Rhode Island Pollutant Discharge Elimination System

Remediation General Permit

Expiration Date: September 30, 2013

Rhode Island Department of Environmental Management
Office of Water Resources
RIPDES Program

Part I: Permit Applicability

A. Applicability and Coverage of the Remediation General Permit (RGP)

1. Permit Area: This permit applies to all areas of the State of Rhode Island.

2. Eligibility: Except discharges identified in Part I.A.3, this permit covers the discharge of treated waste water to surface waters from the sources listed below:

   a. site remediation activities related primarily to petroleum, including site remediation of groundwater contaminated from spills or leaks of gasoline, fuel oil, or other oil contaminated sites;

   b. site remediation where the spill or leak is not petroleum-specific, such as sites contaminated with volatile organic compounds and/or metals;

   c. construction dewatering of contaminated sites, including locations where sub-surface site investigations and/or soil characterization for disposal have revealed various common pollutants typically associated with past industrialization, power generation, incineration, or other activity and where no specific source of contamination is apparent; and

   d. de-watering of miscellaneous contaminated sites, such as aquifer pump testing to evaluate remediation of formerly contaminated sites, well development or rehabilitation at contaminated or formerly contaminated sites, hydrostatic testing of pipelines and tanks, and remediation of contaminated sumps and dikes.

Table 1: Activities Covered by Remediation General Permit

Petroleum Related Site Remediation	A. Gasoline Remediation Sites
	B. Fuel Oil (and other Oils) Sites
	C. Petroleum Sites Containing Other Pollutants
Non- Petroleum Site Remediation	D. Volatile Organic Compound (VOC) Only Sites
	E. VOC Sites Containing Other Contaminants
	F. Sites Containing Primarily Metals
Construction Sites	G. Contaminated Construction Dewatering
Miscellaneous Contaminated Discharges	H. Aquifer Pump Testing and Well Development or Rehabilitation at Contaminated Sites
	I. Hydrostatic Testing of Pipelines and Tanks
	J. Contaminated Sumps and Dikes

3. Limitations of Coverage: The following discharges are not authorized by this permit:

a. Discharges associated with the treatment of groundwater that has a reasonable potential to be contaminated with sources other than those specified in Part A.2 of this permit.

b. Remediation discharges that may adversely affect a listed, or a proposed to be listed, endangered or threatened species or its critical habitat.

c. Remediation discharges that may cause or contribute to a water quality violation.

d. Remediation discharges to the terminal reservoir of a public drinking water supply.

e. Remediation discharges to Class AA, A, or SA waters where the applicant failed to demonstrate to the satisfaction of the Director, that the discharge serves a compelling public purpose which provides benefits to the public as a whole, that no reasonable alternative exists, and that the discharge will not impair existing uses nor attainment of designated uses.

f. Discharges to a Publicly-Owned Treatment Works (POTWs).

g. Discharges directly or indirectly to the ground.

h. Discharge of dredge drain back waters covered by CWA Section 401 and 404.

i. Discharges listed in an individual NPDES permit unless:

i. the permit has expired;
ii. DEM has terminated the existing permit;
iii. The discharges are separate from the currently permitted discharges; or
iv. The discharge is new and eligible for this permit (e.g., an industry where the primary process waste discharge is covered by an individual permit but the facility is conducting groundwater remediation with separate treatment and discharge).

j. Discharges for which the Director makes a determination that an individual permit is required under Rule 32(b)(3) of the RIPDES Regulations.

B. Application and Notice of Intent

1. Definition of “Owner” & “Operator”:

a. For the purposes of this permit, the “owner” of a property is the person, as defined by Rule 3 of the RIPDES Regulations, holding the title, deed, or legal document to the regulated property, facility, or activity, including a party working under an easement on the property.

b. The “operator” is defined as the person who has operational control over plans and specifications, or the person who has day-to-day supervision and control of activities occurring at the site. Further, for purposes of this permit, the operator is:

i. The owner if that person is performing all work related to complying with this permit; or

ii. Both the owner and contractor(s), as co-permittees, if a contractor(s) has been hired to perform work related to complying with this permit.

2. Authorization: To be authorized to discharge under this general permit, owners and operators of remediation discharges shall submit to the Director a standardized Notice of Intent (NOI) form in accordance with Part II.F of this permit. Upon review of the NOI, the Director may deny coverage under this general permit at any time and require submittal of an application for an individual permit. The Authorization may include special conditions, as necessary to protect waters of the State. Authorization to discharge under this general permit shall only be effective upon the owner(s) receipt of an authorization page signed and certified by the Director or the Director's designee.

3. Deadlines for Requesting Authorization:

   a. Discharges that were authorized under an existing permit and which are eligible for coverage under this general permit must submit an NOI within thirty (30) days of the effective date of this permit, if they are expected to continue discharging.

   b. Discharges that are eligible for coverage under this general permit, which commence after the effective date of this permit, must submit an NOI at least ninety (90) days prior to the commencement of such discharge.

4. Signature: The NOI must be signed by the owner and operator(s) of the facility, as defined in Part I.B.1, above, in accordance with the signatory requirements of Rule 12 of the RIPDES Regulations.

5. Termination of Coverage: Owners and/or operators of facilities must notify the Director in writing when discharge(s) authorized by the Remediation General Permit no longer occur at the facility. At that point, coverage under this permit is terminated. At a minimum, the following information is required to terminate coverage under this permit:

   a. Owner's name, mailing address, contact person, and telephone number;

   b. Operator's name, mailing address, contact person and telephone number;

   c. Name and location of the facility;

   d. RIPDES Remediation General Permit number; and

   e. Certification that the discharge no longer occurs.

6. Failure to Notify: Owners or operators, who fail to notify the Director of their intent to be covered under a general permit and discharge to waters of the State or to a separate storm sewer system without a RIPDES permit, are in violation of Chapter 46-12 of the Rhode Island General Laws and the Clean Water Act and are subject to legal action.

7. Continuation of the General Permit After Expiration: If this permit is not reissued prior to the expiration date, it will be administratively continued in accordance with the Administrative Procedures Act and remain in force and in effect as to any particular permittee. However, once this permit expires the DEM cannot provide written notification of coverage under this general permit to any permittee who submits a Notice of Intent to DEM after the permit's expiration date. Any permittee who was granted permit coverage prior to the expiration date will automatically remain covered by the continued permit until the earlier of:

   a. Reissuance of this permit, at which time the permittee must comply with the Notice of Intent conditions of the new permit to maintain authorization to discharge;

b. The permittee's submittal of a Notice of Termination;

c. Issuance of an individual permit for the permittee's discharges; or

d. A formal permit decision by the DEM not to reissue this general permit, at which time the permittee must seek coverage under an alternative permit.

Part II. Permit Conditons

A. Effluent Limitations and Monitoring Requirements

1. General Effluent Limitations and Monitoring Requirements – Each outfall subject to this permit shall be limited and monitored by the permittee as specified below in accordance with the receiving water classification when indicated. Permittees shall monitor the influent on a quarterly basis and the effluent at a frequency of twice per month for all applicable parameters unless otherwise specified.

   a. Permittees must monitor twice per month for each outfall in accordance with Part II.D of this permit.

   b. All of the parameter limits of the permit apply except where the permittee has certified that pollutants are "believed absent" in the discharge (see Part II.A.6.b below) or where specifically excluded in the provisions below.

2. Water Quality Requirements

   a. The discharge shall not cause visible discoloration of the receiving waters.

   b. The discharge shall contain neither a visible oil sheen, foam, nor floating solids at any time.

   c. The discharge shall not cause or contribute to any stream bank erosion and/or cause or contribute to any soil erosion and sedimentation.

3. Prohibition of Toxic Discharge - The discharge shall not contain materials in concentrations or in combinations which are hazardous or toxic to aquatic life or which would impair the uses designated by the classification of the receiving waters.

4. Chemical Effluent Limits and Influent and Effluent Monitoring – Permittees must demonstrate compliance with all of the applicable effluent paramenter limits specified in this permit.

