# MARYLAND DEPARTMENT OF THE ENVIRONMENT

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# FACT SHEET TENTATIVE DETERMINATION DRAFT

General Permit for Discharges from Tanks, Pipes, Other Liquid Containment Structures, Dewatering Activities, and Groundwater Remediation

> General Discharge Permit Number: 17HTXXXX NPDES Number: MDG67XXXX

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# SUMMARY OF SIGNFICANT CHANGES FROM THE 11-HT

- 1. Addition of dewatering activities and groundwater remediation to allowable discharges (pursuant to a regulation change to COMAR 26.08.04.09 K(2))
- 2. Clarification of limitations by reformatting permit into separate "Discharge Categories"
- 3. New requirements regarding chemical additives used for wastewater treatment
- 4. Expansion of the requirement for a Pollution Prevention Plan (PPP) to include all types of discharge regulated by the permit
- 5. More specific requirements regarding visual monitoring of discharges
- 6. Introduction of a tiered monitoring frequency concept based on flow for discharges from hydrostatic testing and groundwater remediation

# BACKGROUND

The Clean Water Act (CWA) was originally enacted as the Water Pollution Control Act of 1948 (P.L. 80-845), and amended in 1972 by the Federal Water Pollution Control Act (P.L. 92-500), which established the National Pollutant Discharge Elimination System (NPDES) in Section 402 of the Act.

The 1972 amendments enumerated a set of national goals "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters," which among others included attainment of "water quality which provides for the protection and propagation of fish, shellfish, and wildlife and provides for recreation in and on the water" (33 U.S.C. § 1251).

The law became known as the "Clean Water Act" (P.L. 95-217) under amendments to the Act in 1977. The 1977 amendments made it unlawful to discharge any pollutant from a point source into navigable waters without a permit, and gave EPA authority to regulate such discharges by setting limits on the amount of pollutants that can be discharged into a body of water from a permitted source.

Under § 402(b) of the CWA, 40 CFR Part 123, EPA may grant authority (in whole or in part) to individual states to administer the federal NPDES program in that state. The State of Maryland is so authorized. The Code of Maryland Regulations (COMAR) Title 26, Subtitle 08, Chapter 04 requires all discharges of waste or wastewater to surface waters to be authorized under a State discharge permit or NPDES permit. Authorized states are prohibited from adopting standards that are less stringent than those established under the Federal NPDES permit program, but may adopt standards that are more stringent if allowed under state law. The Federal NPDES program under the CWA does not apply to groundwater discharges, therefore discharges to groundwater are regulated under the State discharge permit pursuant to COMAR 26.08.04.01 B(1).

This permit replaces General Permit Number 11HT which became effective on March 1, 2012 and expired February 28, 2017. Currently, the 11HT general permit is administratively continued for facilities covered under that permit at the time it expired. As of 2018 over 290 Maryland facilities are registered under the 11HT permit.

General Permit 17 HT regulates its discharges pursuant to COMAR 26.08.04.09 K(2) which stipulates that coverage includes:

• Treated tank bottom wastewater from storage tanks used only for gasoline, kerosene, fuel oil, no. 6 oil, or aviation fuel to surface waters;

- Wastewater from the flushing or hydrostatic testing of pipes, pipelines, or tanks, or wastewater from pipeline infiltration;
- Water in excess of 10,000 gallons per day as a monthly average from the overflow, flushing, or dewatering of reservoirs, tanks, or pipelines used for the storage or delivery of untreated water;
- Wastewater from cleaning or dewatering of vessels or structures used to store or convey potable water;
- Stormwater discharges from storage tank containment structures;
- Emergency discharges of potable water;
- Extracted water from an aquifer test;
- Wastewater from construction dewatering;
- Foundation drainage which has been treated for any contaminants; and
- Air stripping, activated carbon adsorption, or equivalently treated wastewater from groundwater remediation sites not covered by the General Discharge Permit of Treated Ground Water From Oil Contaminated Ground Water Sources to Surface or Ground Waters of the State.

