



Maryland Department of the Environment

20-CP NPDES General Permit for Stormwater Discharges Associated with Construction Activity

Presentation for 10/30/2024 - Training by:

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Today's Training Session

- Providing an overview of the 20-CP, with a focus on how to remain in compliance.

With Special Attention to...

- Toxic & hazardous substance contamination – MDE LRP/VCP requirements
- Dewatering turbidity benchmark monitoring and inspection records
- Who is an operator? Who needs permit coverage?
- SWPPP requirements/triggers (e.g., chemical additives)



20-CP Permit Website

Discharges of Stormwater Associated with **Construction** Activity

[Appendix A - Definitions, Abbreviations, and
Acronyms](#)

[Appendix B - Stream Protection Zone \(SPZ\)
Requirements](#)

[Appendix C - Antidegradation Checklist](#)

[Appendix D - Turbidity Reporting Form](#)

https://mde.maryland.gov/programs/water/wwp/Pages/gp_construction.aspx



Maryland
Department of
the Environment

Larry Hogan, Governor
Boyd K. Rutherford, Lt. Governor
Horacio Tablada, Secretary
Suzanne E. Dorsey, Deputy Secretary

GENERAL PERMIT FOR STORMWATER DISCHARGE ASSOCIATED WITH CONSTRUCTION ACTIVITY
General NPDES Permit Number MDR0000
State Discharge Permit Number 20CP0000A
EFFECTIVE DATE: April 1, 2023 EXPIRATION DATE: March 31, 2028
MODIFIED: May 2, 2023

Table of Contents

PART I. PERMIT APPLICABILITY	3
A. Geographic Coverage	3
B. Eligibility Conditions	3
C. Eligible Discharges (Types of Discharges Authorized)	4
D. Prohibited Discharges	5
E. Requiring an Individual Permit or an Alternative General Permit	6
F. Continuation of an Expired General Permit and Permit Coverage	7
G. Duty to Reapply	7
Part II. AUTHORIZATION UNDER THIS PERMIT	7
A. Authorization Request	8
B. NOI Approval Process and Public Notification Period	13
C. Effective Date of Coverage	13
D. Transfer of Authorization	14
E. E&SC Requirements for Coverage	14
F. How to Terminate Coverage	14
Part III. CONTROL MEASURES AND EFFLUENT LIMITATIONS	16
A. Technology-Based Limits	16
1. Control Measure Selection and Design Considerations	16
2. Erosion and Sediment Controls (E&SCs)	17
3. Pollution Prevention Requirements	21
4. Construction Dewatering Requirements	24
B. Water Quality-Based Limits	24
1. General Effluent Limitation to Meet Applicable Water Quality Standards	24
2. Water Quality-Based Conditions for Sites Discharging to Tier II Waters	25
3. Water Quality-Based Conditions for Sites Discharging to Impaired Waters	25
4. Turbidity Benchmark Monitoring to Protect Water Quality	25
C. Site Inspection, Monitoring and Records	27
1. Person(s) Responsible for Inspecting Site	27
2. Frequency of Inspections	27
3. Increase in Inspection Frequency	28
4. Reductions in Inspection Frequency	28
5. Areas That Must Be Inspected	28
6. Requirements for Site Inspections	29
7. Inspection Report	29





Maryland's General Permit 20-CP



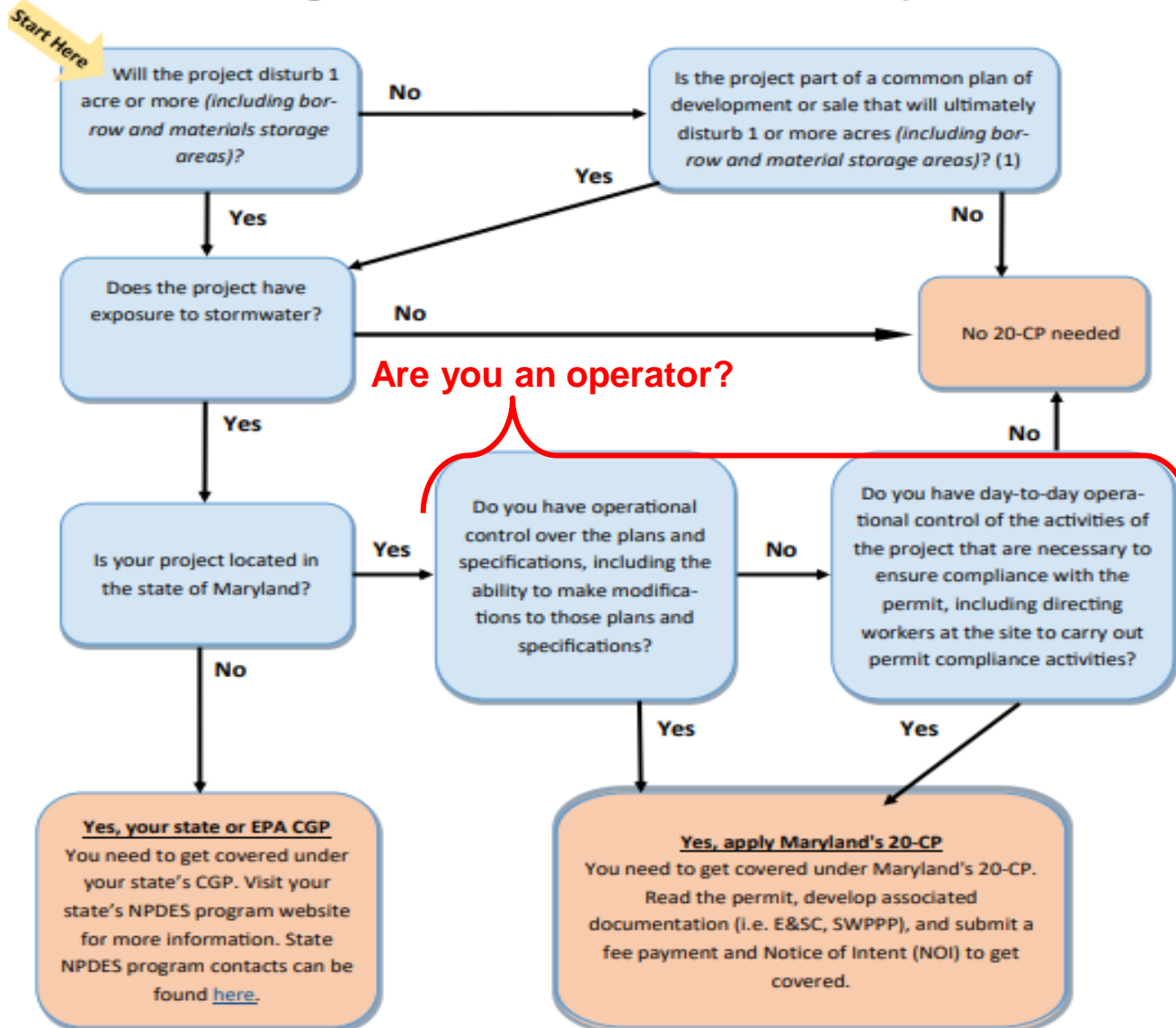
Under the Clean Water Act, coverage under the general construction permit is required for **all operators** whose construction site activities will:

- Will disturb one or more acres of land, or;
- Will disturb less than one acre of land but are part of a **common plan of development** that ultimately disturbs one or more acres (defined in 20-CP Appendix A and later in this presentation)



Do I need a permit?

Do I need to get coverage under the (20-CP) NPDES General Permit for Stormwater Discharge Associated with Construction Activity?



Typically, a project will have two operators – both will fall fairly distinctly into one of the two definitions given by the 20-CP.



Am I an “Operator”?

20-CP “Who Is an Operator?” Guide

This guide provides the definition of an ‘operator’ in the 20-CP NPDES General Permit for Stormwater Discharges Associated with Construction Activity and an evaluation process to help determine which parties have that role. 20-CP general permit conditions require each operator to submit their own NOI for coverage.

For the purposes of the 20-CP (Part I.B.1 Eligibility Requirements) an ‘operator’ is defined as:

- a. The party has operational control over construction plans and specifications, including the ability to make modifications to those plans and specifications (e.g., in most cases this is the owner of the site); or
- b. The party has day-to-day operational control of those activities at a project that are necessary to ensure compliance with the permit conditions including authorization to direct workers at a site to carry out activities required by the permit, correct violations (including repair or installation of erosion and sediment controls (E&SC)), and/or halt construction activity until violations of the permit are corrected; in most cases this is the general contractor (as defined in Appendix A) of the project).

Operators will answer ‘yes’ to any (*not necessarily all*) of the questions below:

1. Does the party control the site plans? Do they have operational control over the construction plans and specifications, including the ability to make modifications? (usually the owner or developer, institution or government entity)
2. Does the party have day-to-day operational control of activities necessary to ensure compliance with the permit? Examples might include: Owner/developer or general contractor in control of hiring/firing subcontractors and/or additional operator
3. Can the party direct workers at the site to carry out activities required by the 20-CP? Example: General contractor/owner that directs third party inspectors
4. Can the party carry out corrective actions independently, including repairing/replacing ESC controls?
5. Can the party halt work until violations are corrected?

This guidance emphasizes that it is the party’s operational control over the construction project that is determinative of whether they are considered an “operator” under the permit. In many cases, there will be two separate parties that have the necessary operational control over the project, and they will fall fairly distinctly into either one of the two types of parties described in the definition in Part I.B.1.a and I.B.1.b. In other cases, there will be one party that exercises both types of operational control over the project. MDE frequently finds that parties with the type of operational control over specific projects within the permit’s meaning of operator are involved in one or more of the following activities:

- Authorizing development/construction activities;
- Procuring project plans and specifications;
- Approving/disapproving project plans and specifications;
- Approving/disapproving project bids;
- Approving/disapproving SWPPPs, and SWPPP modifications;
- Issuing cease and desist orders of construction activities regardless if completed;
- Carrying out or managing construction work on the project site that causes earth disturbance.

This is not a comprehensive list of activities, MDE acknowledges that there are likely other similar decision-making activities not listed here that would be indicative of project specific operational control.

An “operator” will answer “yes” to any (not necessarily all) of these questions:

- Do you control site plans? (e.g., ability to make modifications to the plans/specifications)
- Do you have day-to-day operational control of 20-CP compliance-related activities? (e.g., hiring/firing subcontractors)
- Can you direct workers at the site to carry out 20-CP required activities? (e.g., direct 3rd party inspectors)
- Can you carry out corrective actions independently? (e.g., repairing/replacing ESCs)
- Can you halt work until violations are corrected?





Application Process

Plan Design – include 20-CP considerations (Consult DNR for SSPR areas; consider LRP/VCP status)



Get E&SC and SWM approval from SCD or other approval authority



Assess project to develop stormwater pollution prevention plan (**SWPPP**) and any **Tier II Review**



Submit Complete NOI with ALL required supporting documents



MDE ISPD review and 14 calendar day **public notice**



20-CP authorization granted by MDE



During Project Design Phase...


- ✓ Contact the Maryland Department of Natural Resources if the project is in a **Sensitive Species Project Review Area (SSPR areas)**
- ✓ Confirm if the project is in a **Tier II Watershed** or **LRP/VCP oversight area**
- ✓ Delineate **Stream Protection Zone** (E&SC plans or SWPPP – the SCD may not check)
- ✓ Consider any **Stormwater Pollution Prevention Plan (SWPPP)** requirements



Potential DNR Consultation

- A site may contain Rare, Threatened, and Endangered Species if located within an SSPR area.
- SSPR areas can be located with Merlin – [a web-based mapping system.](#)

For sites within SSPR areas...

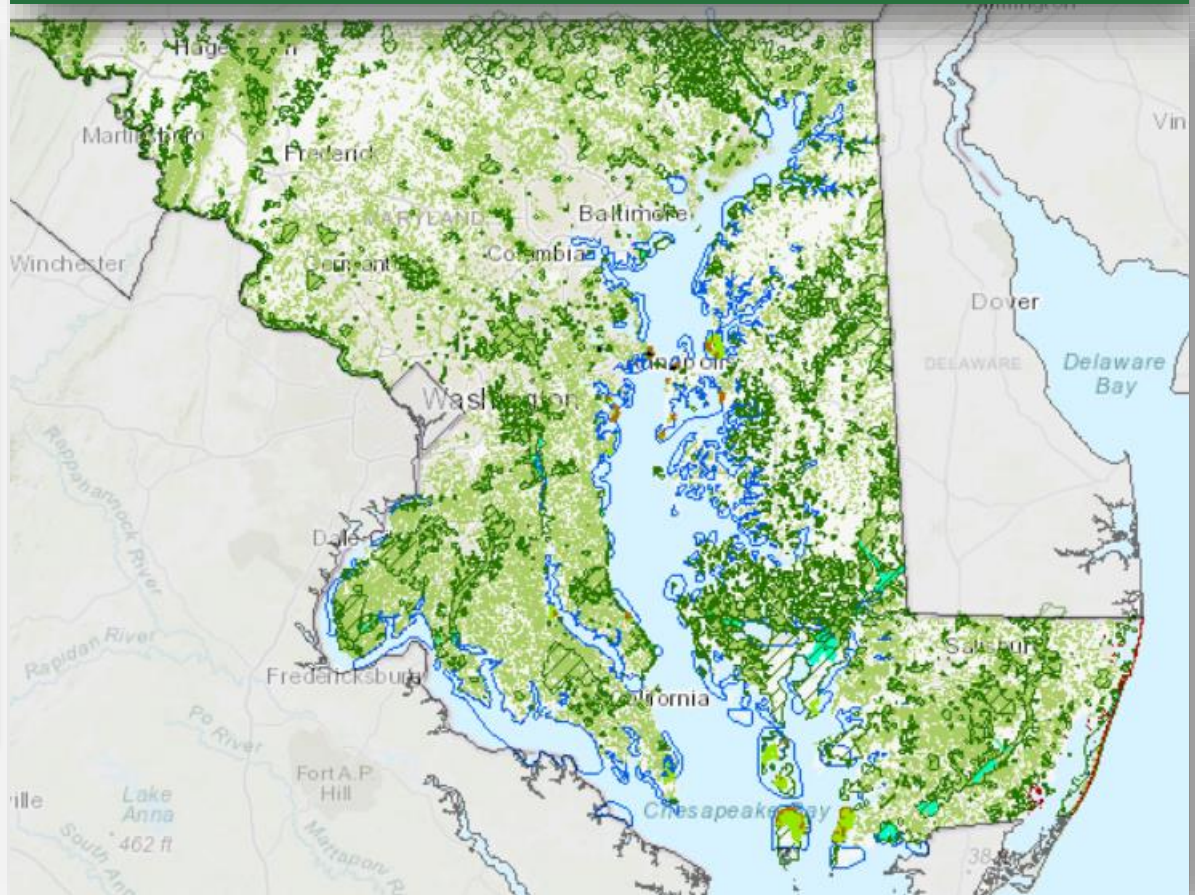
- The NOI will be  flagged in e-Permits
- Permittee must consult DNR
- Permittee should include any additional controls advised by DNR or the approval authority in the E&SC plan and/or SWPPP