5. Consideration of Dilution Factors for Discharges of Metals – Where discharges of metals to freshwater receiving waters require effluent limits, dilution factors may be applied to the discharges of metals to freshwaters. In the NOI, the applicant must select the applicable parameters and, if necessary, an appropriate dilution factor. See the NOI Instructions for details on how to determine the applicable effluent limitations for metals into freshwater.

6. Specific Pollutants to Be Monitored for Individual Sub-Categories

   a. Upon becoming subject to this permit, permittees must monitor the untreated influents on a quarterly basis and effluents for all of the chemicals related to the applicable sub-categories listed in Part II.D at a frequency of twice per month, except for any chemical for which the permittee certified in the NOI that the chemical was "believed absent" (See Part II.A.6.b below).

      i. If the discharge falls within only one sub-category (e.g. gasoline remediation sites), the permittee must monitor for the pollutants specified for that sub-category, except for any chemical for which the permittee certified in the NOI that the chemical was "believed absent".

ii. If the site falls within more than one sub-category, the permittee is required to monitor for all sub-category specified pollutants, except for any chemical for which the permittee certified in the NOI that the chemical was “believed absent”.

b. If the permittee certified in the NOI that any chemicals were “believed absent”, the following additional requirements apply regarding those chemicals:

i. If the discharge continues for one (1) year or greater from the start of the discharge under this permit, the permittee must re-certify by letter to the DEM which chemicals continue to be “believed absent”. Such re-certification shall be made at least once during each year that the discharge continues.

ii. Re-certification of a chemical as “believed absent” shall be based on laboratory data from a minimum of one (1) new untreated influent sample taken within thirty (30) days following the end of the one (1) year period, or

iii. In lieu of new sampling every year, the permittee may re-certify that a chemical is “believed absent”, by submitting historical sampling data demonstrating that the untreated influent concentration was below the applicable minimum detection level (Part II.G).

c. Re-certifications that permitted chemicals are “believed absent” must be signed in accordance with Rule 12 of the RIPDES Regulations.

d. Regardless of certification of chemicals as “believed absent”, the Director may provide written notice to any operator, requiring monitoring of specific parameters. Any such notice will briefly state the reasons for the monitoring, parameters to be monitored, frequency and period of monitoring, sample types, and reporting requirements.

e. In addition to reporting requirements specified in the permit, permittees must notify the Director as soon as they have reason to believe that any activity has occurred which would result in the discharge of any toxic pollutant which is not otherwise limited in the permit.

f. Certain monitoring requirements may be reduced upon demonstration by ongoing sampling and analytical data. This type of change requires written approval by the Director. Prior to receiving written approval, the permittee must continue to monitor at the frequency specified in the Remediation General Permit. To be eligible for a reduction in influent monitoring, the permittee must provide a minimum of two (2) years of data demonstrating compliance with the applicable parameter limits and a summary of the performance of the treatment system including such information as: flow, operation and maintenance activities, and all available influent and effluent data.

7. <u>Operations and Maintenance Requirements</u>

a. The permittee shall treat all waters prior to discharge using the treatment system described in the NOI. The permittee may not modify the treatment system without prior approval from the Office of Water Resources.

b. Treatment systems shall be equipped with liquid level and pressure sensors, alarms, automatic shut-offs and other fail-safe features, as appropriate to ensure the integrity of the treatment system. If the system includes granular activated carbon, the theoretical time to carbon breakthrough of the entire system shall be greater than either ten (10) days beyond the anticipated period of the discharge or sixty (60) days, whichever is less.

c. The DEM reserves the right to require monitoring of influent iron concentrations and may require iron pretreatment if iron fouling reduces the effectiveness of treatment equipment.

d. The treatment system shall be inspected at a minimum of twice per month to assure the system is operating efficiently. As a result of these or any other inspections, appropriate action shall be taken, as soon as practicable, to resolve any problems discovered during an inspection. Records documenting inspections and any actions taken (i.e. changing carbon) shall be retained and made available upon request to the Office of Water Resources and any other Office, as appropriate. If monitoring requirements are reduced per Part II.A.6.f, then the minimum inspection requirements shall be reduced consistent with the reduced monitoring requirements.

e. The permittee shall at all times properly operate and maintain the groundwater recovery/treatment system. Mechanical failure or breakthrough of the treatment system (exceedance of any permit limits) shall be reported to the Office of Water Resources within one (1) business day of the date the permittee receives the analytical results indicating the permit limit exceedence has occurred.

8. Flow Monitoring

a. The permittee shall monitor flow with a continuous flow meter, e.g., a meter that records the instantaneous gallons per minute (gpm) and total gallons discharged, to ensure that it does not exceed the design flow of the treatment system, determined by the component of the treatment train with the most restricted flow and as specified on the NOI.

9. Additional Permit Requirements

a. The permittee and operators covered by this permit must adhere to proper waste management practices for the facility and must comply with all applicable state and federal regulations applicable to the management of wastes. Please note that the submission of a Notice of Termination (NOT) of the discharge does not relieve the operator or the permittee of any requirement for proper management of solid and hazardous waste generated as a result of complying with the permit.

b. The permittee must insure that discharge(s) covered by this permit do not adversely affect existing water quality by preventing any erosion, stream scouring, or sedimentation caused directly or indirectly by the discharge.

B. Sampling, Testing, Recordkeeping, and Reporting Requirements

1. Sampling and Testing

a. Samples shall be taken at a location that provides for a representative analysis of the influent and effluent. Influent sampling should be taken at a point prior to any treatment of the water, i.e., raw influent. Effluent samples should be taken just prior to discharge to the receiving water or, if the effluent is commingled with another permitted discharge, prior to such commingling.

b. All samples shall be tested using the analytical methods approved under 40 CFR 136, or the following alternative methods:

i. For measuring volatile compounds, Method 8260C (or most recent version) may be used as a substitute for CWA Methods 524.2, 602, 624, or 1624.

ii. For measuring semivolatile compounds, Method 8270D (or the most recent version) may be used as a substitute for Methods 610, 625, and 1625.

iii. Any use of Method 8260C or Method 8270D must be accompanied by documented quality assurance/quality control (QA/QC) test results to prove that the analytical process can achieve the lower detection limits of the alternative methods.

2. Initial Treatment System Discharge Startup – The permittee must perform the following additional sampling and analysis of all applicable parameters during the first month of discharge.

   a. During the first week of discharge, permittees must take laboratory samples from the influent and from the effluent once each day on the first, third, and sixth day of the discharge.

   b. During the first week, samples may be analyzed in accordance with 40 CFR 136 or by other methods approved by this permit with a 72-hour turnaround time. After the first week, samples must be analyzed with a 7-day turnaround time.

   c. If the treatment system is working properly and achieving effluent limits, sampling for the remainder of the first month shall be weekly (i.e., for weeks 2, 3, and 4) and then at a frequency of twice per month thereafter for the term of the permit unless modified in accordance with Part II.A.6.f. After the first week, results for these additional samples shall be received and reviewed by the operator no more than seven (7) days from the sampling event.

   d. During system startup, the operator may also utilize field monitoring and visual observations as appropriate (e.g. portable organic vapor analysis or other tests) to aid in proper system startup.

   e. If the operator has any indication of water treatment system malfunction or violation of effluent limitations, the operator must turn the system off and notify the DEM within 24 hours. If the problem has been corrected, discharge may resume upon completion of the correction of the problems and upon DEM approval of the start up. After the discharge is restarted the operator may resume with the regular sampling schedule per Part II.B.2.a-d above.

3. Monitoring and Reporting

   Monitoring results obtained during the previous three (3) months shall be summarized and reported on a Discharge Monitoring Report Form postmarked no later than the 15th day of the month following the completed reporting period.