The permit provides coverage for potable (chlorinated) water discharges, dewatering of reservoirs, dewatering of certain stormwater containment or excavations, water used for hydrostatic testing of pipes or tanks, discharges of fire suppression systems, as well as new coverage for certain contaminated groundwater or tank bottom discharges. Each of these is further described below. As a General Permit, the application process includes completion of a Notice of Intent (NOI) and following the process as described below.

#### PART I: PERMIT APPLICABILITY

Part I of the permit identifies eligible and ineligible discharges under the permit, as do all of the Department's general permits. Other than a minor format change and the changes identified below, the 17HT permit remains unchanged from the 11HT permit.

Part I.B lists the types of discharge which may be covered by the 17HT. Unlike past iterations, the 17HT identifies specific "Discharge Categories," in order to better describe eligible discharges, and to clarify requirements in subsequent sections. Discharge categories under this section are ordered from the most common to the least common.

Construction dewatering (Part I.B.3 – Discharge Category C) and groundwater remediation (Part I.B.4 – Discharge Category D) are new sources directly allowed by the new permit. Each of these types of discharge was added to the eligible discharges under the HT permit by a regulation change to COMAR 26.08.04.09 K(2) effective September 29, 2014. In addition, the Department has specifically identified a list of minor discharges which other permits allow with no monitoring. This change was to avoid confusion regarding whether additional permits were required to discharge from those sources. This addition provides clarity for both inspector and permittee. Lastly, the Department specifies that chemical additives may be used if needed for treatment, subject to the terms of Part III.C.3 of the permit. Further discussion of this inclusion and its terms can be found in that section of this fact sheet.

There are two other minor changes from Part 1. First, the threshold for requiring a permit changes from 10,000 gallons per day, to flow greater than half of the receiving stream. This change was necessary to reconcile the permit to a regulation change that removed a rule requiring a discharge permit for ANY

discharge of 10,000 gallons per day or more. The Department still wishes to take a look at clean water discharges which approach half of the volume of the receiving stream, as it believes erosion and temperature concerns could exist in specific scenarios. Second, additional permits are now listed under "Related Permits." This makes it clear to the operator that s/he is responsible for finding all proper permit coverage, and that coverage under the 17HT permit does not preclude the possibility that other permits may be needed.

# PART II: AUTHORIZATION UNDER THIS PERMIT

This part clarifies what is required to apply for coverage. The terms of Part II remain largely unchanged from the information that was required to apply for the 11HT. Any alterations should be considered very minor and are addressed in updated instructions for the NOI.

Previous iterations included "Definitions" at this point To improve flow of the permit language, definitions have been relocated to Appendix B.

# PART III: SPECIAL CONDITIONS FOR DISCHARGES

This part addresses basic special conditions that apply to all categories of discharges. Part III, Section A has been carried over from the 11HT permit, though previous language regarding NOI requirements have been moved to Part II. Part III, Section B is new, referring the permittees to Appendix A for guidelines and limitations specific to each discharge category. Previous versions of the HT permit listed all limitations in this Part, but this new approach better clarifies requirements for each specific type of discharge.

Part III, Section C addresses common constraints. These are narrative requirements that the Department has determined are applicable for consideration in all of the discharge categories. By including those requirements here, they don't need to be repeated in each of the sections of Appendix A. Each requirement is rationalized below:

1) <u>Erosion and Sediment Control</u>: Any type of discharge may have the potential to cause erosion and/or sediment concerns if the outfalls are not established in the proper manner. This condition simply carries over requirements that were specified in the previous HT permit. Specifically, the condition refers permittees to a manual provided by the Department's Sediment, Stormwater, and Dam Safety Division which also provides guidance to those requiring permits from that program.

2) <u>Pollution Prevention Plan</u>: Facilities are now required to create a pollution prevention plan (PPP) for all discharges regulated by this permit. This requirement was always required for discharges from potable water systems, but, for this renewal, the Department has determined that all permittees should prepare a PPP to ensure facilities are thinking about and documenting how they intend to meet permit requirements in advance of discharging. This requirement should promote more consistent treatment of discharges and improve treatment efficacy.