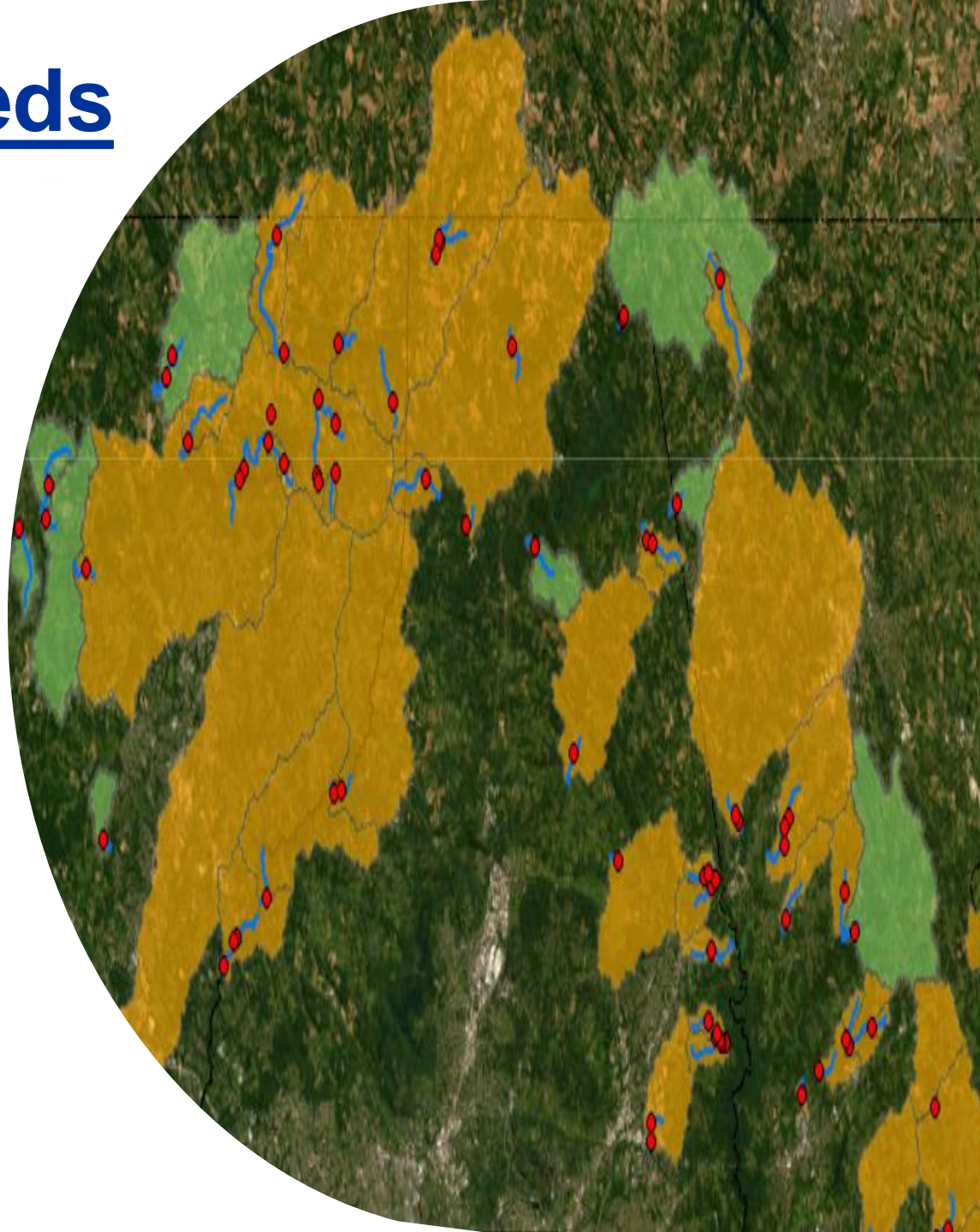
MERLIN-Maryland's Environmental Resource & Land Information Network

- ▼ ☒ Living Resources ...
- ▶ ☐ Fish Blockage Locations ...
- ▶ ☐ Chesapeake Bay Terrapin Habitat ...
- ▶ ☐ Coastal Bays Terrapin Habitat ...
- ▶ ☐ Chesapeake Bay Horseshoe Crab Habitat ...
- ▶ ☐ Coastal Bays Horseshoe Crab Habitat ...
- ▶ ☐ MD Amphibian and Reptile Atlas Grid ...
- ▼ ☒ Sensitive Species Project Review Areas ...



Tier II Watersheds

- “Tier II waters are characterized as having water quality that exceeds the levels necessary to support propagation of fish, shellfish, and wildlife and recreation in and on the water.” – Appendix A of the 20-CP
- Tier II watersheds may be identified through WSA’s [High Quality Waters map](#).





Tier II Requirements

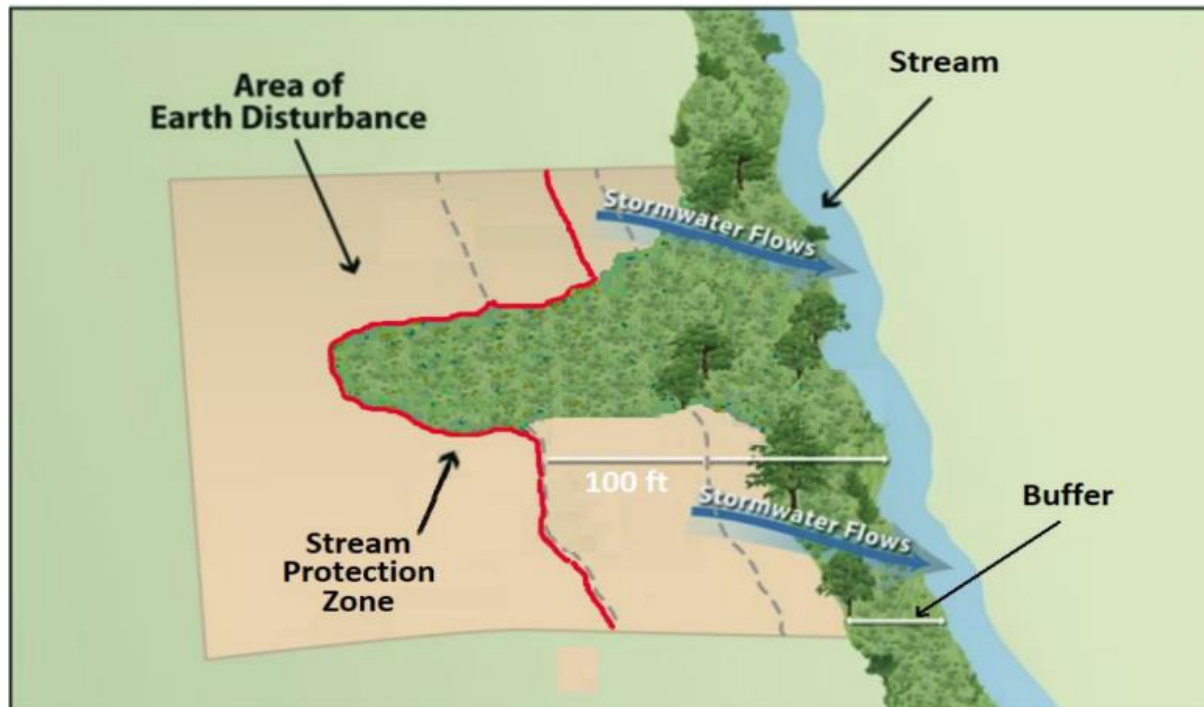
- All operators with discharges within Tier II watersheds must complete an Antidegradation Review (Appendix C) **prior to application submittal.**
- All operators with discharges within a Tier II watershed with **no assimilative capacity** must undergo an additional Tier II Review by MDE's Tier II Review Staff (Angel Valdez) **prior to application submittal.**
 - Social and economic justification, alternatives analysis provisions, stormwater controls you will implement to protect the water resource
 - Angel Valdez at 410-537-3998 or Angel.Valdez@maryland.gov
 - Kara Kemmerer at 410-537-3870 or Kara.Kemmerer@maryland.gov
- All operators with discharges within a Tier II watershed are subject to increased inspection frequencies, turbidity monitoring (if applicable) and increased Stream Protection Zone requirements.



Stream Antidegradation

New Stream Protection Zone (SPZ) requirements require operators to avoid disturbances within:

- 50 feet from the edge of **Tier I** streams.
- An average of 100 feet and not less than 50 feet at any point from the edge of **Tier II** streams.
- **Does not include** waters of the state.





Streams vs. Waters of the State

As defined in Appendix A of the 20-CP...

Waters of this State – includes:

1. both surface and underground waters within the boundaries of this State subject to its jurisdiction, including that part of the Atlantic Ocean within the boundaries of this State, the Chesapeake Bay and its tributaries, and all ponds, lakes, rivers, streams, tidal and nontidal wetlands, public ditches, tax ditches, and public drainage systems within this State, other than those designed and used to collect, convey, or dispose of sanitary sewage; and
2. the flood plain of free-flowing waters determined by the Department of Natural Resources on the basis of the 100-year flood frequency. (See COMAR 26.08.01.01B(103))

Vs.

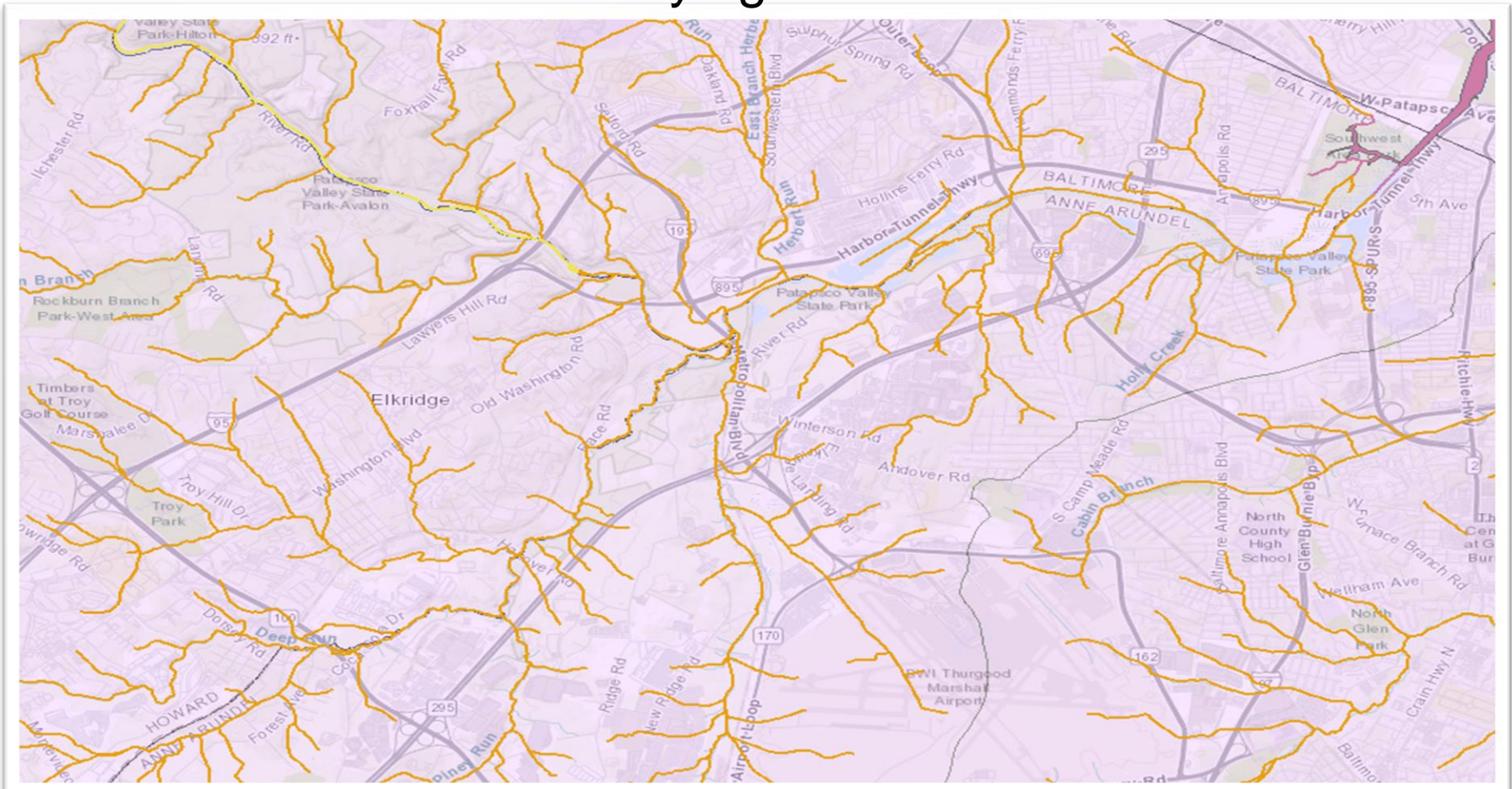
Stream – As used in this permit, stream means a perennial or intermittent stream. A defined channel or bed is indicated by hydraulically sorted sediment, or the removal of vegetative litter, or loosely rooted vegetation by the action of moving water. This does not include ephemeral streams that are formed by water during or immediately after precipitation events.