   Standard reporting quarters are:

January 1-March 31	April 1 – June 30
July 1 – September 30	October 1 – December 31

Signed copies of these, and all other reports required herein, shall be submitted to:

Permitting Section
RIPDES Program
Office of Water Resources
Rhode Island Department of Environmental Management
235 Promenade Street
Providence, Rhode Island 02908

4. Extended System Shutdown – Treatment systems and discharges that are interrupted for 120 or greater consecutive days are considered extended shutdowns. Any system re-start after this period shall revert to the monitoring and reporting requirements for initial system startup outlined in Part II.B.2 of this permit.

5. Short-Term Discharges – Discharges lasting less than one week (7 days), such as: pump tests and discharge of temporarily containerized waters, excluding hydrostatic testing discharges, which are then terminated and are not planned to be re-started, are considered “short-term” discharges.

a. For all short-term discharges, the permittee must take a minimum of three (3) representative influent and effluent laboratory samples.

b. At least one sample must be taken on the first day of discharge and one on the last day of discharge. Discharges of one day or less must take a minimum of one sample.

c. Samples must be analyzed with a 72-hour turnaround time in accordance with 40 CFR 136 or by other methods allowed by this permit.

d. The reporting requirements of Part II.B.3 of this permit apply.

6. Hydrostatic Testing and Discharge Monitoring and Reporting Requirements – Hydrostatic test waters must meet additional monitoring requirements due to the unique nature of those activities.

a. For New and Existing Tanks and Pipelines:

i. Prior to testing, the interior of the tank(s) and/or piping being tested shall be cleaned and certified to be free of product. There shall be no discharge of tank and/or pipe cleaning residual/debris to surface waters. At a minimum, four (4) representative samples shall be taken of the hydrostatic-test water: one (1) grab sample of the influent prior to entering the tank or pipeline and three (3) serial-grab samples of the effluent from the tank. The influent grab sample shall be taken approximately midway through the fill segment of the hydrostatic-test procedure. The three (3) effluent serial-grab samples shall be taken over the duration of the entire discharge segment of the hydrostatic-test procedure. The first serial grab sample shall be taken during the initial phase of the discharge; the second serial grab sample is to be taken midway through the discharge; and the final sample shall be taken at the end of the discharge. These samples should provide adequate characterization of the influent and effluent hydrostatic-test water.

Any hydrostatic test water released from the tank(s), must satisfy all the effluent limitations and conditions of this permit as required in Part II.D.25, 26, or 27 of the permit. A logbook shall be kept on site at all times to document the start and end of each hydrostatic test, the total flow discharged and all monitoring data.

Should any visual inspection or suspicious odor indicate the presence of product while inspecting the effluent from the treatment unit, or if laboratory results from the representative samples of the discharge become available that may indicate an exceedance of the permit effluent limits, the transfer shall be halted immediately followed by notification to the DEM of the suspended discharge. After the discharge of the hydrostatic test water has been completed, the permittee shall submit a letter/report to the DEM with the Discharge Monitoring Report, summarizing the results of the transfer. This report shall contain: the date(s) of the hydrostatic test water transfer; the volume of hydrostatic test water transferred; and the analytically determined values of the discharge parameters.

ii. Prior to hydrostatic testing, pipes or tanks that will come into contact with the test water must be thoroughly cleaned to remove scale, soil, residues, etc.

iii. Discharge flow should not exceed the flow of receiving streams and rivers or alter the habitat in other water bodies.

iv. All chemical additives must be identified. Test water containing additives must be disposed of as waste.

v. De-watering structures (such as splash blocks, sediment filters, etc.) must be used to dissipate energy and control erosion.

b. Permittees shall follow the reporting requirements of Part II.B.3.

C. Special RIPDES Permit Conditions

The following are a number of special RIPDES conditions which apply to certain types of discharges:

1. Compliance with Municipal Separate Storm Sewer Systems (MS4) Requirements and Storm Water Management Programs (SWMP)

   a. Dischargers covered by the general permit who discharge indirectly into a surface water through a MS4 collection system must comply with local requirements for discharge to that system including any Storm Water Management Program (SWMP) developed under the RIPDES MS4 general permit. The permittee shall keep records of any local permit, monitoring, or other information regarding the compliance with the local requirements along with the compliance records for this permit.

   b. If an operator of the facility is covered by the multi-sector storm water general permit and by this general permit, the following particular requirements apply:

      i. Operators who are utilizing a non-municipal storm sewer system at a facility covered by the RIPDES Multi-Sector Storm Water General Permit for Industrial Activity must comply with any SWPPP developed under that permit.

      ii. Where there is separate ownership and/or different operators of the facility/site and the treatment system, the operator of the facility/site covered by this permit must notify the operator of the facility covered by the multi-sector permit.

      iii. An authorization to discharge under this general permit, where the activity discharges to a municipal or private storm drain owned by another party, does not convey any rights or authorization to connect to that drain.

D. Effluent Limitations and Monitoring Requirements

1. Discharge Category A - Gasoline Remediation Sites Discharging to Class AA receiving waters. During the period beginning the date of authorization to discharge and lasting until either the expiration of this general permit or termination of coverage, permittee(s) are authorized to discharge from an approved groundwater treatment system. Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations Concentration - Specify Units		Monitoring Requirement	
	Average Monthly	Maximum Daily	Measurement Frequency[1,2,3]	Sample Type
Flow	--- GPM	xxx GPM	Continuous[4]	Totalizer
Benzene	4.72 ug/l	5.0 ug/l	2/Month	Grab
Toluene	11.2 ug/l	508 ug/l	2/Month	Grab
Ethyl-benzene	28.8 ug/l	1280 ug/l	2/Month	Grab
Total Xylenes (m,p,o)	2.4 ug/l	106.4 ug/l	2/Month	Grab
Total BTEX	--- ug/l	100 ug/l	2/Month	Grab
Napthalene	2.08 ug/l	20 ug/l	2/Month	Grab
Ethylene dibromide	--- ug/l	0.05 ug/l	2/Month	Grab
Methyl-t-Butyl-Ether	--- ug/l	70 ug/l	2/Month	Grab
tert-Butyl Alcohol	--- ug/l	--- ug/l	2/Month	Grab
tert-Amyl Methyl Ether	--- ug/l	--- ug/l	2/Month	Grab
Total Suspended Solids	30,000 ug/l	--- ug/l	2/Month	Grab
Total Petroleum Hydrocarbons	--- ug/l	1000 ug/l	2/Month	Grab
Lead (total recoverable)	See Part II.E	See Part II.E	2/Month	Grab
Iron (total recoverable)	See Part II.E	See Part II.E	2/Month	Grab

Description of footnotes and symbols applicable to all monitoring classes:

[1]In accordance with Part I.B.2, the DEM reserves the right to increase monitoring frequency based on factors including, but not limited to, quality of influent data and duration of project.

[2]In accordance with Part II.B.2 during the first month of discharge additional sampling requirements are applicable.

[3] In accordance with Part II.A.1 the influent to the treatment system shall be monitored on a quarterly basis.

[4]Monitor flow and submit a flow log with the monitoring results. The flow log shall include the rate and duration of flow including the time(s) of day when flow commences and ceases. At a minimum, the flow must be reported each time a sample is collected.

--- Signifies a parameter which must be monitored and data must be reported; no limit has been established at this time.

xxx Signifies a parameter which will be limited based upon the design plans and specifications for each project.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the effluent of a groundwater treatment system. The two (2) grab samples taken per month shall be separated by a minimum of ten (10) days.