In addition to detailing how the permittee plans to meet permit limitations, it will also be required for the PPP to list any treatment chemicals and their Safety Data Sheets to allow for quick and easy reference in the event of a problem. Permittees will also be required to document any lapses in their pollution controls, in order to help prevent such errors in future discharges. Appendix A includes specific items to be included in a PPP, broken down by Discharge Category.

As with the 11-HT, the Department will not require submission of each plan, but a plan must be made available upon request by the Department for review of any discharge of concern, and for inspection staff to compare actual ongoing pollution controls to those prescribed by the plan. Facilities are required to update their plan to maintain current with site activities.

3) <u>*Training/Contractors*</u>: The training portion requires that the permittee train any personnel working on site in the methods being used for pollution prevention. Training records shall be maintained as part of the facility PPP.

Prior iterations of the HT permit have been somewhat ambiguous as to who should be a permit holder in the event of a contractor and/or how a permittee/contractor situation works in the event of permit noncompliance. Therefore, this permit specifically identifies that the permittee is responsible for determining whether to allow a contractor to operate under their permit registration or obtain separate coverage. Terms of either arrangement should be clear in any agreement between parties. If a contractor is allowed to operate under a permittee's registration, it is the permittee's responsibility to ensure all contractor staff is properly trained (and documented as such) and made aware of all permit requirements. The Department will assume that the permittee is at fault for any noncompliance unless a separate agreement between parties indicates otherwise.

4) <u>Chemical Additives</u>: In order to meet permit limitations, permittees may desire to use chemical additives as part of their treatment process, most commonly for sediment control. Previously, each proposed chemical would have to be approved individually by the Department prior to use. As this permit iteration specifically includes remediation and dewatering sections, the Department believes that the frequency of using chemical additives may substantially increase, so research has been conducted to determine if certain types of chemicals can be pre-approved, requiring only notice. Based on the rationale from the factsheet of the Department's *General Permit for Discharges from Mineral Mines, Quarries, Borrow Pits, and Concrete and Asphalt Plants* (15-MM), which also references EPA's 2012 Construction General Permit (CGP), it has been determined that the use of anionic polymers, flocculants, and other sediment controlling chemicals may be used subject solely to notification requirements. However, additional requirements shall be required to use cationic polymers, including submission of Safety Data Sheets and a justification that the chemicals will not cause aquatic toxicity or a violation of water quality standards if used as proposed. For more details on this analysis, please refer to the factsheet for the 15-MM permit.

5) <u>Visual Inspection of Discharges</u>: This condition was not specifically included in prior iterations of the HT permit, but aligns with terms found in all of the Department's individual NPDES permits and several of its general permits as well. Essentially, it requires notification be provided in the event that a permittee observes oil sheen, floating solids, or persistent foam in its discharges.

# PART IV: MONITORING AND REPORTING

Part IV of the 17-HT permit specifies requirements for how to monitor discharges, data recording and retention, submission of testing results, and instructions to follow if a permit noncompliance occurs. This entire section is relatively standard across all of the Department's general NPDES permits and has been carried over verbatim from the 11-HT, with the exception of the section regarding discharge monitoring reports (DMRs). On October 22, 2015, EPA published the NPDES Electronic Reporting Rule to modernize Clean Water Act reporting. As a result, this permit requires the submission of all reports electronically via EPA's (and MDE's) reporting website, NetDMR. The Department has included its standard language regarding this requirement, which is shared among all of its NPDES permits. More information regarding this rule can be found at <u>www.epa.gov/compliance/npdes-ereporting</u>.

# PART V: STANDARD PERMIT CONDITIONS

The standard permit conditions have been organized to be consistent with the recently issued general permits by the Department. There have been no substantial changes to the language of these conditions from the 11-HT permit.