SPZ requirements only apply to **streams**.



WSA's Surface Waters Map

An [online mapping system](#) utilized for listing the designated use of receiving waters, but also helpful in identifying streams.





Stream Protection Zones (SPZ)

- Appendix B - Stream Protection Zone (SPZ) Requirements

Contents

1.	Construction Sites that are Required to Provide and Maintain Stream Protection Zones.....	1
2.	Stream Protection Zone Alternatives.....	2
3.	Exceptions to the Stream Protection Zone Alternatives.....	4
4.	Requirements for Providing and Maintaining Natural Buffers	5
5.	Guidance for Providing Additional Erosion and Sediment Controls	9



Stream Protection Zones (SPZ)

- Avoid disturbances within 50 feet of **Tier I streams** and an average of 100 feet of **Tier II streams**.
- If disturbance is required within this zone, additional/redundant E&S controls needed:
 - Minimize the disturbance
 - Accelerated Stabilization
 - Upgraded Controls
 - Passive or Active Chemical Treatment
 - Reduction in Size of Grading Unit
- **This information should be included in the SWPPP, if the project has one.**



Approval Authority Discretion

The additional controls included in the 20-CP are examples. Approval authorities may use these examples as a guide when approving projects but may also apply further erosion and sediment control measures based on local site conditions and best professional judgement.

- **SCD may not check for SPZ**
- Discuss SPZ with your plan engineer

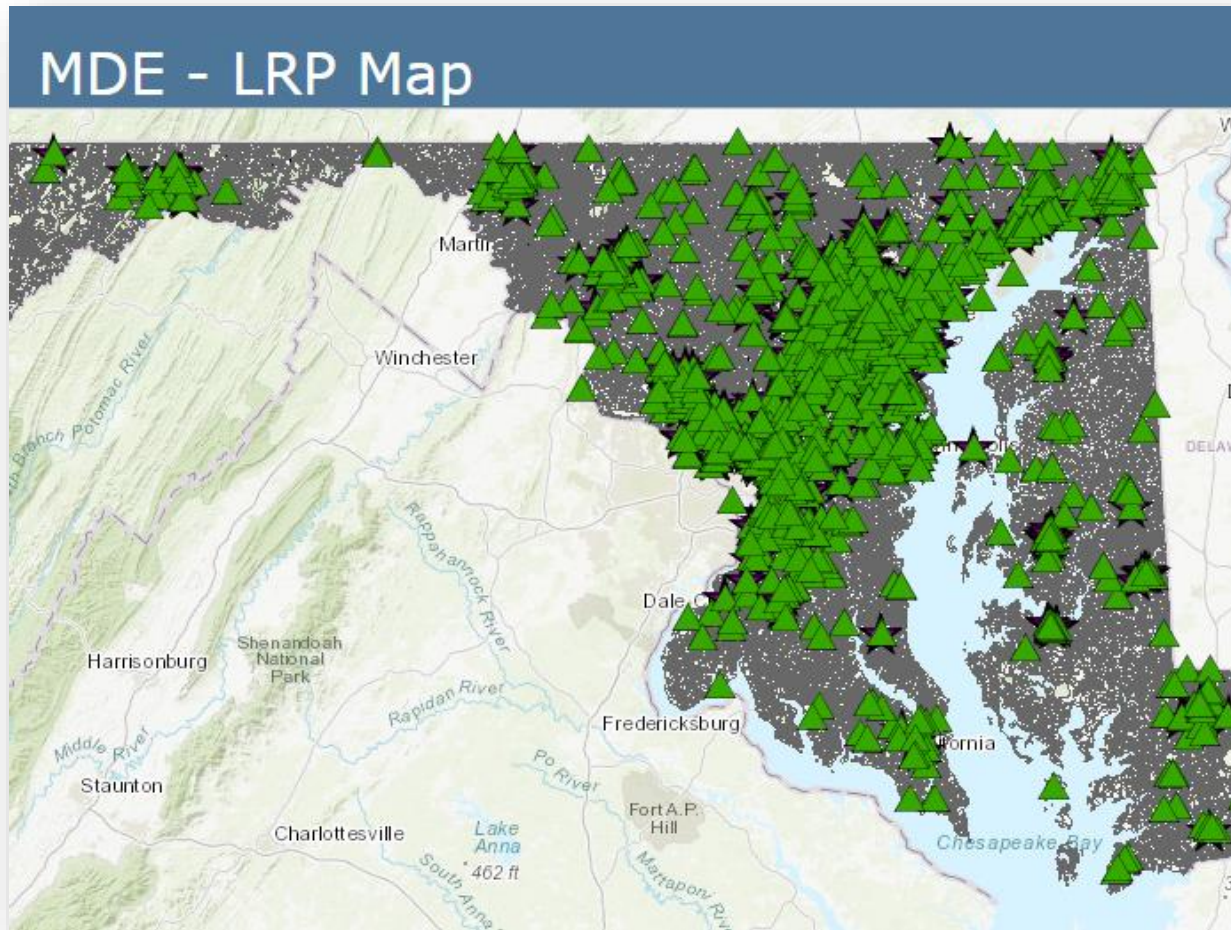


Contaminated Soils

- Projects within LRP/VCP oversight areas may disturb material or soils with known contamination by toxic or hazardous substances.
- Contact LMA and include any LRP/VCP requirements/documentation in your SWPPP **prior to application submittal.**
- LRP/VCP oversight areas may be identified through MDE'S LRP map.



The LRP Mapping System

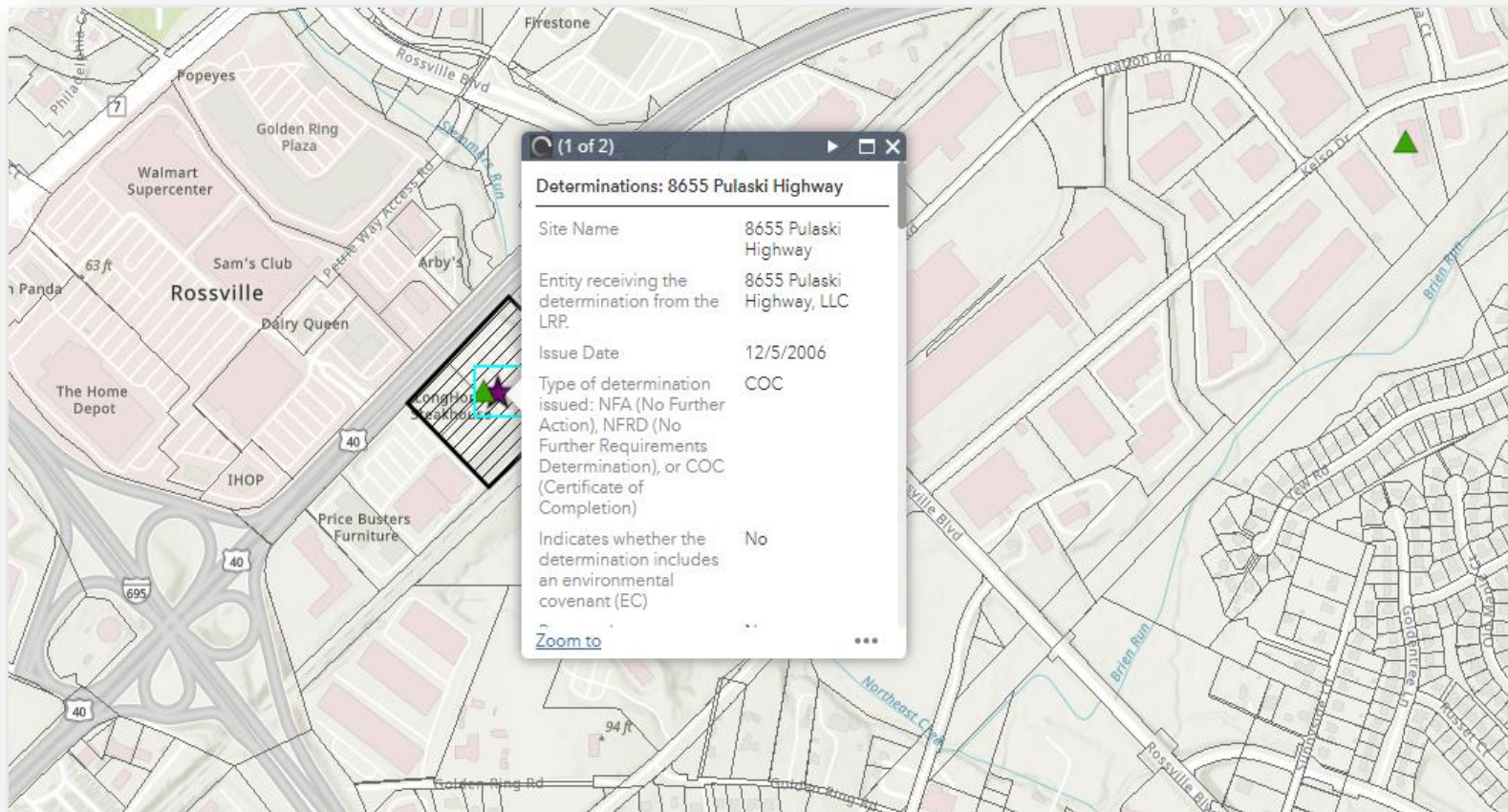


- ▲ LRP Sites
- ★ Determinations
- ▨ Determination Areas



The LRP Mapping System

The LRP mapping system provides further information on LRP/VCP oversight areas, such as LMA's determination of the area, what limitations there may be on activities within the area, etc.



If your project falls within an LRP/VCP oversight area and you would like further information, please visit the [LRP](#) and [VCP](#) webpages for relevant guidance and contact information.



LRP/VCP's Effects on Permitting

- NOIs for projects within LRP/VCP oversight areas may be either held or returned with comments if:
 - Sufficient details/documentation pertaining to the site's contamination concerns has not been provided in the NOI and SWPPP.
 - LMA has additional concerns not covered by the provided details/documentation pertaining to the site's contamination.
- NOIs that have been held will likely experience delayed processing as we consult with LMA on their concerns with the project.



Complete Application...

- **Only complete applications will be posted to public notice.**
- You can no longer add supporting documentation after submitting the NOI.
- Talk to the E&SC approval authority about your Certification of E&SC early.
- Consult DNR, LMA and/or MDE Tier II Review when necessary.



Part II.A – What is a Complete NOI

2. Contents of Notice of Intent. The NOI must include the following:

- a. The site's name, mailing address, and general location;
- b. The site's latitude and longitude in decimal degrees of at least 4 decimals, using a central point within the property boundary;
- c. A vicinity map of the site;
- d. The Operator's name and signatory's signature, address, telephone number, email address;
- e. The preparer's name, organization, email address and telephone number;
- f. The resident agent (for corporations/LLC) name and address, if the business is not incorporated or registered to do business in Maryland;
- g. Federal Tax ID (not required for Individual);
- h. Workers Compensation Certificate of Compliance document provided by the Workers Compensation Commission or Workers Comp Provider and Policy Number;
- i. A brief project description, including existing and proposed land uses;
- j. The type of organization (e.g., Individual, Sole Proprietor, Partnership, Volunteer Organization, Corporation, State, Federal, or Local Government);
- k. Type of construction (e.g., Single-Family Residential, Multifamily Residential, Industrial and Warehouses, Institutional, Commercial, Other Non-residential Construction, Highway or Road, Bridge, Tunnel & Elevated Highway, Water, Sewer, or other Pipeline, Communications & Power Line Construction, Heavy Construction, Not Elsewhere Classified, Wrecking and Demolition Work, Other Special Trade Contractors);
- l. The name of the receiving water(s) (if the discharge is to a municipal separate storm sewer system, the name of the municipal system and the receiving water(s) must be supplied);
- m. A confirmation that the permittee has compared the eventual receiving water(s) with the Maryland 303(d) list, the date on which the comparison took place, and a statement as to whether the eventual receiving water(s) are listed on the 303(d) list as impaired for pollutants such as sediment or PCBs. Indicate the name and location of the impaired water(s) and the pollutant(s) for which the water is impaired;
- n. A confirmation if the receiving water(s) are Tier II (high quality waters), and if so that the antidegradation review and Checklist have been completed (Part II.A.4.b);
- o. The total site area, the total proposed disturbed area;
- p. An indication whether you were exempted or waived from any requirements in the SWM Plan;
- q. The E&SC Plan Approval Authority and Plan ID;
- r. Estimated construction project start date and end date;
- s. Indicate identifying information for the main developer if the activity is part of a common plan of development or sale;
- t. An indication if earth-disturbing activities have commenced on your project/site, and if so indicate if your project is an "emergency-related project";
- u. An indication if there is or will be demolition of any structure built or renovated before January 1, 1980;
- v. An indication if any of the structures being demolished have at least 10,000 square feet of floor space (Part III.B.3);
- w. An indication if disturbing material or soils with known contamination by toxic or hazardous substances (Part I.D.6) and identify the contaminants, (e.g. from sites managed under Maryland's Voluntary Cleanup Program (VCP), Land Restoration Program (LRP), or base on historic land records).
- x. An indication if chemical additives are used for flocculation, and when intending to use a product that is cationic to identify the product (Part I.C.3);
- y. Permit number of any other NPDES Permit you retain for this site, or if part of a common plan the name of the owner, and an indication if this is new or a continuation of coverage (see Table 1); and
- z. An indication if there were any Federal or State listed rare, threatened, and endangered species or designated critical habitat located in the project area and if so are there specific requirements in your E&SC or SWPPP.
- aa. An indication if dewatering benchmarks are applicable.



