter 93.
 - e. Procedures to ensure the proper handling, storage, control, disposal and recycling of wastes or other materials that have potential to cause pollution.

- f. A narrative description and a map (USGS topographic quadrangle or equivalent) of the project area that identifies the location and characteristics of sensitive areas or areas of environmental concern for the project site. Sensitive areas or areas of environmental concern include but are not limited to: wetlands, special protection waters, historic or cultural resource areas and areas where threatened or endangered special or critical habitat may be present.

B. For the initial phase (and each subsequent phase) of the project:

1. A detailed description identifying the specific BMPs that will be used, plan details, drawings, specifications and a sequence of BMP installation
2. The amount of projected runoff and supporting calculations for each BMP.
3. E&S Plan drawings identifying the location and boundaries of the phase, the locations of BMPs that will be used, construction details, specifications and a legend. Typical sketches may be used but must provide sufficient detail to illustrate critical dimensions and construction requirements.
4. Maintenance program including the inspection of BMPs on a weekly basis and after each stormwater event including a written report documenting each inspection and all BMP replacement, repair and maintenance conducted for each BMP to ensure effectiveness.
5. A site restoration plan that meets the requirements of 25 Pa Code § 102.8, subsections (b), (c), (e), (f), (h), (i), (l) and when applicable (m). Subsection (m) is applicable in cases where long term post construction stormwater management BMPs are needed. Such cases include the construction of permanent, impervious surfaces at a site that will remain after implementation of the site restoration plan and require permanent stormwater management BMPs to meet requirements for rate and volume of stormwater runoff.
6. For subsequent phases only, a check with the appropriate per acre fee, \$100 for each total disturbed acreage of the subsequent phase. The \$500 administrative filing fee is not required after the initial NOI.

Note: Phased Projects and Conceptual Future Activities cannot be used to circumvent the five acre threshold of earth disturbance.

VI. Permit Termination

In accordance with 25 Pa. Code § 102.7, upon completion of post drilling restoration or permanent restoration of the well site as described in section IV *Stabilization and Restoration*, Subsection C *Well Site Restoration* and permanent stabilization of the earth disturbance activity including installation of BMPs as described in IV *Stabilization and Restoration*, Subsection B, *Permanent Stabilization*, the permittee must submit, on a form provided by DEP, a notice of termination to DEP. The notice of termination must include the following:

1. The facility name, address and location.
2. The operator name and address.
3. The permit number.
4. The reason for permit termination.
5. Identification of the persons who have agreed to and will be responsible for long-term operation and maintenance of the PCSM BMPs in accordance with 25 Pa. Code § 102.8(m) and proof of compliance with 25 Pa. Code § 102.8(m)(2) (when applicable).

Until the permittee or co-permittee has received written approval of a notice of termination, the permittee or co-permittee will remain responsible for compliance with the permit terms and conditions including long-term operation and maintenance of all PCSM BMPs on the project site and is responsible for violations occurring on the project site.

The NOT must include the agreement document that transfers PCSM BMP responsibility from the permittee/co-permittee/landowner to the entity accepting long-term operation and maintenance responsibility and provide evidence that an instrument has been recorded with the recorder of deeds. The recorded instrument must identify the PCSM BMP, provide for necessary access related to long-term operation and maintenance for PCSM BMPs and provide notice that the responsibility for long-term operation and maintenance of the PCSM BMP is a covenant that runs with the land that is binding upon and enforceable by subsequent grantees.

The DEP or conservation district will conduct a final inspection and approve or deny the notice of termination within 30 days.