# PART VI: AUTHORITY TO ISSUE GENERAL NPDES PERMITS

This section identifies the statutes which provide authority for the Department to issue this and all other general NPDES permits. Language has been unchanged from the 11-HT.

# APPENDIX A: SPECIFIC REQUIREMENTS FOR DISCHARGE CATEGORIES

This Appendix is meant to organize the HT clearly for both the operator and inspector. Therefore, the Department has split the types of permissible discharges under this permit into eight categories, defined as Discharge Category A through H. Limitations and monitoring requirements (both numeric and narrative) which are applicable specifically to each Discharge Category have been assembled and presented in Appendix A. The rationale below, however, will look at numeric limitations separated by parameter – as the rationales are often the same across all discharges. Similarly, narrative requirements will be rationalized by the actual requirement.

# Numerical Limitations/Monitoring

<u>*Flow*</u>: All of the Department's NPDES permits require monitoring for flow. There are no numerical limitations for flow in this permit, but actual flow shall be used to determine annual permit fees if applicable. In lieu of measured flow, the permittee may also provide monitoring via flow estimation, pursuant to the terms of Part IV.A.2 of the permit.

Additionally, for Discharge Category F (Untreated "Water" Discharges), the Department has included two flow thresholds which trigger a requirement for coverage under this permit: 100,000 gallons per day as a monthly average or flow which will comprise more than half of its receiving stream. These thresholds have been established based on best professional judgment (BPJ) because large volumes of water in storage may have thermal impacts on the receiving stream. The Department also specifies that it may choose to require coverage for any such type of discharge regardless of flow, which allows for additional protection of specific streams as needed.

<u>Total Suspended Solids (TSS)</u>: The 17HT contains limits for TSS in three different discharge categories: hydrostatic test water, potable water sources (mechanical cleaning only), and tank bottom wastewater. The limitations have been carried over from the 11HT. Hydrostatic testing may cause sediments and/or scale to be flushed from pipe interiors or sediments which may be present from construction or sediment bearing water supplies. Hydrostatic testing within a potable water system does not represent the same potential for solids pollution, so TSS limits are not applicable to that type of discharge. If mechanical cleaning is done in a potable water system, the entire purpose would be to remove build up from tank or pipeline walls, obviously resulting in a potential sediment concern. Tank bottom wastewater could easily contain sediments which have built up in the storage tank over time.

In each of these cases, the limitation is a daily maximum of 60 mg/L, which is a technology-based limit that the Department has established using best professional judgment to represent an achievable treatment level via gravity settling, filtration, or chemically-assisted gravity settling. While there is no water quality standard for TSS, there is a standard for in-stream turbidity. The Department has routinely posited that a limit of 60 mg/L for TSS is stringent enough to meet the criteria for turbidity.

While sediments could also be a concern for construction dewatering, they are regulated by narrative erosion and sediment control requirements. Sediments have not been determined to pose a reasonable potential for the other types of discharge regulated by this permit. However, as in all NPDES permits, no discharge is allowed to cause an exceedance of water quality standards, so should an unexpected sediment occurrence happen, permittees shall remain bound by the aforementioned turbidity standard.

<u>*pH*</u>: Discharges from hydrostatic testing, potable water systems, construction dewatering, and groundwater remediation for pH adjustment all have the potential to cause pH excursions. In the case of hydrostatic testing, pH concerns may be caused by dechlorination, source water influences, and/or presence of concrete for cleaning or construction. Potable water sources also could be impacted by dechlorination or source water influences. Construction dewatering only requires pH limitations if concrete is being used in the presence of the water being discharged, though monitoring is required in all instances to be sure the groundwater being discharged would not cause pH concerns. Some groundwater remediation projects are to adjust for pH extremes, so this permit includes a limit for those instances in Discharge Category D.

The limit in all cases is a range of 6.0 to 9.0 which represents a technology standard found in numerical effluent limitation guidelines . The Department has chosen this limitation over the water quality standard range of 6.5 to 8.5 based on the assumption that enough buffering capacity would be present to accommodate for the slight difference between the two ranges. Again, in these instances, narrative permit conditions prevent the permittee from causing an exceedance of water quality standards in the receiving stream, which covers the possibility of an extreme case where 6.0 to 9.0 would not be sufficiently protective.