Application Process

Plan Design – include 20-CP considerations (Consult DNR for SSPR areas; consider LRP/VCP status)



Get E&SC and SWM approval from SCD or other approval authority



Assess project to develop stormwater pollution prevention plan (**SWPPP**) and any **Tier II Review**



Submit Complete NOI with ALL required supporting documents



MDE ISPD review and 14 calendar day **public notice**



20-CP authorization granted by MDE



Senate Bill 471 – Notice Period Extension

(B) (1) SUBJECT TO PARAGRAPH (2) OF THIS SUBSECTION, IF THE DEPARTMENT RECEIVES A WRITTEN REQUEST WITHIN THE PUBLIC NOTIFICATION PERIOD OF THE GENERAL DISCHARGE PERMIT, THE DEPARTMENT SHALL EXTEND THE PUBLIC NOTICE PERIOD TO 60 DAYS TO PROVIDE THE REQUESTOR AN OPPORTUNITY TO COMMENT ON THE POTENTIAL IMPACT OF INADEQUATE CONSTRUCTION SITE CONTROLS ON WATERS OF THE STATE.

(2) THE DEPARTMENT SHALL PROMPTLY:

(I) ACKNOWLEDGE RECEIPT OF THE WRITTEN REQUEST;

(II) NOTIFY THE APPLICANT FOR THE GENERAL DISCHARGE PERMIT OF THE WRITTEN REQUEST AND INCLUDE DETAILS REGARDING POTENTIAL INADEQUACIES OF PROPOSED CONSTRUCTION SITE CONTROLS;

(III) REQUEST AN ELECTRONIC COPY OF THE APPROVED SEDIMENT CONTROL PLAN FROM THE APPLICANT AND PROVIDE A COPY TO THE REQUESTOR; AND

(IV) NOTIFY THE APPLICANT IF ANY UPDATES TO THE SEDIMENT CONTROL PLAN ARE REQUIRED PRIOR TO FINAL AUTHORIZATION OF THE GENERAL DISCHARGE PERMIT.



Who To Contact?

20-CP SWPPP ?'s:

Maryland Department of the Environment (MDE)

- Phone for Industrial Stormwater Permits: (410) 537-3019
- Phone for Other NPDES Permits: (410) 537-3323
- Email: Jennifer.Nitsch@maryland.gov, Matt.Perry@maryland.gov or Paul.Hlavinka@maryland.gov

Tier II Review: General Permit Review ?'s:

Maryland Department of the Environment (MDE)

- Angel Valdez at 410-537-3998 or Angel.Valdez@maryland.gov
- Kara Kemmerer at 410-537-3870 or Kara.Kemmerer@maryland.gov

Stream Protection Zone ?'s:

- Jennifer Nitsch & Matthew Perry
- [Appendix B - Stream Protection Zone \(SPZ\) Requirements](#)
***Discuss with your Erosion and Sediment Control Plan engineer/designer (Erosion and Sediment Control Authority may not check for SPZ)

Rare, Threatened, or Endangered Species Project Review ?'s:

Maryland Department of Natural Resources

- [Wildlife and Heritage Services \(SSPR\)](#) E-Mail: customerservice.dnr@maryland.gov

Erosion and Sediment Control Plan Approval ?'s:

- [Erosion and Sediment Control \(E&SC\) authority](#)

LRP/VCP ?'s:

- [MDE Land Restoration Program \(LRP\)](#)
- [MDE Voluntary Cleanup Program \(VCP\)](#)

Preconstruction Meeting and Compliance ?'s:

- [MDE WSA Compliance Program](#)

**Consider
these early!**





Deadlines for Coverage

Table 1 on Page 12 (Part II.A)

- **New Operator/Site** = minimum 14 days prior to construction commencement/taking over operations
- Add a SWPPP trigger (where no SWPPP was required prior) = **within 7 days of starting the activity and you must have a SWPPP** (no public notice period for these modifiers)
- **Increase in Area** = 14 days prior; an increase of 1 or more acres requires an additional 14 day public notice period

Table 1 - Deadlines for Permit Coverage

Type of Operator	NOI Package Submittal Deadline	Special Instructions
Operator of an Existing Construction Site with an active authorization number under the prior 14GP (i.e., a site where construction activities commenced prior to the effective date of this permit and which did have coverage under the prior 14GP permit).	Within 6 months after the effective date of this permit.	On eNOI select 'Continuation'. No additional fee or public notification period is required. Comply with the terms and conditions of the 14GP in the interim. (This includes sites that filed DOI with an NOI after the 14GP expired).
Operator of a New Site (i.e. a site where construction activities commence on or after the effective date of this permit but before expiration of this permit).	A minimum of 14 days prior to commencing construction activities.	
New Operator (i.e. an operator that through transfer of ownership, operation or both replaces the operator of an already permitted construction site that is either a "New site" or an "existing site").	A minimum of 14 days prior to date that the transfer will take place to the new owner/operator.	No additional fee or public notification period is required.
Amendments to Construction Activity which Adds a SWPPP Requirement (i.e. a request to modify an existing authorization for use of a cationic chemical additive or other triggering activity requiring SWPPP).	Amendments for use of any approved cationic chemical additive must be submitted a week prior to use. All other amendment must be submitted within 7 days of the change.	Amendments are required each time a new approved cationic chemical additive is used, or for the first time an approved anionic chemical additive is used. Amendments are not required for other changes for authorizations that already had a SWPPP.
Increase in Construction Activity (i.e. a request to modify an existing authorization for an increase in project acreage).	A minimum of 14 days prior to increasing construction activities.	If the increase is one acre or more, the process is the same as a new NOI. Fees are only assessed if the modification results in the total acreage being increased to the next fee tier.
Operator of an "emergency-related project" (i.e., a project initiated in response to a public emergency (e.g., mud slides, earthquake, extreme flooding conditions, disruption in essential public services), for which the related work requires immediate authorization to avoid imminent endangerment to human health or the environment, or to reestablish	No later than 7 calendar days after commencing construction activities.	You are considered provisionally covered under the terms and conditions of this permit immediately. After reviewing the NOI, the Department may request more information prior to issuing full coverage or deny continued coverage.



General Permit Background

Eligible Stormwater Discharges

- Stormwater associated with construction/support activities
- Stormwater associated with the creation of staging areas/access roads



Eligible Non-Stormwater Discharges

- Non-stormwater discharges are required to comply with applicable effluent limitations.
- Landscape irrigation, dust control, **construction dewatering water**, wash water, etc.





General Permit Background

Prohibited Discharges

- Fuels, soaps, solvents, CWO, oils, etc.





Not Authorized...

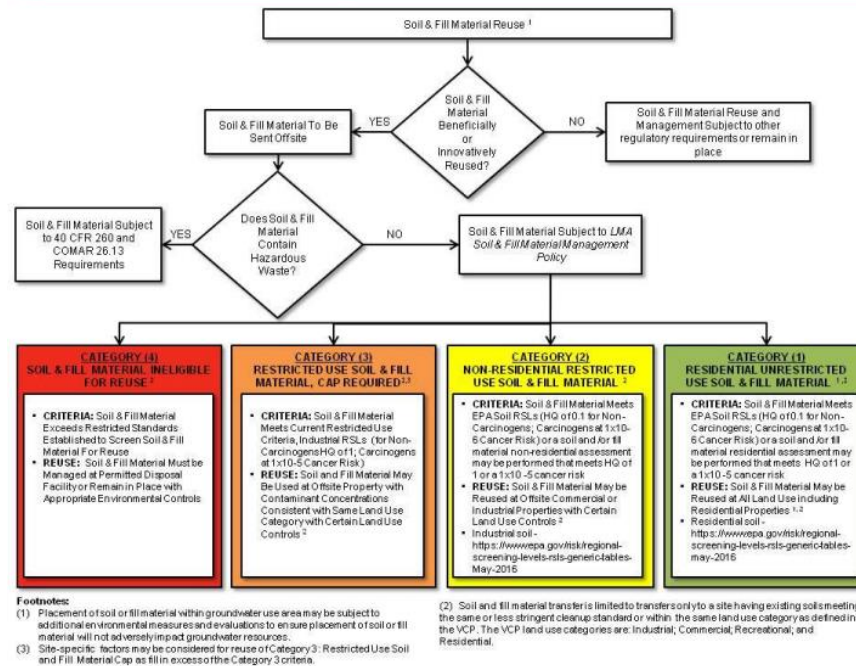
- Water contaminated by toxic or hazardous substances (e.g. from sites managed under Maryland's Voluntary Cleanup Program (VCP) or Land Restoration Program (LRP) or demolition debris contaminated by PCBs) **not addressed by a stormwater pollution prevention plan** and consistent with requirements stipulated by the Department's LMA or WSA.



What's uncontaminated?

- “uncontaminated” means that the discharge does not cause or contribute to an exceedance of applicable water quality standards.

Figure 1: Soil & Fill Material Management Flow Chart





Effluent Limitations

Technology-Based Limits

- Selection and Design Considerations
- Erosion and Sediment Controls (E&SC)
- Pollution Prevention Requirements
- Approved Construction Dewatering Practices

Water Quality-Based Limits

- Water Quality Standards
- Tier II and Impaired Waters
- Turbidity Benchmarks



Tech-based Limits

Part III.A.

- Stormwater controls must be designed, installed and maintained in accordance with Title 4 Subtitle 1 of COMAR and the 2011 ESC Handbook – **Part III.A.1.**
- E&SCs must be implemented in accordance with approved SWM and ESC plans – **Part III.A.2.**
- Specific pollution prevention controls must be implemented to minimize/prevent the discharge of pollutants – **Part III.A.3.**
- Dewatering operations must comply with the requirements in **Part III.A.4** to minimize the discharge of pollutants.



Water Quality Standards

Consist of three parts:

1. Designated uses of waters of the state
2. Water quality criteria to protect the designated use
3. Antidegradation Policy

COMAR 26.08.02.01

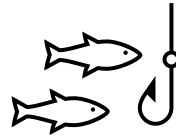


Designated Use...

(a) Water contact recreation;



(b) Fishing;



(c) Propagation of fish, other aquatic life, and wildlife; and



(d) Agricultural and industrial water supply.



COMAR Water Quality Criteria

NO floating debris, oil, grease, scum, sludge, and other floating materials in amounts sufficient to cause the receiving water(s) to be unsightly;

NO Change the existing color to produce objectionable color for aesthetic purposes, or

NOT Interfere directly or indirectly with designated uses; or elevate temperature which interfere directly or indirectly with designated use

Dewatering (Part III.A.4)

4. Construction Dewatering Requirements

Comply with the following requirements to minimize the discharge of pollutants from dewatering operations, in accordance with Part I.C.2.

- a. Route dewatering water through a sediment control designed to minimize discharges of pollutants and prevent discharges with visual turbidity (as defined in Appendix A). Appropriate controls are identified in the ESC Handbook Section F and may require additional use of chemical additives as provided in this permit that are designed to remove sediment.
- b. Do not discharge visible floating solids or foam;
- c. Use an oil-water separator or suitable filtration device (such as a cartridge filter) that is designed to remove oil, grease, or other products if dewatering water is found to contain these materials;
- d. To the extent feasible, use well-vegetated, upland areas of the site to infiltrate dewatering water before discharge. You are prohibited from using Waters of this State as part of the treatment area;
- e. To prevent dewatering-related erosion and related sediment discharges;
 - i. Use stable, erosion-resistant surfaces (e.g., well-vegetated grassy areas, clean filter stone, geotextile underlayment) to discharge from dewatering controls;
 - ii. Do not place dewatering controls, such as pumped water filter bags, on steep slopes; and
 - iii. At all points where dewatering water is discharged, comply with the velocity dissipation requirements of Part III.A.2.1;
- f. With backwash water, either haul it away for disposal or return it to the beginning of the treatment process;
- g. For any approved manufactured treatment systems, replace and clean the filter media used in dewatering devices when the pressure differential equals or exceeds the manufacturer's specifications; and
- h. Comply with dewatering-specific inspection requirements in Part C.

- Requires the selection of certain E&S controls and practices.
- Requires visual monitoring.
- Must consider potential pollutants.
- May necessitate additional specific inspection requirements related to turbidity.

Turbidity Benchmark Monitoring

- Page 26, Part III.B.4
- Required for any site **discharging dewatering water to a Tier II watershed or waters impaired for sediment.**
- In other words, the usage of any of the approved dewatering practices from the 2011 ESC Handbook. (E.g., removable pumping station, sump pit, portable sediment tank, filter bag.)