2. Discharge Category A - Gasoline Remediation Sites Discharging to Non-Class AA Waters. During the period beginning the date of authorization to discharge and lasting until either the expiration of this general permit or termination of coverage, permittee(s) are authorized to discharge from an approved groundwater treatment system. Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations Concentration - Specify Units		Monitoring Requirement	
	Average Monthly	Maximum Daily	Measurement Frequency[1,2,3]	Sample Type
Flow	--- GPM	xxx GPM	Continuous[4]	Totalizer
Benzene	4.72 ug/l	5.0 ug/l	2/Month	Grab
Toluene	11.2 ug/l	508 ug/l	2/Month	Grab
Ethyl-benzene	28.8 ug/l	1280 ug/l	2/Month	Grab
Total Xylenes (m,p,o)	2.4 ug/l	106.4 ug/l	2/Month	Grab
Total BTEX	--- ug/l	100 ug/l	2/Month	Grab
Napthalene	2.08 ug/l	20 ug/l	2/Month	Grab
Ethylene dibromide	--- ug/l	0.05 ug/l	2/Month	Grab
Methyl-t-Butyl Ether	--- ug/l	70 ug/l	2/Month	Grab
tert-Butyl Alcohol	--- ug/l	--- ug/l	2/Month	Grab
tert-Amyl Methyl Ether	--- ug/l	--- ug/l	2/Month	Grab
Total Suspended Solids	30,000 ug/l	--- ug/l	2/Month	Grab
Total Petroleum Hydrocarbons	--- ug/l	1000 ug/l	2/Month	Grab
Lead	See Part II.E	See Part II.E	2/Month	Grab
Iron	See Part II.E	See Part II.E	2/Month	Grab

Description of footnotes and symbols applicable to all monitoring classes:

[1]In accordance with Part I.B.2, the DEM reserves the right to increase monitoring frequency based on factors including, but not limited to, quality of influent data and duration of project.

[2]In accordance with Part II.B.2 during the first month of discharge additional sampling requirements are applicable.

[3] In accordance with Part II.A.1 the influent to the treatment system shall be monitored on a quarterly basis.

[4]Monitor flow and submit a flow log with the monitoring results. The flow log shall include the rate and duration of flow including the time(s) of day when flow commences and ceases. At a minimum, the flow must be reported each time a sample is collected.

--- Signifies a parameter which must be monitored and data must be reported; no limit has been established at this time.

xxx Signifies a parameter which will be limited based upon the design plans and specifications for each project.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the effluent of a groundwater treatment system. The two (2) grab samples taken per month shall be separated by a minimum of ten (10) days.

3. Discharge Category A - Gasoline Remediation Sites Discharging to SA or SB Waters. During the period beginning the date of authorization to discharge and lasting until either the expiration of this general permit or termination of coverage, permittee(s) are authorized to discharge from an approved groundwater treatment system. Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations Concentration - Specify Units		Monitoring Requirement	
	Average Monthly	Maximum Daily	Measurement Frequency[1,2,3]	Sample Type
Flow	--- GPM	xxx GPM	Continuous[4]	Totalizer
Benzene	5.0 ug/l	5.0 ug/l	2/Month	Grab
Toluene	12,000 ug/l	--- ug/l	2/Month	Grab
Ethyl-benzene	1,680 ug/l	--- ug/l	2/Month	Grab
Total Xylenes (m,p,o)	--- ug/l	--- ug/l	2/Month	Grab
Total BTEX	100 ug/l	100 ug/l	2/Month	Grab
Napthalene	--- ug/l	20 ug/l	2/Month	Grab
Ethylene dibromide	--- ug/l	0.05 ug/l	2/Month	Grab
Methyl-t-Butyl Ether	--- ug/l	70 ug/l	2/Month	Grab
tert-Butyl Alcohol	--- ug/l	--- ug/l	2/Month	Grab
tert-Amyl Methyl Ether	--- ug/l	--- ug/l	2/Month	Grab
Total Suspended Solids	30,000 ug/l	--- ug/l	2/Month	Grab
Total Petroleum Hydrocarbons	--- ug/l	1,000 ug/l	2/Month	Grab
Lead	6.8 ug/l	176.6 ug/l	2/Month	Grab
Iron	--- ug/l	1,000 ug/l	2/Month	Grab

Description of footnotes and symbols applicable to all monitoring classes:

[1]In accordance with Part I.B.2, the DEM reserves the right to increase monitoring frequency based on factors including, but not limited to, quality of influent data and duration of project.

[2]In accordance with Part II.B.2 during the first month of discharge additional sampling requirements are applicable.

[3] In accordance with Part II.A.1 the influent to the treatment system shall be monitored on a quarterly basis.

[4]Monitor flow and submit a flow log with the monitoring results. The flow log shall include the rate and duration of flow including the time(s) of day when flow commences and ceases. At a minimum, the flow must be reported each time a sample is collected.

--- Signifies a parameter which must be monitored and data must be reported; no limit has been established at this time.

xxx Signifies a parameter which will be limited based upon the design plans and specifications for each project.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the effluent of a groundwater treatment system. The two (2) grab samples taken per month shall be separated by a minimum of ten (10) days.

4. Discharge Category B - Oil Remediation Sites Discharging to Class AA receiving waters. During the period beginning the date of authorization to discharge and lasting until either the expiration of this general permit or termination of coverage, permittee(s) are authorized to discharge from an approved groundwater treatment system. Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations Concentration - Specify Units		Monitoring Requirement	
	Average Monthly	Maximum Daily	Measurement Frequency[1,2,3]	Sample Type
Flow	--- GPM	xxx GPM	Continuous[4]	Totalizer
Acetone	--- ug/l	--- ug/l	2/Month	Grab
Total Petroleum Hydrocarbons	--- ug/l	1000 ug/l	2/Month	Grab
Napthalene	2.08 ug/l	20 ug/l	2/Month	Grab
Total Group I Polycyclic Aromatic Hydrocarbons	0.03 ug/l[5]	10 ug/l	2/Month	Grab
Benzo (a) Anthracene	--- ug/l	0.0038 ug/l[5]	2/Month	Grab
Benzo (a) Pyrene	--- ug/l	0.0038 ug/l[5]	2/Month	Grab
Benzo (b) Fluoranthene	--- ug/l	0.0038 ug/l[5]	2/Month	Grab
Benzo (k) Fluoranthene	--- ug/l	0.0038 ug/l[5]	2/Month	Grab
Chrysene	--- ug/l	0.0038 ug/l[5]	2/Month	Grab
Dibenzo (a,h) anthracene	--- ug/l	0.0038 ug/l[5]	2/Month	Grab
Indeno (1,2,3-cd) Pyrene	--- ug/l	0.0038 ug/l[5]	2/Month	Grab
Total Group II Polycyclic Aromatic Hydrocarbons	0.03 ug/l[5]	100 ug/l	2/Month	Grab
Acenapthene	1.52 ug/l	1.9 ug/l	2/Month	Grab
Acenapthylene	--- ug/l	--- ug/l	2/Month	Grab
Anthracene	6640 ug/l	--- ug/l	2/Month	Grab
Benzo (ghi) Perylene	--- ug/l	--- ug/l	2/Month	Grab
Fluoranthene	3.52 ug/l	159.2 ug/l	2/Month	Grab
Fluorene	880 ug/l	--- ug/l	2/Month	Grab
Phenanthrene	--- ug/l	--- ug/l	2/Month	Grab
Pyrene	664 ug/l	--- ug/l	2/Month	Grab
Benzene	4.72 ug/l	5 ug/l	2/Month	Grab
Toluene	11.2 ug/l	508 ug/l	2/Month	Grab
Ethylbenzene	28.8 ug/l	1280 ug/l	2/Month	Grab
Total Xylenes (m,p,o)	2.4 ug/l	106.4 ug/l	2/Month	Grab
Methyl-t-Butyl Ether	--- ug/l	70 ug/l	2/Month	Grab
Total BTEX	--- ug/l	100 ug/l	2/Month	Grab
Nickel (total recoverable)	See Part II.E	See Part II.E	2/Month	Grab

Chromium III (trivalent, total recoverable)	See Part II.E	See Part II.E	2/Month	Grab
Chromium VI (hexavalent, total recoverable)	See Part II.E	See Part II.E	2/Month	Grab
Zinc (total recoverable)	See Part II.E	See Part II.E	2/Month	Grab
Iron (total recoverable)	See Part II.E	See Part II.E	2/Month	Grab

Description of footnotes and symbols applicable to all monitoring classes:

[1]In accordance with Part I.B.2, the DEM reserves the right to increase monitoring frequency based on factors including, but not limited to, quality of influent data and duration of project.

[2]In accordance with Part II.B.2 during the first month of discharge additional sampling requirements are applicable.