<u>*Oil & Grease (O&G)*</u>: Any discharge which comes from areas where petroleum-based products are present contains a limit for oil & grease. The daily maximum limitation of 15 mg/L is a historically-used technology-base d limitation which was established using best professional judgment to represent an achievable standard for treatment using gravity separation or adsorption. Such limits are included for Discharge Categories A, B, G, and H.

<u>Total Residual Chlorine (TRC)</u>: Any discharge which contains water which has been chlorinated must be subject to a limit for TRC. While the actual permit limit is established based on the numerical water quality standards in COMAR 26.08.02.03-2G(1), language at COMAR 26.08.03.06 requires only that chlorine be reduced to non-detectable levels and specifies that the non-detectable level is 0.1 mg/L. This is included in all relevant sections via footnote.

<u>Dissolved Oxygen (DO)</u>: In cases where chemical dechlorination is required for a permittee to meet the chlorine limitation, it is possible for dissolved oxygen to be depressed, particularly if the dechlorinating agent is over applied. As a result, Discharge Categories A and B, for hydrostatic testing and potable water discharges contain a water-quality based limit for DO which is applicable if chemical dechlorination is performed. The limit requires a minimum DO level of 5.0 mg/L for Designated Use Class I, I-P, and II waters and a minimum DO level of 6.0 mg/L for Designated Use Class III, III-P, IV, and IV-P waters based on COMAR 26.08.02.03-3.

<u>Temperature/Temperature Difference</u>: Water fitting into the hydrostatic testing, fire systems, and untreated water categories could potentially represent a temperature concern if the water has been sitting outside obtaining solar heat for a lengthy time or simply because the discharge is very large. For that reason, the Department has established limitations for either temperature or a calculated parameter called "temperature difference." "Temperature difference" has been created for instances when the actual ambient stream temperature does not comply with water quality standards. Rather than limit the discharge to the WQS, the permittee subtracts the temperature of the discharge (either end of pipe or at the edge of a 50-foot mixing zone, if needed) from the higher of the ambient temperature or the WQS. The limitation is zero, as anything above zero would mean the discharge temperature is too high.

For the case of a large discharge (defined in this permit as greater than 100,000 gpd or greater than half of the flow of the receiving stream), the permit establishes a limit on temperature directly based on the water quality standards established at COMAR 26.08.02.03-3. The rationale behind this decision is that extremely large discharges have a greater potential to prevent the receiving stream from ever decreasing from an ambient temperature which already exceeds WQS, so in those instances, it is not appropriate to simply allow the discharge to meet current ambient temperatures. In cases where the ambient temperature is below the WQS, the limit is actually the same as that of "temperature difference."

<u>Total Volatile Organics</u>: The Department has always included a technology-based limit for organics for impacted wastewaters which are being treated using air stripping, carbon adsorption, and/or air sparging systems, among others. Based on best professional judgment, this limitation has been established as 100  $\mu$ g/L and has typically been defined as applying to the sum of all parameters in EPA Test Method 624. In order to match this parameter to a STORET code for tracking purposes, it has been defined as "Total Volatile Organics." Examples of individual permits containing such a limit for groundwater remediation are State Numbers 15-DP-3613 and 16-DP-3149.

<u>BTEX</u>: BTEX is an abbreviation for benzene, toluene, ethylbenzene, and xylenes and is represented by the sum of those four parameters and has been limited to  $100 \mu g/L$  based on best professional judgment. These parameters are most prevalent (though not exclusive to) gasoline and have been applied in past iterations of the HT permit for tank bottoms wastewater as well as tank containment area discharges, if the tank contained gasoline. For this permit, BTEX limits have been borrowing from the Department's General Permit for the Discharge of Treated Ground Water from Oil Contaminated Ground Water

Sources to Surface or Ground Waters of the State, which is implemented by MDE's Oil Control Program. Since this permit is applicable to discharges from groundwater remediation projects for contamination by oil plus other organics, it is only appropriate that the Department include the standards from the permit which governs groundwater impacted by oil only.