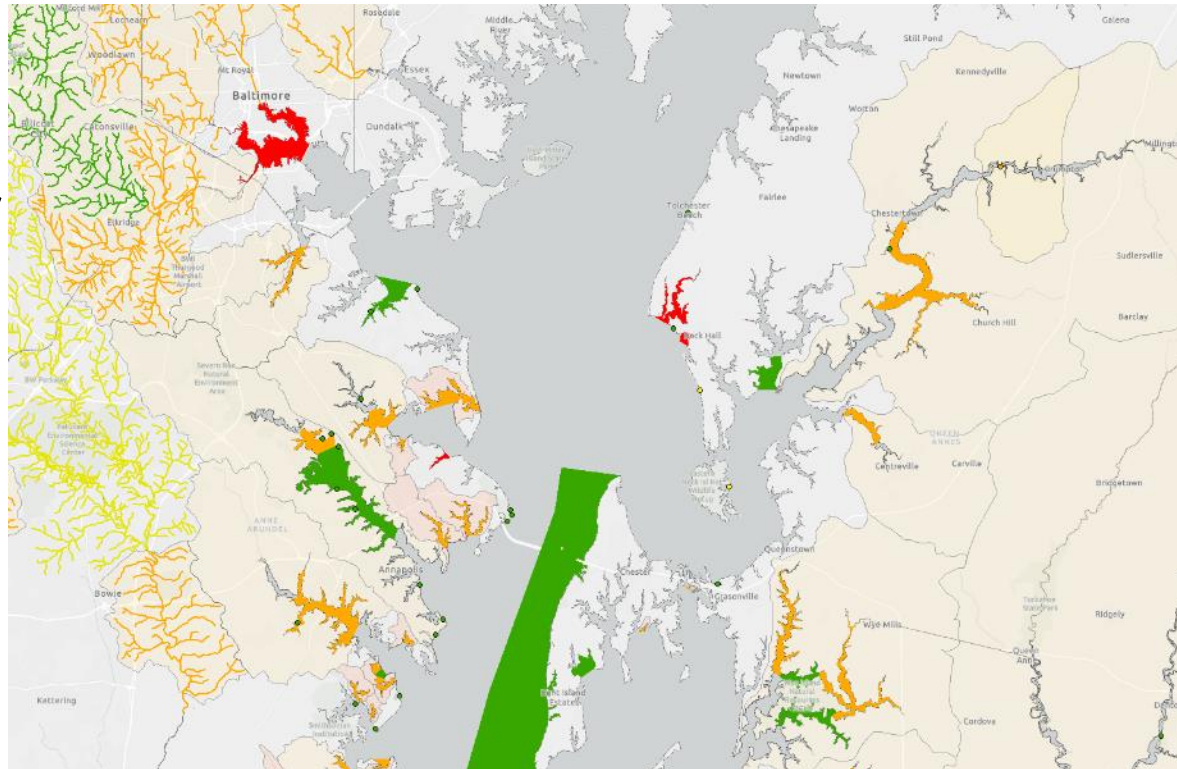


Impaired Water Monitoring

Turbidity Benchmark Monitoring Applies to receiving waters impaired for sediment or Tier II

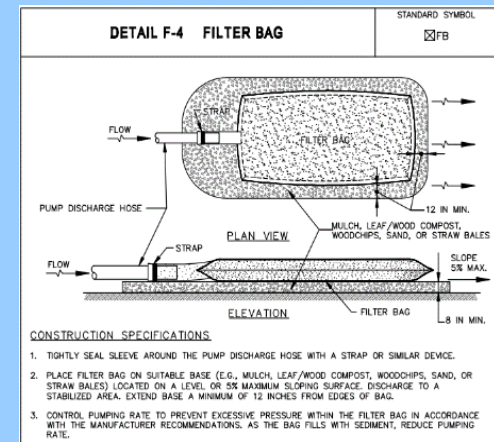
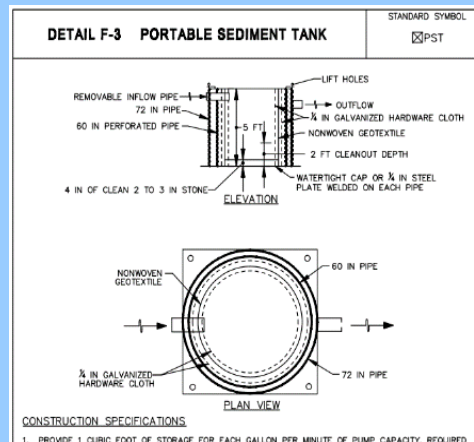
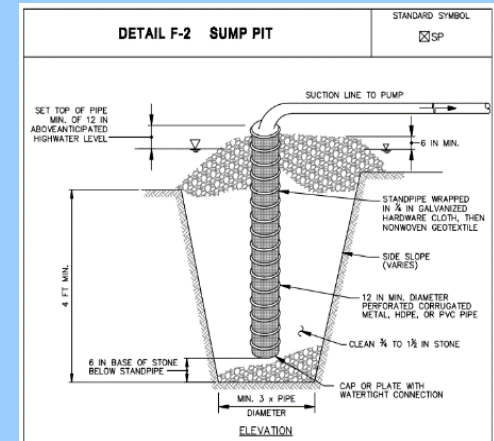
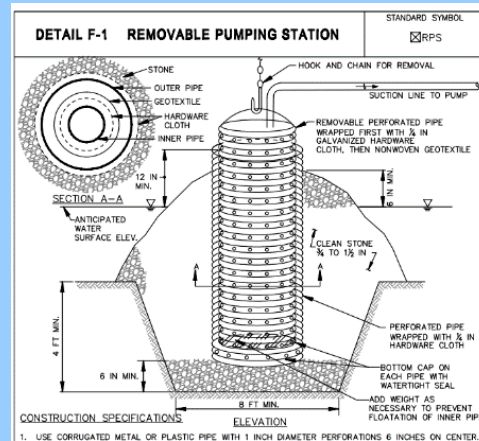
- 2-Meets Water Quality Criterion
- 3-Insufficient Information
- 4a-Impaired, TMDL Complete
- 5-Impaired, TMDL Needed

Orange (4a) or Red (5) = Impaired for sediment



(Similar process for Tier II Identification)

Dewatering Practices (2011 ESC Handbook)



Dewatering is...

“The act of draining accumulated stormwater and/or ground water from building foundations, vaults, well point system, and trenches.”
– 20-CP Appendix A



Turbidity Benchmark Monitoring

- Necessitates:
 - Turbidity sampling and dewatering inspections at **each dewatering discharge point once a day for every day dewatering discharge occurs.**
 - The comparison of turbidity samples to the standard **150 NTU benchmark.**
 - The maintenance of a daily log of turbidity measurements.
 - The submission of a turbidity monitoring report (Appendix D) via e-Permits **following the end of each monitoring quarter.**



Turbidity Sampling and the 150 Benchmark

- **Test Methods** – Samples must be taken and measured with a turbidity meter that reports in NTUs and conforms to Part 136 of the Federal Regulations (e.g., methods 180.1 and 2130); the meters must be calibrated prior to each day's use.
- **Sampling frequency** – Once per day.
- **Sampling location** – At each dewatering discharge point – after the usage of other ESCs/BMPs (though you may sample prior to other ESCs/BMPs as well).
- **Representative samples** – Samples should be taken during “in the middle of” dewatering (not just as dewatering begins/ends).
- Sampling results must be compared to the **daily maximum of 150 NTUs.**

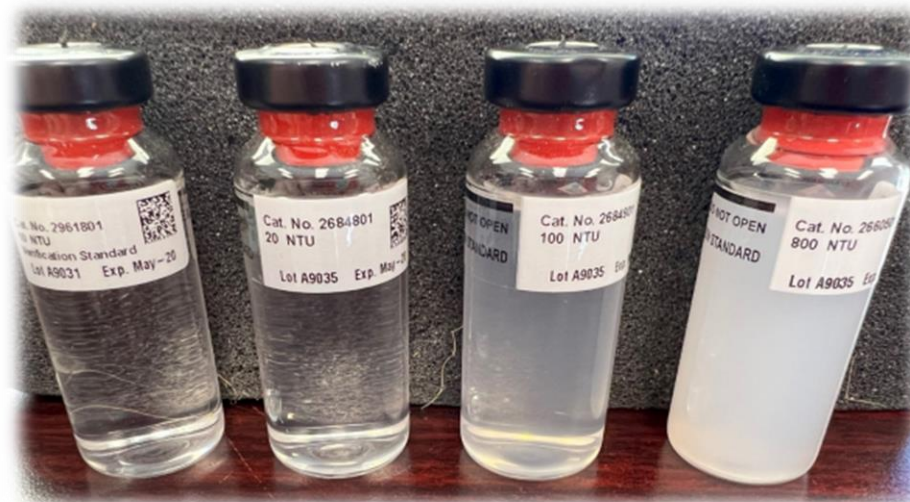
Dewatering Inspections

- Dewatering inspections must be conducted **during the discharge of dewatering water, once per day on which the discharge occurs** (Parts III.C.3.b and III.C.7.d).
 - Conducted at the discharge location
 - Look for plumes, sheens, odors, colors, etc. at the point of discharge to receiving waters.
 - **If any triggering events are observed, a corrective action is required (Part III.D.5).**
- Dewatering inspection reports require:
 - Start and end times (approx.) of the discharge.
 - Whether the discharge was continuous.
 - An estimate of the rate in gallons per day.
 - Whether there was any indications of pollutant discharge observed at the discharge point.
 - To be submitted alongside regular inspection report.



The Daily Maximum Threshold

- The benchmark threshold for turbidity is a daily maximum of **150 NTUs**.
 - **An exceedance of 150 NTUs is not a violation on its own!**
 - Exceeding this threshold requires a corrective action (Part III.D.5).
 - If no correction action is taken, **this is a permit violation.**





Turbidity Violations

- Turbidity may not exceed levels detrimental to aquatic life.
- Turbidity in the surface water resulting from any discharge may not exceed 150 units at any time or 50 units as a monthly average.
- **Any in-stream color change is a violation.**



Dewatering Corrective Actions

- a. Immediately take all reasonable steps to minimize or prevent the discharge of pollutants until you can implement a solution, including shutting off the dewatering discharge as soon as possible depending on the severity of the condition taking safety considerations into account;
- b. Determine whether the dewatering controls are operating effectively and whether they are causing the conditions; and
- c. Make any necessary adjustments, repairs, or replacements to the dewatering controls to lower the turbidity levels below the benchmark or remove the visible plume or sheen.

When you have completed these steps and made any changes deemed necessary, you may resume discharging from your dewatering activities.

- If any triggering actions (i.e., 150 NTU exceedance or signs of pollutant discharge) are observed, you must:
 - Stop the dewatering
 - Examine your dewatering equipment and determine if adjustments need to be made.
 - Make any necessary adjustments, repairs, etc.
 - **Then you may resume dewatering.**



Turbidity Monitoring Reporting

- A log of daily turbidity measurements (and calibration data) must be maintained
- Turbidity Monitoring Report (TBM) must be submitted via e-Permits no later than 28 days after each monitoring quarter.
 - [Appendix D of the 20-CP](#)
 - Summary of daily turbidity data, indicate if no discharge during certain weeks
 - **One operator can fulfill all turbidity monitoring requirements on behalf of multiple other operators at the same site, including the submission of the TBM!**



Turbidity Monitoring Reporting Cont.

In accordance with MDE Turbidity monitoring requirements, please upload your form to the NPDES application using the following schedule in the Permit if dewatering activity is occurring, please amend the NOI to remove the dewatering requirement.

Monitoring Quarter #	Months	Reporting Deadline (no later than 28 days after the end of the monitoring quarter)
1	January 1 - March 31	April 28
2	April 1 - June 30	July 28
3	July 1 - September 30	October 28
4	October 1 - December 31	January 28

Click [HERE](#) to open the Turbidity Benchmark Monitoring Data Reporting Form.

If you have any questions or concerns regarding your status, contact MDE's Administrative Team for the General Permit For Discharges of Stormwater Associated With Construction Activity Maryland General Permit No. 20-CP at mde.constructionwnoi@maryland.gov or 410-537-3019.

Visit <https://egov.maryland.gov/mde/npdes> to access the MDE Permit Authorization Portal to view the status of your application or to access technical support.



Important Notes / FAQ

- One operator may fulfill the turbidity monitoring requirements of multiple other operators at the same site.
 - Avoids duplicate work and streamlines reporting
 - **Does not** exempt those other operators from their responsibility to remain compliant with turbidity monitoring requirements
 - **Does** exempt those other operators from having to submit quarterly TBMs, if the “representative operator” is fulfilling all requirements
 - These coordinating arrangements must be described in the SWPPP
- If dewatering to a basin, and the volume being pumped to the basin doesn't result in a discharge, then turbidity benchmark monitoring isn't required.
- Turbidity sampling should be performed at each dewatering discharge point, after the usage of other BMPs/ESCs.



Turbidity Reporting Form

SECTION IV. MONITORING QUARTER					
Monitoring Quarter	Identify monitoring quarter (select only one): <input type="checkbox"/> Quarter 1 (January 1 – March 31) <input type="checkbox"/> Quarter 3 (July 1 – September 30)				
	<input type="checkbox"/> Quarter 2 (April 1 – June 30) <input type="checkbox"/> Quarter 4 (October 1 – December 31)				
SECTION V. TURBIDITY MONITORING DATA					
Turbidity Monitoring	Discharge Point Description/ Name:				
	Was dewatering water discharged during the monitoring quarter? <input type="checkbox"/> Yes (Enter the data below) <input type="checkbox"/> No (Skip to Section VI)				
	Specific Week within Monitoring Quarter	Daily Maximum (NTU) ¹	Benchmark Threshold (NTU)	Notes	Daily Maximum exceeds Benchmark? ²
	Week 1		150		<input type="checkbox"/> Yes <input type="checkbox"/> No
	Week 2		150		<input type="checkbox"/> Yes <input type="checkbox"/> No
	Week 3		150		<input type="checkbox"/> Yes <input type="checkbox"/> No
	Week 4		150		<input type="checkbox"/> Yes <input type="checkbox"/> No
	Week 5		150		<input type="checkbox"/> Yes <input type="checkbox"/> No
	Week 6		150		<input type="checkbox"/> Yes <input type="checkbox"/> No
	Week 7		150		<input type="checkbox"/> Yes <input type="checkbox"/> No
	Week 8		150		<input type="checkbox"/> Yes <input type="checkbox"/> No
	Week 9		150		<input type="checkbox"/> Yes <input type="checkbox"/> No
	Week 10		150		<input type="checkbox"/> Yes <input type="checkbox"/> No
	Week 11		150		<input type="checkbox"/> Yes <input type="checkbox"/> No
	Week 12		150		<input type="checkbox"/> Yes <input type="checkbox"/> No
	Week 13		150		<input type="checkbox"/> Yes <input type="checkbox"/> No
Week 14		150		<input type="checkbox"/> Yes <input type="checkbox"/> No	
¹ Report to the nearest whole number. Enter "N/A" if no dewatering discharge occurred during any particular week. ² If "Yes," the operator must conduct follow-up corrective action pursuant to Part III.D.2. and document any corrective action taken in the corrective action log in accordance with Part III.D.4.					