[3] In accordance with Part II.A.1 the influent to the treatment system shall be monitored on a quarterly basis.

[4] Monitor flow and submit a flow log with the monitoring results. The flow log shall include the rate and duration of flow including the time(s) of day when flow commences and ceases. At a minimum, the flow must be reported each time a sample is collected.

[5] The limit at which compliance/noncompliance determinations will be based is the Quantitation Limit, which is defined as 0.05 ug/l for Benzo (a) Anthracene, 2 ug/l for Benzo (a) Pyrene, 0.1 ug/l for Benzo (b) Fluoranthene, 2 ug/l for Benzo (k) Fluoranthene, 5 ug/l for Chrysene, 0.1 ug/l for Dibenzo (a,h) anthracene, 0.15 ug/l for Indeno (1,2,3-cd) Pyrene, and 10 ug/l for Polycyclic Aromatic Hydrocarbons. These values may be reduced by permit modification as more sensitive methods are approved by EPA and the State.

---Signifies a parameter which must be monitored and data must be reported; no limit has been established at this time.

xxxSignifies a parameter which will be limited based upon the design plans and specifications for each project.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the effluent of a groundwater treatment system. The two (2) grab samples taken per month shall be separated by a minimum of ten (10) days.

5. Discharge Category B - Oil Remediation Sites Discharging to Non-Class AA receiving waters. During the period beginning the date of authorization to discharge and lasting until either the expiration of this general permit or termination of coverage, permittee(s) are authorized to discharge from an approved groundwater treatment system. Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations Concentration - Specify Units		Monitoring Requirement	
	Average Monthly	Maximum Daily	Measurement Frequency[1,2,3]	Sample Type
Flow	--- GPM	xxx GPM	Continuous[4]	Totalizer
Acetone	--- ug/l	--- ug/l	2/Month	Grab
Total Petroleum Hydrocarbons	--- ug/l	1000 ug/l	2/Month	Grab
Napthalene	2.08 ug/l	20 ug/l	2/Month	Grab
Total Group I Polycyclic Aromatic Hydrocarbons	0.14 ug/l[3]	10 ug/l	2/Month	Grab
Benzo (a) Anthracene	--- ug/l	0.0038 ug/l[5]	2/Month	Grab
Benzo (a) Pyrene	--- ug/l	0.0038 ug/l[5]	2/Month	Grab
Benzo (b) Fluoranthene	--- ug/l	0.0038 ug/l[5]	2/Month	Grab
Benzo (k) Fluoranthene	--- ug/l	0.0038 ug/l[5]	2/Month	Grab
Chrysene	--- ug/l	0.0038 ug/l[5]	2/Month	Grab
Dibenzo (a,h) anthracene	--- ug/l	0.0038 ug/l[5]	2/Month	Grab
Indeno (1,2,3-cd) Pyrene	--- ug/l	0.0038 ug/l[5]	2/Month	Grab
Total Group II Polycyclic Aromatic Hydrocarbons	0.14 ug/l[5]	100 ug/l	2/Month	Grab
Acenapthene	1.52 ug/l	1.9 ug/l	2/Month	Grab
Acenapthylene	--- ug/l	--- ug/l	2/Month	Grab
Anthracene	32000 ug/l	--- ug/l	2/Month	Grab
Benzo (ghi) Perylene	--- ug/l	--- ug/l	2/Month	Grab
Fluoranthene	3.52 ug/l	159.2 ug/l	2/Month	Grab
Fluorene	4240 ug/l	--- ug/l	2/Month	Grab
Phenanthrene	--- ug/l	--- ug/l	2/Month	Grab
Pyrene	3200 ug/l	--- ug/l	2/Month	Grab
Benzene	4.72 ug/l	5 ug/l	2/Month	Grab
Toluene	11.2 ug/l	508 ug/l	2/Month	Grab
Ethylbenzene	28.8 ug/l	1280 ug/l	2/Month	Grab
Total Xylenes (m,p,o)	2.4 ug/l	106.4 ug/l	2/Month	Grab
Total BTEX	--- ug/l	100 ug/l	2/Month	Grab
Methyl-t-Butyl Ether	--- ug/l	70 ug/l	2/Month	Grab

Nickel (total recoverable)	See Part II.E	See Part II.E	2/Month	Grab
Chromium III (trivalent, total recoverable)	See Part II.E	See Part II.E	2/Month	Grab
Chromium VI (hexavalent, total recoverable)	See Part II.E	See Part II.E	2/Month	Grab
Zinc (total recoverable)	See Part II.E	See Part II.E	2/Month	Grab
Iron (total recoverable)	See Part II.E	See Part II.E	2/Month	Grab

Description of footnotes and symbols applicable to all monitoring classes:

[1]In accordance with Part I.B.2, the DEM reserves the right to increase monitoring frequency based on factors including, but not limited to, quality of influent data and duration of project.

[2]In accordance with Part II.B.2 during the first month of discharge additional sampling requirements are applicable.

[3] In accordance with Part II.A.1 the influent to the treatment system shall be monitored on a quarterly basis.

[4]Monitor flow and submit a flow log with the monitoring results. The flow log shall include the rate and duration of flow including the time(s) of day when flow commences and ceases. At a minimum, the flow must be reported each time a sample is collected.

[5] The limit at which compliance/noncompliance determinations will be based is the Quantitation Limit, which is defined as 0.05 ug/l for Benzo (a) Anthracene, 2 ug/l for Benzo (a) Pyrene, 0.1 ug/l for Benzo (b) Fluoranthene, 2 ug/l for Benzo (k) Fluoranthene, 5 ug/l for Chrysene, 0.1 ug/l for Dibenzo (a,h) anthracene, 0.15 ug/l for Indeno (1,2,3-cd) Pyrene, and 10 ug/l for Total Polycyclic Aromatic Hydrocarbons. These values may be reduced by permit modification as more sensitive methods are approved by EPA and the State.

--- Signifies a parameter which must be monitored and data must be reported; no limit has been established at this time.

xxx Signifies a parameter which will be limited based upon the design plans and specifications for each project.
Samples taken in compliance with the monitoring requirements specified above shall be taken at the effluent of a groundwater treatment system. The two (2) grab samples taken per month shall be separated by a minimum of ten (10) days.

6. Discharge Category B - Oil Remediation Sites Discharging to Class SA or SB receiving waters. During the period beginning the date of authorization to discharge and lasting until either the expiration of this general permit or termination of coverage, permittee(s) are authorized to discharge from an approved groundwater treatment system. Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations Concentration - Specify Units		Monitoring Requirement	
	Average Monthly	Maximum Daily	Measurement Frequency[1,2,3]	Sample Type
Flow	--- GPM	xxx GPM	Continuous[4]	Totalizer
Acetone	--- ug/l	--- ug/l	2/Month	Grab
Total Petroleum Hydrocarbons	--- ug/l	1,000 ug/l	2/Month	Grab
Napthalene	--- ug/l	20 ug/l	2/Month	Grab
Total Group I Polycyclic Aromatic Hydrocarbons	0.14 ug/l[5]	10 ug/l	2/Month	Grab
Benzo (a) Anthracene	0.0038 ug/l[5]	0.0038 ug/l[5]	2/Month	Grab
Benzo (a) Pyrene	0.0038 ug/l[5]	0.0038 ug/l[5]	2/Month	Grab
Benzo (b) Fluoranthene	0.0038 ug/l[5]	0.0038 ug/l[5]	2/Month	Grab
Benzo (k) Fluoranthene	0.0038 ug/l[5]	0.0038 ug/l[5]	2/Month	Grab
Chrysene	0.0038 ug/l[5]	0.0038 ug/l[5]	2/Month	Grab
Dibenzo (a,h) anthracene	0.0038 ug/l[5]	0.0038 ug/l[5]	2/Month	Grab
Indeno (1,2,3-cd) Pyrene	0.0038 ug/l[5]	0.0038 ug/l[5]	2/Month	Grab
Total Group II Polycyclic Aromatic Hydrocarbons	0.14 ug/l[5]	100 ug/l	2/Month	Grab
Acenapthene	1.9 ug/l	1.9 ug/l	2/Month	Grab
Acenapthylene	--- ug/l	--- ug/l	2/Month	Grab
Anthracene	32000 ug/l	--- ug/l	2/Month	Grab
Benzo (ghi) Perylene	--- ug/l	--- ug/l	2/Month	Grab
Fluoranthene	112 ug/l	--- ug/l	2/Month	Grab
Fluorene	4240 ug/l	--- ug/l	2/Month	Grab
Phenanthrene	--- ug/l	--- ug/l	2/Month	Grab
Pyrene	3200 ug/l	--- ug/l	2/Month	Grab
Benzene	5 ug/l	5 ug/l	2/Month	Grab
Toluene	12000 ug/l	--- ug/l	2/Month	Grab
Ethylbenzene	1680 ug/l	--- ug/l	2/Month	Grab
Total Xylenes (m,p,o)	--- ug/l	--- ug/l	2/Month	Grab
Total BTEX	100 ug/l	100 ug/l	2/Month	Grab