Of the four individual parameters which comprise BTEX, only benzene has an aquatic life water quality standard which is lower than the tech-based standard of 100  $\mu$ g/L, so a corresponding daily maximum limitation of 22  $\mu$ g/L has been included for benzene. Drinking water standards are more stringent for toluene (57  $\mu$ g/L) and ethylbenzene (68  $\mu$ g/L), so those have also been included as limitations if the discharge is to a stream classified as a drinking water source or to groundwater (which is regulated as a drinking water source). Water quality standards are found at COMAR 26.08.02.03-2G.

<u>Total Petroleum Hydrocarbons</u>: The daily maximum limitation of 15 mg/L for "total petroleum hydrocarbons" has been taken directly from the Department's General Permit for the Discharge of Treated Ground Water from Oil Contaminated Ground Water Sources to Surface or Ground Waters of the State, which is implemented by MDE's Oil Control Program. It is applicable to petroleum-impacted groundwater which contains contaminants other than gasoline. As in that permit, "total petroleum hydrocarbons" is defined at the sum of all parameters in EPA Test Method 8015B.

<u>Individual Organic Parameters</u>: In addition to the limits on total volatile organics, BTEX, and total petroleum hydrocarbons, it is also necessary to limit several individual organic compounds which comprise those conglomerated parameters. All of these limits are based on water quality standards for aquatic life (for non-drinking water streams) or drinking water maximum contaminant levels (for drinking water streams and groundwater) as established in COMAR 26.08.02.03-2G. Individual organic compounds that are not limited have been excluded because they either have no water quality criteria or the value is greater than the technology standard for the applicable conglomerated parameter. In order to specifically identify each parameter and avoid nomenclature confusions (as organic parameters often have many alternate names), the Department has included CAS number and STORET codes, which uniquely define each parameter.

<u>*Total Lead*</u>: If groundwater has been impacted by leaded gasoline, it has the potential to contain elevated concentrations of lead. As a result, limitations have been included in the permit for this scenario, again based on the water quality criteria at COMAR 26.08.02.03-2G.

<u>Monitoring Frequency</u>: The 17HT introduces a tiered monitoring concept for hydrostatic test discharge (Discharge Category A) and groundwater remediation (Discharge Category D). This concept is borrowed from the Department's General Permit for the Discharge of Treated Ground Water from Oil Contaminated Ground Water Sources to Surface or Ground Waters of the State, which is implemented by MDE's Oil Control Program. Since there is no reason to expect significant variation throughout the duration of these discharges, the more important governing factor is flow volume, as higher flows have the ability to have greater impact on the receiving stream.

For the remaining categories which have carried over from the 11HT, the monitoring frequencies have remained the same. The potential for variation in water quality between startup, middle of the discharge, and the end of discharge is greater for these discharge categories, so monitoring either twice or thrice per discharge is more appropriate. Discharges from stormwater containment areas is once per discharge,

assuming that there is a visual detection of sheen. Monitoring in this instance is required before commencing discharge and since the sample must be representative, requiring more than one would be superfluous.

Discharges from construction dewatering which have pH limitations are required to monitor once per week, which is consistent with the terms of similar individual permits which have been issued by the Department.

# Narrative Limitations

<u>Discharge Category A</u>: The narrative criteria for hydrostatic testing discharges specifies that any vessels must be cleaned prior to filling with test water, refers permittees to Part I.G.5 of the base permit regarding appropriations if they plan to use waters of the State to perform the testing, and that discharges not exceed the capacity of any treatment system being utilized. The rationale behind each of these conditions is essentially common sense, as they either prevent unnecessary pollution in discharges or refer permittees to other State requirements (appropriations).