Question 1.b

B. Prohibited Discharges and Discharge Limitations

Will construction activity include disturbing material or soils **contamination by toxic or hazardous substances** ([Part I.D.6: Prohibited Discharges](#) and [Part III.B.3: Discharge Limitations for Sites Discharging to Impaired Waters](#)), **dewatering requiring turbidity benchmarks** ([Part III.B.4](#)), or has the Department notified you with a request to install additional controls to meet water quality standards ([Part III.B.1: General Effluent Limitation to Meet Applicable Water Quality Standards](#))?

- ☒ Yes
- ☐ No

Yes, construction activity has the potential for disturbing material or soils with known contamination by toxic or hazardous substances.

Check each box below if applicable to your project.

- ☐ Demolition contaminants of any structure built or renovated before January 1, 1980, when the structures being demolished are at least 10,000 square feet of floor space ([Part III.B.3: Discharge Limitations for Sites Discharging to Impaired Waters](#)).
- ☐ The site has soils that contain controlled hazardous substances. ("Controlled hazardous substance" means [hazardous waste](#) as defined in COMAR 26.13.02, except as provided in COMAR 26.13.02.06).
- ☒ The site is discharging dewatering water to sediment-impaired water or to water designated as a Tier II for antidegradation purposes.
- ☒ I understand that I must report all daily maximum turbidity monitoring results on a quarterly basis via ePermits (unless use of the paper monitoring form in Appendix D is approved by the Department) no later than 30 days following the end of each monitoring quarter.

The Turbidity Benchmark Monitoring Data Reporting Form can be found here: [Appendix D 20-CP: Turbidity Monitoring Report Form and Instructions](#)



EPA Guidance



EPA 833-B-22-001



Inspection and Monitoring Guide for Construction Dewatering

EPA's 2022 Construction General Permit

February 2022



<https://www.epa.gov/system/files/documents/2022-01/cgp-inspection-and-monitoring-guide-for-dewatering.pdf>



e-Permits Public Features

- Search for Current Public Notices
- Search Active Authorizations
 - View NOIs and Print authorization letter
- View Demo

MDE e-Permits

Welcome to the online Maryland Department of the Environment (MDE) e-Permits interface, established for projects that disturb one or more acres of earth that must apply for coverage under a Permit for Stormwater Associated with Construction Activity, and obtain coverage under that permit before beginning earth disturbance on any part of the project. Projects that initially disturb less than one acre, but that are part of a plan of development that will ultimately disturb one acre or more, must also obtain coverage before beginning earth disturbance on the first part of the project.

Once you have a user account, this online interface allows you to perform the following actions:

- Submit Notice of Intent (NOI)
- Upload supporting documents such as plans
- Pay permit fees
- Transfer of ownership
- Increase the disturbed acreage
- Withdraw a request
- Terminate coverage

Notice of Maryland SB0471 legislation for Public Notice can be reviewed at the following location:
<https://mgaleg.maryland.gov/2023RS/bills/sb/sb0471E.pdf>

If you have any questions please contact:
MDE Wastewater Program
Email: mde.constructionswnoi@maryland.gov
Phone: (410) 537-3019

Process for Obtaining Approval under the Notice

Public Notices / Permits

[View Public Notices](#)
[View Active Authorizations](#)

Log In

You will need to create a user account to use this service. If you have an account, enter your username and password here.

Username

Password

[Log In ►►](#) or [Create Account](#)

[Forgot Password?](#)

You may also try out a demo of this system:

[View Demo ►►](#)



e-Permits Public Features

- Submit new NOIs
- Modify existing NOIs
- Transfer authorization of permits
- Submit Notice of Termination for permits
- And more...

All features/processes on e-Permits come with detailed instructions. Further assistance is available at mde.constructionwnoi@maryland.gov and mdhelp@egov.com.

Logged in as: **usermatt**

Account Home

[User Account](#)

[▶ Begin a New Notice of Intent](#)

[Active Permits](#) [Inactive Permits](#)

Indicates the project is in a MD DNR WHS Sensitive Species Project Review area.

Show entries

Last Modified	Permit Number	Issued Date	Site Name	Ownership	Status	History	Actions
02/13/2024 2:06 PM	20CPC00FYA	02/13/2024	Test	Signatory	Permit Issued		Options
02/13/2024 10:58 AM	Notice of Intent			Signatory	In-Progress	Not submitted to N	<div>View or Modify Permit Information</div> <div>View PDF of Permit</div> <div>Transfer Authorization of Permit</div> <div>Submit Notice of Termination of Permit</div> <div>Payment History</div> <div>Give Access</div>

Showing 1 to 2 of 2 entries



Termination

- Termination (Page 16, Part II.F.2)
 - Vegetative stabilization established
 - Pollution controls removed (waste controls)
 - Potential pollutants removed

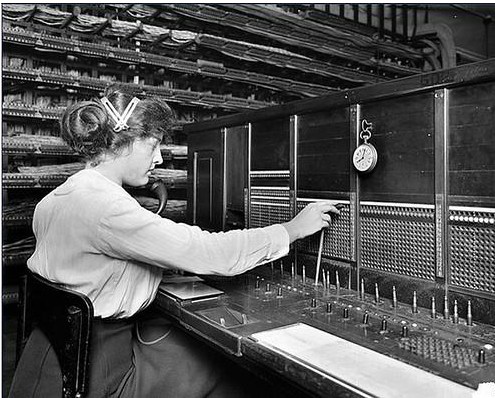
Permittees can terminate coverage through ePermits (once MDE Compliance has concurred)



Who is an operator?



[This Photo](#) by Unknown Author is licensed under [CC BY](#)



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Who is an Operator?

- Has operational control over construction plans and specifications, including the ability to make modifications to those plans and specifications; or
- Has day-to-day operational control of those activities at a project that are necessary to ensure compliance with the permit conditions.
- **Usually not subcontractors**



Single Operator Scenarios

Owner as sole permittee. Designs structures, develops/implements the SWPPP, and general contractor (or has an on-site representative with full authority to direct day-to-day operations). Everyone else on the site may be considered subcontractors and might not need permit coverage.

Contractor as sole permittee. The property owner hires one company (i.e., a contractor) to design the project and oversee all aspects of the construction project.

For example, individual having a personal residence built for their own use (e.g., not those to be sold for profit or used as rental property).





Multiple Operator Scenarios

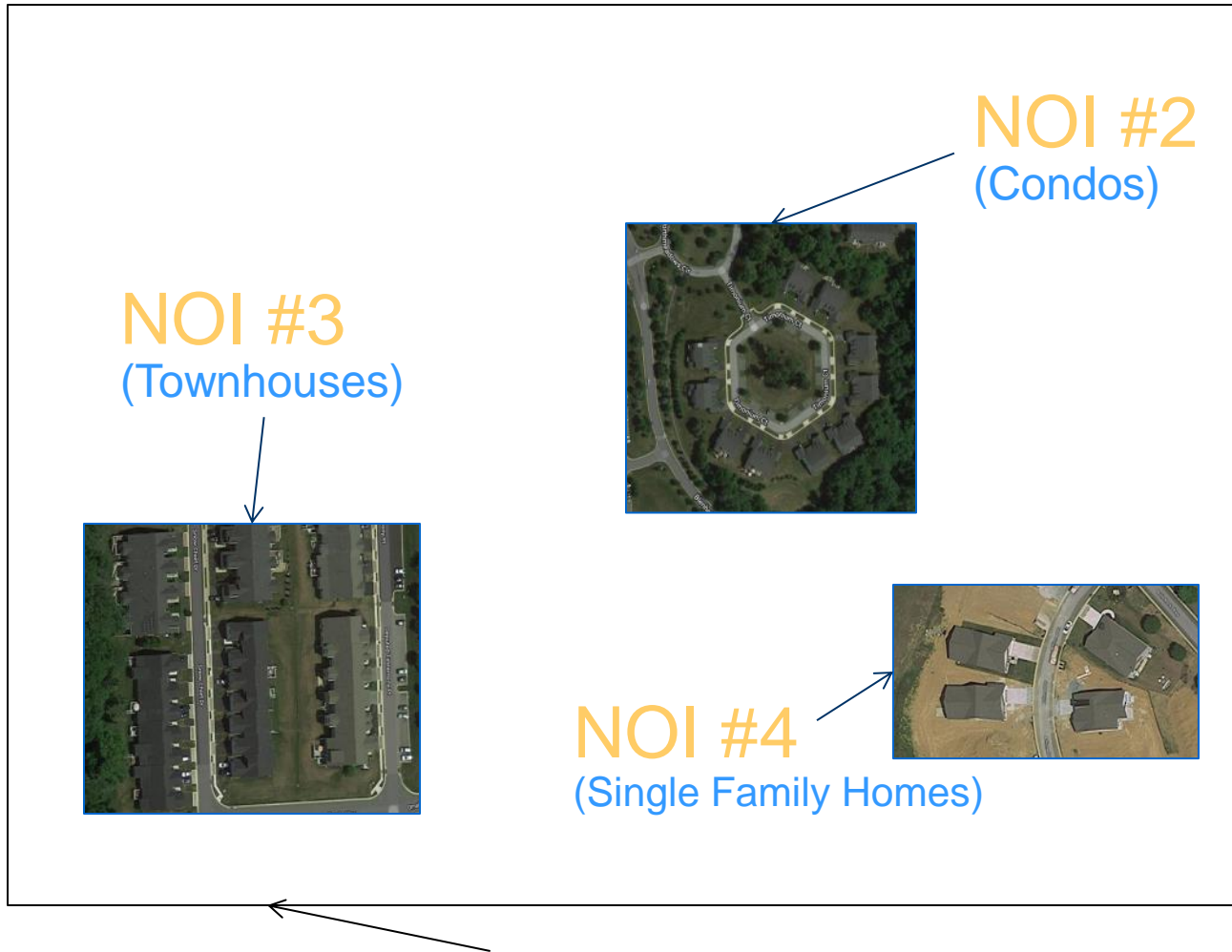


Owner and contractor as co-permittees/co-operators. The owner retains control over any changes to site plans, SWPPPs, or stormwater conveyance or control designs; but the contractor is responsible for overseeing actual earth disturbing activities and daily implementation of SWPPP and other permit conditions.

Different General Contractors for Grading and Building.



Example NOIs Required in Common Plans



NOI #1 (Roads, Utilities, Grading, SWM)

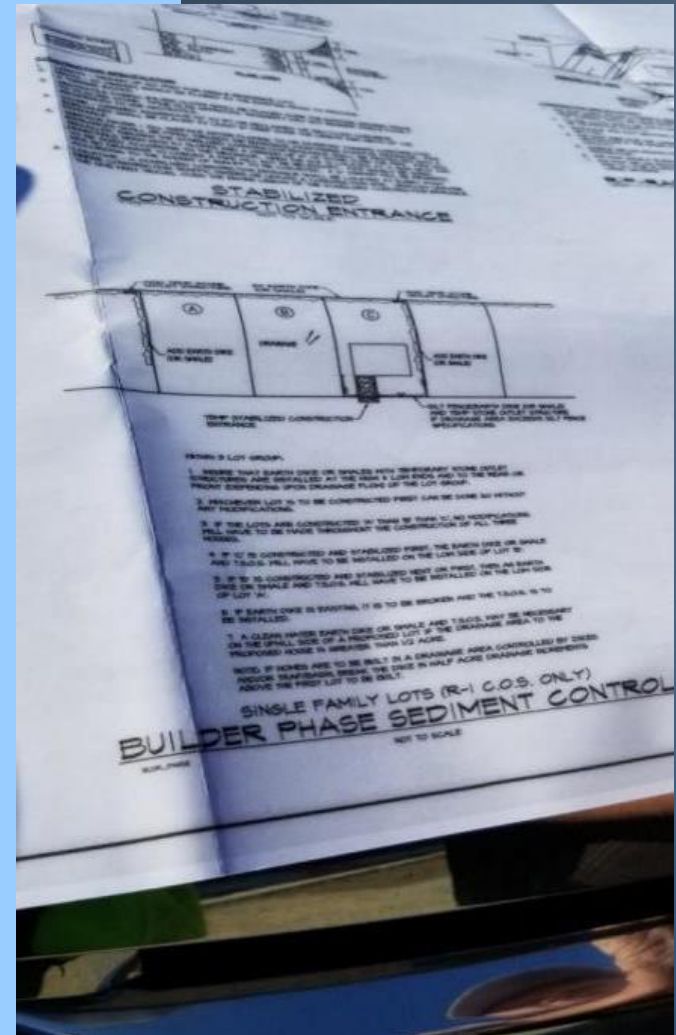
Single Family Homes

Detached single family homes on single lots under a common plan.

See the Exception to Public Notice

Submit a separate NOI to ePermits for single lots

No townhomes or mixed construction are eligible





SFH Exception... e-Permits

D. Sharing Permit-Related Functions

Will your project involve the sharing of permit-related functions between and among operators on the same site?

- ☒ **Yes, through a common plan of development or sale**
- ☐ Yes, through a co-permittee/operator (with a separate NOI)
- ☐ No

My project is within a common plan of development or sale.

Is this NOI for an existing common plan of development?

- ☒ **Yes**
- ☐ No

Common plan number:

Enter total acreage for single-family home lots that are less than an acre each.

Acreage: acres

Enter total acreage for single-family home lots that are equal to or more than an acre each.

Acreage: acres

Enter total acreage for lots being used for any other construction type.