Methyl-t-Butyl Ether	--- ug/l	70 ug/l	2/Month	Grab
Nickel (total recoverable)	6.62 ug/l	59.79 ug/l	2/Month	Grab
Chromium III (trivalent, total recoverable)	100 ug/l	--- ug/l	2/Month	Grab
Chromium VI (hexavalent, total recoverable)	40.28 ug/l	886.2 ug/l	2/Month	Grab
Zinc (total recoverable)	68.5 ug/l	76.11 ug/l	2/Month	Grab
Iron (total recoverable)	--- ug/l	1000 ug/l	2/Month	Grab

Description of footnotes and symbols applicable to all monitoring classes:

[1]In accordance with Part I.B.2, the DEM reserves the right to increase monitoring frequency based on factors including, but not limited to, quality of influent data and duration of project.

[2]In accordance with Part II.B.2 during the first month of discharge additional sampling requirements are applicable.

[3] In accordance with Part II.A.1 the influent to the treatment system shall be monitored on a quarterly basis.

[4]Monitor flow and submit a flow log with the monitoring results. The flow log shall include the rate and duration of flow including the time(s) of day when flow commences and ceases. At a minimum, the flow must be reported each time a sample is collected.

[5] The limit at which compliance/noncompliance determinations will be based is the Quantitation Limit, which is defined as 0.05 ug/l for Benzo (a) Anthracene, 2 ug/l for Benzo (a) Pyrene, 0.1 ug/l for Benzo (b) Fluoranthene, 2 ug/l for Benzo (k) Fluoranthene, 5 ug/l for Chrysene, 0.1 ug/l for Dibenzo (a,h) anthracene, 0.15 ug/l for Indeno (1,2,3-cd) Pyrene and 10 ug/l for Polycyclic Aromatic Hydrocarbons. These values may be reduced by permit modification as more sensitive methods are approved by EPA and the State.

---Signifies a parameter which must be monitored and data must be reported; no limit has been established at this time.

xxxSignifies a parameter which will be limited based upon the design plans and specifications for each project.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the effluent of a groundwater treatment system. The two (2) grab samples taken per month shall be separated by a minimum of ten (10) days.

7. Discharge Category C - Petroleum Sites Containing Other Pollutants Discharging to Class AA receiving waters. During the period beginning the date of authorization to discharge and lasting until either the expiration of this general permit or termination of coverage, permittee(s) are authorized to discharge from an approved groundwater treatment system. Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations Concentration - Specify Units		Monitoring Requirement	
	Average Monthly	Maximum Daily	Measurement Frequency[1,2,3]	Sample Type
Flow	--- GPM	xxx GPM	Continuous[4]	Totalizer
Total Suspended Solids	30,000 ug/l	--- ug/l	2/Month	Grab
Total Residual Chlorine	11 ug/l[5]	19 ug/l[5]	2/Month	Grab
Total Petroleum Hydrocarbons	--- ug/l	1000 ug/l	2/Month	Grab
Cyanide	4.16 ug/l[5]	17.6 ug/l	2/Month	Grab
Benzene	4.72 ug/l	5 ug/l	2/Month	Grab
Toluene	11.2 ug/l	508 ug/l	2/Month	Grab
Ethylbenzene	28.8 ug/l	1280 ug/l	2/Month	Grab
Total Xylenes (m,p,o)	2.4 ug/l	106.4 ug/l	2/Month	Grab
Total BTEX	--- ug/l	100 ug/l	2/Month	Grab
Ethylene dibromide	--- ug/l	0.05 ug/l	2/Month	Grab
Methyl-t-Butyl Ether	--- ug/l	70 ug/l	2/Month	Grab
tert-Amyl Methyl Ether	--- ug/l	--- ug/l	2/Month	Grab
Carbon Tetrachloride	1.84 ug/l	4.4 ug/l	2/Month	Grab
1,4 Dichlorobenzene	0.96 ug/l	5 ug/l	2/Month	Grab
1,2 Dichlorobenzene	1.44 ug/l	63.2 ug/l	2/Month	Grab
1,3 Dichlorobenzene	6.96 ug/l	312 ug/l	2/Month	Grab
Total Dichlorobenzene	--- ug/l	763 ug/l	2/Month	Grab
1,1 Dichloroethane	--- ug/l	70 ug/l	2/Month	Grab
1,2 Dichloroethane	3.04 ug/l	5 ug/l	2/Month	Grab
1,1 Dichloroethylene	3.2 ug/l	3.2 ug/l	2/Month	Grab
cis-1,2 Dichloroethylene	--- ug/l	70 ug/l	2/Month	Grab
Dichloromethane	--- ug/l	4.6 ug/l	2/Month	Grab
Tetrachloroethylene	4.24 ug/l	5 ug/l	2/Month	Grab
1,1,1 Trichloroethane	--- ug/l	200 ug/l	2/Month	Grab
1,1,2 Trichloroethane	4.72 ug/l	5 ug/l	2/Month	Grab
Trichloroethylene	5 ug/l	5 ug/l	2/Month	Grab
Vinyl Chloride	0.02 ug/l[3]	2 ug/l	2/Month	Grab

Acetone	--- ug/l	--- ug/l	2/Month	Grab
1,4 Dioxane	--- ug/l	--- ug/l	2/Month	Grab
Total Phenols	4.48 ug/l	200.8 ug/l	2/Month	Grab
Pentachlorophenol (PCP)	0.04 ug/l[5]	0.05 ug/l[5]	2/Month	Grab
Total Phthalates	3 ug/l[5]	--- ug/l	2/Month	Grab
Bis (2-Ethylhexyl) Phthalate	6 ug/l	6 ug/l	2/Month	Grab
Total Group I Polycyclic Aromatic Hydrocarbons	0.03 ug/l[5]	10 ug/l	2/Month	Grab
Benzo (a) Anthracene	--- ug/l	0.0038 ug/l[5]	2/Month	Grab
Benzo (a) Pyrene	--- ug/l	0.0038 ug/l[5]	2/Month	Grab
Benzo (b) Fluoranthene	--- ug/l	0.0038 ug/l[5]	2/Month	Grab
Benzo (k) Fluoranthene	--- ug/l	0.0038 ug/l[5]	2/Month	Grab
Chrysene	--- ug/l	0.0038 ug/l[5]	2/Month	Grab
Dibenzo (a,h) anthracene	--- ug/l	0.0038 ug/l[5]	2/Month	Grab
Indeno (1,2,3-cd) Pyrene	--- ug/l	0.0038 ug/l[5]	2/Month	Grab
Total Group II Polycyclic Aromatic Hydrocarbons	0.03 ug/l[5]	100 ug/l	2/Month	Grab
Acenapthene	1.52 ug/l	1.9 ug/l	2/Month	Grab
Acenapthylene	--- ug/l	--- ug/l	2/Month	Grab
Anthracene	6640 ug/l	--- ug/l	2/Month	Grab
Benzo (ghi) Perylene	--- ug/l	--- ug/l	2/Month	Grab
Fluoranthene	3.52 ug/l	159.2 ug/l	2/Month	Grab
Fluorene	880 ug/l	--- ug/l	2/Month	Grab
Napthalene	2.08 ug/l	20 ug/l	2/Month	Grab
Phenanthrene	--- ug/l	--- ug/l	2/Month	Grab
Pyrene	664 ug/l	--- ug/l	2/Month	Grab
Total Polychlorinated Biphenyls (PCBs)	0.000064 ug/l[5]	0.000064 ug/l[5]	2/Month	Grab
Antimony	See Part II.E	See Part II.E	2/Month	Grab
Arsenic	See Part II.E	See Part II.E	2/Month	Grab
Cadmium	See Part II.E	See Part II.E	2/Month	Grab
Chromium III (trivalent, total recoverable)	See Part II.E	See Part II.E	2/Month	Grab
Chromium VI (hexavalent, total recoverable)	See Part II.E	See Part II.E	2/Month	Grab
Copper	See Part II.E	See Part II.E	2/Month	Grab
Lead (total Recoverable)	See Part II.E	See Part II.E	2/Month	Grab
Mercury	See Part II.E	See Part II.E	2/Month	Grab
Nickel (total recoverable)	See Part II.E	See Part II.E	2/Month	Grab