<u>Discharge Category B</u>: For discharges from potable water systems, there are a number of specific items which the Department has determined should be present in the facility Pollution Prevention Plan (PPP), in addition to the requirements of Part III.B.2 of the base permit. Since this category often includes multiple discharges under a single NOI, an estimated schedule is important. Additionally, the permittee should be considering alternative discharge options, prior effluent data (if available), potential treatment options, and receiving stream information as they prepare for their discharges in order to provide the best protection for the environment possible. Lastly, the narrative condition stipulates that the permittee is responsible for ensuring that their PPP is protective and provides a timeline of 90 days if the Department ever notifies the permittee of deficiencies in their PPP.

<u>Discharge Category C</u>: Construction dewatering discharges have routinely been regulated by the Department using only narrative criteria, most notably in past applying of the "untreated raw water discharges" category of the 11HT permit. Since construction project are already responsible for having erosion and sediment control plans, this permit simply specifies requirements for those plans in relation to their discharges in Parts III.C.1 and III.C.3 of the base permit. The narrative conditions in Appendix A refer permittees to those parts and also specify the requirement that a corrective action be implemented if a sediment plume is observed in the receiving stream.

Additionally, the narrative criteria stipulates that the Department may require organics monitoring to ensure that groundwater is not impacted prior to regulating under this Discharge Category, requires pH monitoring (and any necessary resulting corrective actions) be documented in the facility PPP, and specifies that coverage may be terminated when discharges have ceased (including reporting requirements until termination occurs). All of these requirements are to assure that the permittee is following their PPP and to protect the environment. Note that the Department reserves the right to waive any organics monitoring based on best professional judgment, which is logical, as some of the sites will have had no history of activity which could have reasonably led to impacted groundwaters.

<u>Discharge Category D</u>: The only narrative criteria for groundwater remediation specifies that the permittee must identify their treatment technology if they are not using air stripping, carbon adsorption, or

air sparging. Each of these three systems have been utilized successfully in the past and the Department has determined that they are sufficient to achieve the BPJ-derived numerical limitation. In order to ensure protection of the receiving waters, the permittee is responsible for demonstrating that they can meet this limitation if they select an alternate treatment method.

<u>Discharge Category E</u>: The narrative criteria for fire control systems emphasizes the non-detectable chlorine limits and offers options for treatment to meet said limitation. If the pre-approved treatment methods are not used, the permittee must obtain approval for an alternate method prior to discharge. This is designed to protect the receiving waters, as the Department is only willing to pre-approve methods which have been routinely shown to be effective. Additionally, narrative criteria specifies that the discharge limitations for temperature are to protection exceedances in the receiving stream and suggests flow reductions or decreasing effluent temperatures as a means to avoid such exceedances.

<u>Discharge Category F</u>: This category is for untreated water and only contains narrative criteria that discharges cannot create a noticeable sediment plume or color change in the receiving stream and refers permittees to the erosion and sediment control section in the base permit for guidance on creating an outfall. As these discharges consist of only raw water, there is no basis for additional limitations.

<u>Discharge Category G</u>: Discharges of tank bottoms wastewater have the potential to contain toxics that the Department may be unaware of through traditional parameter testing. As a result, past iterations have included requirements for biomonitoring, in order to ensure protection of aquatic life. The narrative conditions of this permit carry over this requirement from the 11HT and specify the procedures to be followed in completing the biomonitoring. The language is essentially identical to conditions found in all of the Department's applicable individual NPDES permits.

<u>Discharge Category H</u>: The narrative criteria for the stormwater from aboveground containment areas category has been carried over directly from the 11HT iteration. It requires that the outfall be valved and the valve be closed except when draining, which ensure protection from unnoticed spills which may have occurred in the area. It specifies that the permittee must visually inspect the containment areas prior to discharge (and a minimum of once per month) and log any inspections. Additionally, it outlines spill prevention and response procedures.

# APPENDIX B: DEFINITIONS, ABBREVIATIONS, AND ACRONYMS

The standard terms and definitions have been moved into a separate appendix. Those that appeared in the 11HT were compared with recently issued General Permits, and if required in this permit, they have been included.