Acreage: acres



E-Permits for common plan

Will your project involve the sharing of permit-related functions between and among operators on the same site?

☒ Yes, through a common plan of development or sale

☐ Yes, through a co-permittee/operator (with a separate NOI)

☐ No

My project is within a common plan of development or sale.

Is this NOI for an existing common plan of development?

☒ Yes

☐ No

Common plan number:

Enter total acreage for single-family home lots that are less than an acre each.

Acreage: acres

Enter total acreage for single-family home lots that are equal to or more than an acre each.

Acreage: acres

Enter total acreage for lots being used for any other construction type.

Acreage: acres

Example: Construct 15 acres of townhomes under an already approved Common Plan (MDRC12345)



Owner not an Operator

Ownership of the land where construction is occurring does not necessarily imply the property owner is an operator (e.g., a landowner whose property is being disturbed by construction of a gas pipeline).

Likewise, if the erection of a structure has been contracted for, but possession of the title or lease to the land or structure does not occur until after construction, the would-be owner may not be considered an operator (e.g., having a house built by a residential homebuilder).





Probably Not an Operator

- You are a subcontractor hired by, and under the supervision of, the owner or a general contractor (i.e., if the contractor directs your activities on-site, you probably are not an operator)
- The operator of the site has indicated in the SWPPP that someone other than you (or your subcontractor) is responsible for your activities as they relate to stormwater quality (i.e., another operator has assumed responsibility for the impacts of your construction activities). This is typically the case for many, if not most, utility service line installations.





What is a SWPPP?

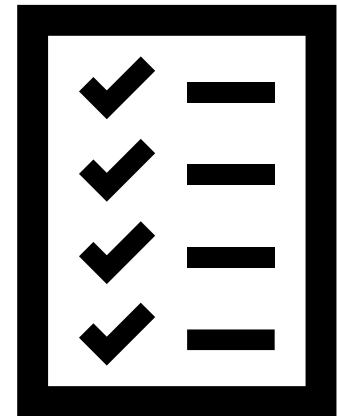
A SWPPP is a site-specific, written document that:

Identifies potential sources of stormwater pollution at the construction site

Describes practices to reduce pollutants in stormwater discharges from the construction site.

Identifies procedures the operator will implement to comply with the terms and conditions of a construction general permit

Organizes operators and BMPs beyond the ESC Plan





SWPPP Development

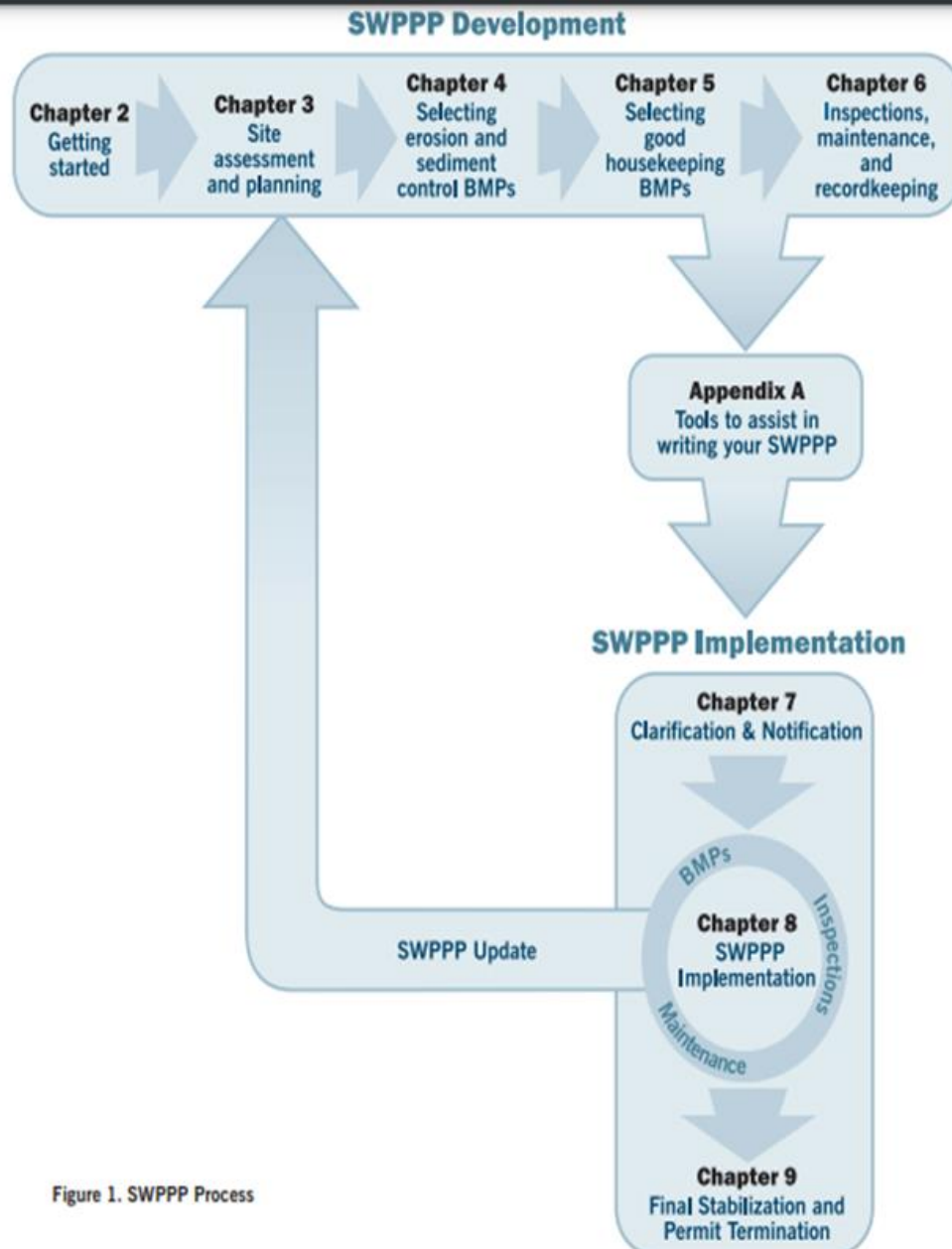


Figure 1. SWPPP Process



Triggers for SWPPPs

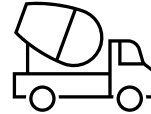
- SWPPPs are required when there are pollutants beyond those addressed by the E&SC Plan
 1. Chemical additive use
 2. Contaminated soil or demolition, **dewatering** with turbidity benchmarks
 3. Activities under Part III.A.3
 4. Sites with **multiple operators** under a common plan of development



Do I need a SWPPP?

Prohibited Non-stormwater Discharges under Part I.D...may include:

Wastewater from the Concrete Washout.



Wastewater from washout and cleanout of stucco, paint, form release oils, curing compounds, and other construction materials. (permit Part III.A.3)



Fuels, oils, or other pollutants used in vehicle and equipment operation.



Soaps or solvents, or detergents used in vehicle and equipment washing or external building



Toxic or hazardous substances from a spill or other release

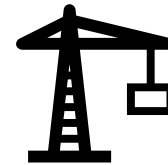


Water contaminated by toxic or hazardous substances from **sites managed under Maryland's Voluntary Cleanup Program (VCP) or Land Restoration Program (LRP).**



E&SC Exempt?

5. Where coverage under this permit is required but E&SC is not required under Title 4.



(example: demolition or agriculture construction where the approval authority doesn't require E&SC)

SWPPP Elements (Part III.F)

- Cover/title page Project and SWPPP contact information
- Site and activity description, including a site map
- Identification of potential pollutant sources
- Description of controls to reduce pollutants
- Maintenance/inspection procedures
- Records of inspections and follow-up maintenance of BMPs
- SWPPP amendments
- SWPPP certification

Protect Natural Resources

Identify Approaches to Protect Natural Resources

- Stream protection zone Assess Whether Your Project Impacts an Impaired Waterbody,
- Assess Whether You Have Endangered Plant or Animal Species in Your Area
- Develop a Site Map



Indicate the following:

- Material storage areas • Stockpiles
- Vehicle and equipment fueling and maintenance areas
- Concrete washouts, Paint and stucco washouts
- Dumpsters or other trash and debris containers, Portable toilets
- Spill kits
- Any other non-structural non-stormwater management BMPs
- Any temporarily removed structural BMPs
- Any changes to the structural BMPs



Erosion and Sediment Control

Erosion Control (keeping the dirt in place) and Minimizing the Impact of Construction

1. Minimize disturbed area and protect natural features and soil
2. Phase construction activity
3. Control stormwater flowing onto and through the project
4. Stabilize soils promptly
5. Protect slopes

Sediment Controls (the second line of defense)

6. Protect storm drain inlets
7. Establish perimeter controls
8. Retain sediment on-site and control dewatering practices
9. Establish stabilized construction exits
10. Inspect and maintain controls



Basic Training



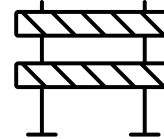
Train your Contractors and Subcontractors

Keep the SWPPP Updated and Available – Keep it Simple

- Spill prevention and cleanup measures, including the prohibition of dumping any material into storm drains or waterways.



- An understanding of the basic purpose of stormwater BMPs, including what common BMPs are on-site, what they should look like, and how to avoid damaging them



- Potential penalties associated with stormwater noncompliance



\$\$\$



Subcontractors



Tips to ensure compliance with the 20-CP General Permit:



Include specific contract language requiring subcontractors to implement appropriate stormwater controls.



Subcontractors should be trained on appropriate BMPs and requirements in the SWPPP and should not disturb or remove BMPs.



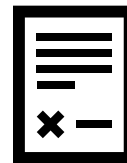
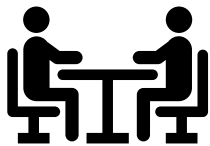
Some contractors will include specific penalties in subcontractor agreements to ensure subcontractors do not damage or remove BMPs.



Ensure Responsibility

Subcontractor and Operator Agreements

Contract language should spell out responsibilities implementing and maintaining stormwater BMPs, for training staff, and for correcting damage to stormwater BMPs on the site.





SWPPPs in action...

- ✓ Implement Your SWPPP Before Construction Starts
- ✓ Update and Evaluate Your SWPPP
- ✓ Are Your BMPs Working?
- ✓ Have a plan for final stabilization



SWPPPs...

Not meant to replace the
approved E&SC plan  

Erosion and Sediment Control (E&SC) authority



Updates on Chemical Additives

Part III.A.2 and Appendix A

- **Chemical additive** - waste water treatment chemicals or products added to water prior to discharge, such as **polymers or flocculants**. Additives are added to the water so that the discharge water is in compliance with the permit limits.
 - Only treatment chemicals added to water with the purpose of meeting permit limitations for discharges are considered “chemical additives” by the 20-CP. Chemicals used for things such as soil cementation do not fit this criteria.
- [Standards for Use of Treatment Chemicals for Sediment Control](#)
- [Request for Cationic Chemical Additives Form](#)
- [Procedures for Review of Chemical Additives for Sediment Control](#)
- [Maryland List of Pre-Approved Flocculants](#)



Why Use Polymers?





Polymer Use Considerations

- Our approach is informed by the EPA's CGP Requirements and Guidance, as well as other regulatory agencies.
- Polymer / Chemical Additive use will require pre-approval through the permitting process.

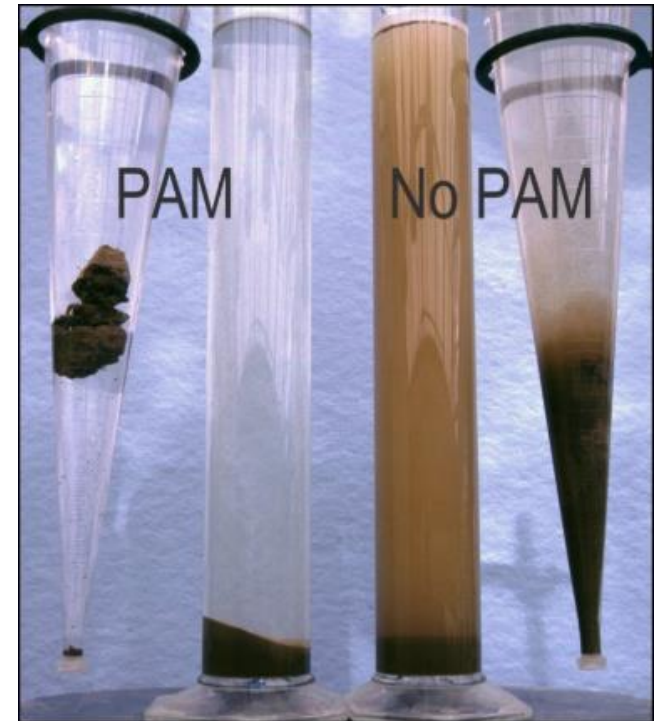


Photo credit: USDA PowerPoint: An Overview of PAM (polyacrylamides) Technology



Requirements for Use

- All polymers
 - Notify MDE of product use via the NOI.
 - Include information on a stormwater pollution prevention plan.
- Anionic polymers
 - MDE's acceptance of the NOI is the approval.
 - The SWPPP must be available on-site for MDE compliance inspectors.
- Cationic polymers
 - An additional application is required.
 - The section of the SWPPP that addresses chemicals (such as chitosan) must be submitted to MDE for review.
 - **Residual testing will be required.**





Pre-Approved Additives

- MDE maintains a list of pre-approved polymers/flocculants, including approved application method and maximum allowable dosage concentration or application rate on its website (<https://mdewwp.page.link/MDFlocs>).
- Usage of an additive **not** on the pre-approved list requires written approval from MDE
 - This is obtained via the Procedures for Review of Chemical Additives for Sediment Control, also available on the MDE website

MDE Flocculants

Chemical Additive Forms and Guidance

- Standards for Use of Treatment Chemicals for Sediment Control
- Request for Cationic Chemical Additives Form
- Procedures for Review of Chemical Additives for Sediment Control
- Video Guidance: Example of Polyacrylamide (PAM) Use with Wattles - external link, courtesy of NCSU Crop and Soil Sciences Department

Authorization for use of chemical additives as part of an NPDES permit or NPDES general permit registration is required prior to use, including the use of additives on the approved list below.