Selenium	See Part II.E	See Part II.E	2/Month	Grab
Silver	See Part II.E	See Part II.E	2/Month	Grab
Zinc (total recoverable)	See Part II.E	See Part II.E	2/Month	Grab
Iron (total recoverable)	See Part II.E	See Part II.E	2/Month	Grab

Description of footnotes and symbols applicable to all monitoring classes:

[1]In accordance with Part I.B.2, the DEM reserves the right to increase monitoring frequency based on factors including, but not limited to, quality of influent data and duration of project.

[2]In accordance with Part II.B.2 during the first month of discharge additional sampling requirements are applicable.

[3] In accordance with Part II.A.1 the influent to the treatment system shall be monitored on a quarterly basis.

[4]Monitor flow and submit a flow log with the monitoring results. The flow log shall include the rate and duration of flow including the time(s) of day when flow commences and ceases. At a minimum, the flow must be reported each time a sample is collected.

[5]The limit at which compliance/noncompliance determinations will be based is the Quantitation Limit, which is defined as 20 ug/l for Total Residual Chlorine, 10 ug/l for Cyanide, 0.5 ug/l for Vinyl Chloride, 1 ug/l for Pentachlorophenol, 5 ug/l for Total Phthalates, 0.05 ug/l for Benzo (a) Anthracene, 2 ug/l for Benzo (a) Pyrene, 0.1 ug/l for Benzo (b) Fluoranthene, 2 ug/l for Benzo (k) Fluoranthene, 5 ug/l for Chrysene, 0.1 ug/l for Dibenzo (a,h) anthracene, 0.15 ug/l for Indeno (1,2,3-cd) Pyrene, and 10 ug/l for Total Polycyclic Aromatic Hydrocarbons. These values may be reduced by permit modification as more sensitive test methods are approved by EPA and the State.

--- Signifies a parameter which must be monitored and data must be reported; no limit has been established at this time.

xxx Signifies a parameter which will be limited based upon the design plans and specifications for each project.
Samples taken in compliance with the monitoring requirements specified above shall be taken at the effluent of a groundwater treatment system. The two (2) grab samples taken per month shall be separated by a minimum of ten (10) days.

8. Discharge Category C - Petroleum Sites Containing Other Pollutants Discharging to Non-Class AA receiving waters. During the period beginning the date of authorization to discharge and lasting until either the expiration of this general permit or termination of coverage, permittee(s) are authorized to discharge from an approved groundwater treatment system. Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations Concentration - Specify Units		Monitoring Requirement	
	Average Monthly	Maximum Daily	Measurement Frequency[1,2,3]	Sample Type
Flow	--- GPM	xxx GPM	Continuous[4]	Totalizer
Total Suspended Solids	30,000 ug/l	--- ug/l	2/Month	Grab
Total Residual Chlorine	11 ug/l[5]	19 ug/l[5]	2/Month	Grab
Total Petroleum Hydrocarbons	--- ug/l	1000 ug/l	2/Month	Grab
Cyanide	4.16 ug/l[3]	17.6 ug/l	2/Month	Grab
Benzene	4.72 ug/l	5 ug/l	2/Month	Grab
Toluene	11.2 ug/l	508 ug/l	2/Month	Grab
Ethylbenzene	28.8 ug/l	1280 ug/l	2/Month	Grab
Total Xylenes (m,p,o)	2.4 ug/l	106.4 ug/l	2/Month	Grab
Total BTEX	--- ug/l	100 ug/l	2/Month	Grab
Ethylene dibromide	--- ug/l	0.05 ug/l	2/Month	Grab
Methyl-t-Butyl Ether	--- ug/l	70 ug/l	2/Month	Grab
tert-Amyl Methyl Ether	--- ug/l	--- ug/l	2/Month	Grab
Carbon Tetrachloride	4.4 ug/l	4.4 ug/l	2/Month	Grab
1,4 Dichlorobenzene	0.96 ug/l	5 ug/l	2/Month	Grab
1,2 Dichlorobenzene	1.44 ug/l	63.2 ug/l	2/Month	Grab
1,3 Dichlorobenzene	6.96 ug/l	312 ug/l	2/Month	Grab
Total Dichlorobenzene	--- ug/l	763 ug/l	2/Month	Grab
1,1 Dichloroethane	--- ug/l	70 ug/l	2/Month	Grab
1,2 Dichloroethane	5 ug/l	5 ug/l	2/Month	Grab
1,1 Dichloroethylene	3.2 ug/l	3.2 ug/l	2/Month	Grab
cis-1,2 Dichloroethylene	--- ug/l	70 ug/l	2/Month	Grab
Dichloromethane	--- ug/l	4.6 ug/l	2/Month	Grab
Tetrachloroethylene	4.24 ug/l	5 ug/l	2/Month	Grab
1,1,1 Trichloroethane	--- ug/l	200 ug/l	2/Month	Grab
1,1,2 Trichloroethane	5 ug/l	5 ug/l	2/Month	Grab
Trichloroethylene	5 ug/l	5 ug/l	2/Month	Grab
Vinyl Chloride	1.92 ug/l	2 ug/l	2/Month	Grab

Acetone	--- ug/l	--- ug/l	2/Month	Grab
1,4 Dioxane	--- ug/l	--- ug/l	2/Month	Grab
Total Phenols	4.48 ug/l	200.8 ug/l	2/Month	Grab
Pentachlorophenol	0.04 ug/l[5]	0.05 ug/l[5]	2/Month	Grab
Total Phthalates	3 ug/l[5]	--- ug/l	2/Month	Grab
Bis (2-Ethylhexyl) Phthalate	6 ug/l	6 ug/l	2/Month	Grab
Total Group I Polycyclic Aromatic Hydrocarbons	0.14 ug/l[5]	10 ug/l	2/Month	Grab
Benzo (a) Anthracene	--- ug/l	0.0038 ug/l[5]	2/Month	Grab
Benzo (a) Pyrene	--- ug/l	0.0038 ug/l[5]	2/Month	Grab
Benzo (b) Fluoranthene	--- ug/l	0.0038 ug/l[5]	2/Month	Grab
Benzo (k) Fluoranthene	--- ug/l	0.0038 ug/l[5]	2/Month	Grab
Chrysene	--- ug/l	0.0038 ug/l[5]	2/Month	Grab
Dibenzo (a,h) anthracene	--- ug/l	0.0038 ug/l[5]	2/Month	Grab
Indeno (1,2,3-cd) Pyrene	--- ug/l	0.0038 ug/l[5]	2/Month	Grab
Total Group II Polycyclic Aromatic Hydrocarbons	0.14 ug/l[5]	100 ug/l	2/Month	Grab
Acenapthene	1.52 ug/l	1.9 ug/l	2/Month	Grab
Acenapthylene	--- ug/l	--- ug/l	2/Month	Grab
Anthracene	32000 ug/l	--- ug/l	2/Month	Grab
Benzo (ghi) Perylene	--- ug/l	--- ug/l	2/Month	Grab
Fluoranthene	3.52 ug/l	159.2 ug/l	2/Month	Grab
Fluorene	4240 ug/l	--- ug/l	2/Month	Grab
Napthalene	2.08 ug/l	20 ug/l	2/Month	Grab
Phenanthrene	--- ug/l	--- ug/l	2/Month	Grab
Pyrene	3200 ug/l	--- ug/l	2/Month	Grab
Total Polychlorinated Biphenyls	0.000512 ug/l	0.000064 ug/l	2/Month	Grab
Antimony	See Part II.E	See Part II.E	2/Month	Grab
Arsenic	See Part II.E	See Part II.E	2/Month	Grab
Cadmium	See Part II.E	See Part II.E	2/Month	Grab
Chromium III (trivalent, total recoverable)	See Part II.E	See Part II.E	2/Month	Grab
Chromium VI (hexavalent, total recoverable)	See Part II.E	See Part II.E	2/Month	Grab
Copper	See Part II.E	See Part II.E	2/Month	Grab
Lead (total recoverable)	See Part II.E	See Part II.E	2/Month	Grab
Mercury	See Part II.E	See Part II.E	2/Month	Grab
Nickel (total recoverable)	See Part II.E	See Part II.E	2/Month	Grab