Manufacturer/Distributor	Product-Name	Max-Concentration (ppm or mg/l)	Type-of-Polymer	Limitation
Ashland Hercules Water Tech (Solenis)	Ashland ChargePac 55	10	Cationic	Requires Monitoring
Aquamark, Inc	AQ 109	180 mg/L	Anionic	Land surface application
Aquamark, Inc	AQ 224	1	Cationic	Requires Monitoring
Biostar	CH Chitosan Acetate	220.8	Cationic	Requires Monitoring
Biostar	CH Chitosan Lactate	263.9	Cationic	Requires Monitoring
HaloSource / now Dober Chem 4-4-16	3% LiquiFloc	9.4	Cationic	Requires Monitoring
HaloSource / now Dober Chem 4-4-16	Haloklear BHR - P50	78.4	Cationic	Requires Monitoring
HaloSource / now Dober Chem 4-4-16	Haloklear 4900 DBF	1.4	Cationic	Requires Monitoring
HaloSource / now Dober Chem 4-4-16	Haloklear GelFloc	2.56	Cationic	Requires Monitoring



Water Quality Standards

COMAR 26.08.02.03-3

.03-3 Water Quality Criteria Specific to Designated Uses.

(5) Turbidity.

(a) Turbidity may not exceed levels detrimental to aquatic life.

(b) Turbidity in the surface water resulting from any discharge may not exceed 150 units at any time or 50 units as a monthly average. Units shall be measured in Nephelometer Turbidity Units.

Dewatering effluent turbidity should be below 150 NTUs!



Turbidity Benchmark and WQS

Dewatering effluent should be BELOW 150 NTUs before the stream



Take corrective action as effluent approaches the 150 NTU benchmark **PRIOR** to impacting the stream



In-stream color change is a violation!



Additional Permits Required

- **Dewatering during construction will require a “Water Appropriation and Use Permit” if:**
 - The duration of the dewatering (including intermittent periods of nonpumping) will or is expected to last more than **30 days**
 - The dewatering is **greater than 10,000 GPD** as an annual average (calculated over the course of 1 year)
 - COMAR 26.17.06.03A and 26.17.06.03B
- No cost for applying
- Average turnaround time from application to approval is 1-2 months
- Approval lasts up to 12 years
- Full fact-sheet and approval process available on MDE’s website under the Water Supply Program



20-CP specifies that....

Any unauthorized non-stormwater discharges must be covered under an individual permit or alternative general permit.



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Alternative General Permits

- Certain activities require an alternative General Permit(Part I.E)

Portable Batch Plants with Discharges



General Permit for Discharges from Mineral Mines, Quarries, Borrow Pits and Concrete and Asphalt Plants **(15-MM)**

Mining Activity Earth Disturbance



General Permit or Individual Permit for those activities – can be 20-CP if construction is part of non-mining disturbance (≥ 1 acre)

New/Existing Sources Where ESC Plan Doesn't Meet State Standards



Individual Permit or Plan Revision if the Department determines WQS cannot be/may not be met due to ESC plans not meeting State Standards (Parts I.B.3 and II.B)

Stormwater Discharges Cause/May Cause WQS Exceedance or Contribute to a Waterbody Impairment



Individual Permit if the Department determines that this is necessary – may also modify stormwater controls or submit data proving WQS are met



Alternative General Permits Cont.

Landfills



20-CP **if** construction of landfill cells or other structures for landfill operation. Terminate permits for cells as soon as waste may be accepted **if** covered by General Permit for Discharges of Stormwater Associated with Industrial Activity **(20-SW)**.

Prohibited Discharges



Individual Permit if Department finds discharges contain prohibited non-stormwater discharges not addressed by any General Permits.



PCB Requirements

- EPA has requested that Maryland address potential PCB contamination during demolition, from caulking or paints that are contaminated with PCB.
- We have receiving waters impaired for PCBs, which could be a trigger for enhanced erosion control or polymer use, since PCBs are often bound in the sediments.



On-site Fueling



You need a Pollution Prevention Plan.
(no tanks on the ground)



Pollution Prevention Plans...

- a. For equipment and vehicle fueling and maintenance:
 - i. Implement measures to eliminate the discharge of spilled or leaked chemicals, including fuels and oils, from these activities (Examples of effective means include: locating activities away from waters of the State and stormwater inlets or conveyances so that stormwater coming into contact with these activities cannot reach Waters of this State; providing secondary containment (e.g., spill berms, decks dikes, spill containment pallets) and cover where appropriate; and having a spill kit available on site and ensuring personnel are available to respond expeditiously in the event of a leak or spill.);
 - ii. If applicable, comply with the Spill Prevention Control and Countermeasures (SPCC) requirements in 40 CFR part 112 and Section 311 of the CWA;
 - iii. Ensure adequate supplies are available at all times to handle spills, leaks, and disposal of used liquids;
 - iv. Use drip pans and absorbents under or around leaky vehicles;
 - v. Dispose of or recycle oil and oily wastes in accordance with other federal, state, tribal, or local requirements;
 - vi. Clean up spills or contaminated surfaces immediately, using dry clean up measures (do not clean contaminated surfaces by hosing the area down); and
 - vii. Eliminate the source of the spill to prevent a discharge or a continuation of an ongoing discharge.
- b. For equipment and vehicle washing:
 - i. Minimize the discharge of pollutants from equipment and vehicle washing, wheel wash water, and other wash waters; (Examples of effective means to minimize the discharge include locating activities away from Waters of this State and stormwater inlets or conveyances and directing wash waters to a sediment basin or sediment trap, using filtration devices, such as filter bags or sand filters, or using other similarly effective controls.)
 - ii. Ensure there is no discharge of soaps, solvents, or detergents in equipment and vehicle wash water; and
 - iii. For storage of soaps, detergents, or solvents, provide either
 - cover (e.g., plastic sheeting, temporary roofs) to minimize the exposure of these detergents to precipitation and to stormwater, or
 - a similarly effective means designed to minimize the discharge of pollutants from these areas.
- c. For storage, handling, and disposal of building products, materials, and wastes:
 - i. For building materials and building products (Examples of building materials and building products typically present at construction sites include asphalt sealants, copper flashing, roofing materials, adhesives, concrete admixtures, and gravel and mulch stockpiles), provide either
 - cover (e.g., plastic sheeting, temporary roofs) to minimize the exposure of these



Part III A, B, C, and D...

- Lists specific activities triggering SWPPP
- Lists SWPPP specifics

Permittees can review and implement

Inspectors can review SWPPP for compliance

Part III.D – Covers Corrective actions

Pollution Prevention Plans (SWPPP)

- Must be submitted to MDE as supporting documentation for the NOI
- Must meet minimum requirements outlined in the permit prior to the authorization be granted
- NOI must be modified in ePermits to start any of the four listed SWPPP triggering activities.



Common Plan Clarity

To reduce ongoing confusion for larger common plans of development the permit:

- clarifies when transfers of permit coverage are possible,
- when a new or separate NOI is required,
- and has developed a new classification of Single Family Home Builder with certain exemptions when projects occur within a larger common plan of development.

Common Plan of Development or Sale - A contiguous area where multiple separate and distinct construction activities may be taking place at different times on different schedules under one common plan. The “common plan” of development or sale is broadly defined as any announcement or piece of documentation (including a sign, public notice or hearing, sales pitch, advertisement, drawing, permit application, zoning request, computer design, etc.) or physical demarcation (including boundary signs, lot stakes, surveyor markings, etc.) indicating that construction activities may occur on a specific plot.



Proactive Coverage

Developers may get coverage for multiple operators...

Then transfer the coverage to the operator as their work areas become active

Avoid delays for new operators

Update the SWPPP



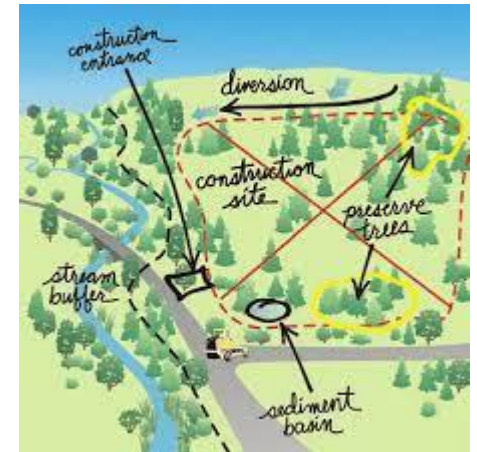
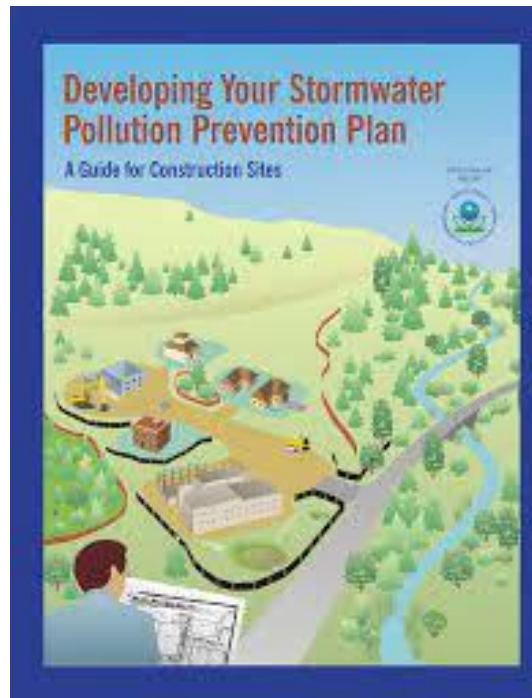
One SWPPP allowed...

- Where there are multiple operators associated with the same site, they may develop a group SWPPP instead of multiple individual SWPPPs.



Developing a SWPPP

- EPA Resources...





MDE SWPPP Template

- MDE version
- Customize

Stormwater Pollution Prevention Plan (SWPPP)
INSERT PROJECT NAME

Construction Stormwater Pollution Prevention Plan Template

The Maryland Department of the Environment (MDE) requires construction operators to develop a Stormwater Pollution Prevention Plan (SWPPP) prior to submitting a Notice of Intent (NOI) for Construction General Permit (20-CP) coverage (Refer to Part III.F of the permit). To assist with developing a SWPPP that meets the minimum requirements of the General Permit for Stormwater Associated with Construction Activity, the Maryland Department of the Environment has provided this template.

This template is customizable to your specific project and site.

Once MDE has approved coverage for your project under the 20-CP, include your NOI, your authorization, and a copy of the 20-CP as attachments to the SWPPP.

For more information on the Tier II Checklist, the NOI in ePermits or Cationic Chemical Treatment, please navigate to our website located here:

https://mde.maryland.gov/programs/water/www/Pages/gp_construction.aspx

Instructions for Using the SWPPP Template

Each section of the SWPPP Template includes instructions and space for your project and site information. Read the instructions for each section before you complete that section. The **blue text** indicates what information is to be included.

The SWPPP Template is an editable document file. You may add tables or additional text and/or delete unneeded or inapplicable fields. The information provided in each section may vary in length.

The following items may help you better prepare for completing the SWPPP:

- Make sure you read the General Permit thoroughly before you begin preparation of your SWPPP. By doing so, you are ensuring that you have a working understanding of the permit's underlying requirements.
- Remember to complete the SWPPP prior to submitting your Notice of Intent (NOI) for permit coverage when required.
- If there is more than one construction operator or individual/entity that will be responsible



EPA Inspector Training

EPA Training

Updated for 2022 CGP



- <https://www.epa.gov/npdes/construction-general-permit-inspector-training>



Self-Monitoring Inspections

- Weekly *and* post storm event, or every 4 business days
- Monthly (construction complete, grass starting)
- Twice a week, preferably after storm events (Tier II)
- Responsible ESC Personnel Certified

*Discuss Inspection Requirements During Preconstruction Meeting and with your MDE Compliance Inspector





Corrective Actions

Read Part III D of
the 20-CP

Discuss reporting
expectations with
your MDE Inspector

D. Corrective Actions

1. Conditions Triggering Corrective Action.

You must take corrective action to address any of the following conditions identified at your site:

- a. A stormwater control needs repair or replacement (beyond routine maintenance required under Part III.A.1.d);
- b. A stormwater control necessary to comply with the requirements of this permit was never installed, or was installed incorrectly;
- c. Your discharges are causing an exceedance of applicable water quality standards;
- d. A prohibited discharge has occurred (see Part I.D);
- e. During discharge from site dewatering activities the daily maximum of your turbidity monitoring results exceeds the 150 NTU benchmark; or
- f. Indications exist of significant amounts of sediment discharging such as:
 - i. Earth slides or mud flows;
 - ii. Concentrated flows of stormwater such as rills, rivulets or channels that cause erosion when such flows are not filtered, settled or otherwise treated to remove sediment;
 - iii. Turbid flows of stormwater that are not filtered, settled or otherwise treated to reduce turbidity;
 - iv. Deposits of sediment at the construction site in areas that drain to unprotected stormwater inlets or catch basins that discharge directly to surface waters;
 - v. Deposits of sediment from the construction site on public or private streets outside of the permitted construction activity;
 - vi. Deposits of sediment from the construction site on any adjacent property outside of the permitted construction activity; or
 - vii. Discharges from the construction site to municipal conveyances, curbs and gutters, or streams running through or along the site where visual observations show that the discharges differ from ambient conditions in terms of turbidity so as to indicate significant amounts of sediment present in them.



Feedback Requested

- Please send comments or questions to:

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Thank you!!!

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