Selenium	See Part II.E	See Part II.E	2/Month	Grab
Silver	See Part II.E	See Part II.E	2/Month	Grab
Zinc (total recoverable)	See Part II.E	See Part II.E	2/Month	Grab
Iron (total recoverable)	See Part II.E	See Part II.E	2/Month	Grab

Description of footnotes and symbols applicable to all monitoring classes:

[1]In accordance with Part I.B.2, the DEM reserves the right to increase monitoring frequency based on factors including, but not limited to, quality of influent data and duration of project.

[2]In accordance with Part II.B.2 during the first month of discharge additional sampling requirements are applicable.

[3] In accordance with Part II.A.1 the influent to the treatment system shall be monitored on a quarterly basis.

[4]Monitor flow and submit a flow log with the monitoring results. The flow log shall include the rate and duration of flow including the time(s) of day when flow commences and ceases. At a minimum, the flow must be reported each time a sample is collected.

[5] The limit at which compliance/noncompliance determinations will be based is the Quantitation Limit, which is defined as 20 ug/l for Total Residual Chlorine, 10 ug/l for Cyanide, 1 ug/l for Pentachlorophenol, 5 ug/l for Total Phthalates, 0.05 ug/l for Benzo (a) Anthracene, 2 ug/l for Benzo (a) Pyrene, 0.1 ug/l for Benzo (b) Fluoranthene, 2 ug/l for Benzo (k) Fluoranthene, 5 ug/l for Chrysene, 0.1 ug/l for Dibenzo (a,h) anthracene, 0.15 ug/l for Indeno (1,2,3-cd) Pyrene, and 10 ug/l for Polycyclic Aromatic Hydrocarbons. These values may be reduced by permit modification as more sensitive methods are approved by EPA and the State.

---Signifies a parameter which must be monitored and data must be reported; no limit has been established at this time.

xxx Signifies a parameter which will be limited based upon the design plans and specifications for each project.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the effluent of a groundwater treatment system. The two (2) grab samples taken per month shall be separated by a minimum of ten (10) days.

9. Category C - Petroleum Sites Containing Other Pollutants Discharging to Class SA or SB receiving waters. During the period beginning the date of authorization to discharge and lasting until either the expiration of this general permit or termination of coverage, permittee(s) are authorized to discharge from an approved groundwater treatment system. Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations Concentration - Specify Units		Monitoring Requirement	
	Average Monthly	Maximum Daily	Measurement Frequency[1,2,3]	Sample Type
Flow	--- GPM	xxx GPM	Continuous[4]	Totalizer
Total Suspended Solids	30,000 ug/l	--- ug/l	2/Month	Grab
Total Residual Chlorine	7.5 ug/l[5]	13 ug/l[5]	2/Month	Grab
Total Petroleum Hydrocarbons	--- ug/l	1000 ug/l	2/Month	Grab
Cyanide	0.8 ug/l[5]	0.8 ug/l[5]	2/Month	Grab
Benzene	5 ug/l	5 ug/l	2/Month	Grab
Toluene	12,000 ug/l	--- ug/l	2/Month	Grab
Ethylbenzene	1,680 ug/l	--- ug/l	2/Month	Grab
Total Xylenes (m,p,o)	--- ug/l	--- ug/l	2/Month	Grab
Total BTEX	100 ug/l	100 ug/l	2/Month	Grab
Ethylene dibromide	--- ug/l	0.05 ug/l	2/Month	Grab
Methyl-t-Butyl Ether	--- ug/l	70 ug/l	2/Month	Grab
tert-Amyl Methyl Ether	--- ug/l	--- ug/l	2/Month	Grab
Carbon Tetrachloride	4.4 ug/l	4.4 ug/l	2/Month	Grab
1,4 Dichlorobenzene	5.0 ug/l	5.0 ug/l	2/Month	Grab
1,2 Dichlorobenzene	600 ug/l	600 ug/l	2/Month	Grab
1,3 Dichlorobenzene	320 ug/l	320 ug/l	2/Month	Grab
Total Dichlorobenzene	--- ug/l	763 ug/l	2/Month	Grab
1,1 Dichloroethane	--- ug/l	70 ug/l	2/Month	Grab
1,2 Dichloroethane	5 ug/l	5 ug/l	2/Month	Grab
1,1 Dichloroethylene	3.2 ug/l	3.2 ug/l	2/Month	Grab
cis, 1,2 Dichloroethylene	--- ug/l	70 ug/l	2/Month	Grab
Dichloromethane	--- ug/l	4.6 ug/l	2/Month	Grab
Tetrachloroethylene	5 ug/l	5 ug/l	2/Month	Grab
1,1,1 Trichloroethane	--- ug/l	200 ug/l	2/Month	Grab
1,1,2 Trichloroethane	5 ug/l	5 ug/l	2/Month	Grab
Trichloroethylene	5 ug/l	5 ug/l	2/Month	Grab
Vinyl Chloride	1.92 ug/l	2 ug/l	2/Month	Grab

Acetone	--- ug/l	--- ug/l	2/Month	Grab
1,4 Dioxane	--- ug/l	--- ug/l	2/Month	Grab
Total Phenols	300 ug/l	300 ug/l	2/Month	Grab
Pentachlorophenol	1 ug/l	1 ug/l	2/Month	Grab
Total Phthalates	3 ug/l[3]	--- ug/l	2/Month	Grab
Bis (2-Ethylhexyl) Phthalate	6 ug/l	6 ug/l	2/Month	Grab
Total Group I Polycyclic Aromatic Hydrocarbons	0.14 ug/l[5]	10 ug/l	2/Month	Grab
Benzo (a) Anthracene	0.0038 ug/l[5]	0.0038 ug/l[5]	2/Month	Grab
Benzo (a) Pyrene	0.0038 ug/l[5]	0.0038 ug/l[5]	2/Month	Grab
Benzo (b) Fluoranthene	0.0038 ug/l[5]	0.0038 ug/l[5]	2/Month	Grab
Benzo (k) Fluoranthene	0.0038 ug/l[5]	0.0038 ug/l[5]	2/Month	Grab
Chrysene	0.0038 ug/l[5]	0.0038 ug/l[5]	2/Month	Grab
Dibenzo (a,h) anthracene	0.0038 ug/l[5]	0.0038 ug/l[5]	2/Month	Grab
Indeno (1,2,3-cd) Pyrene	0.0038 ug/l[5]	0.0038 ug/l[5]	2/Month	Grab
Total Group II Polycyclic Aromatic Hydrocarbons	0.14 ug/l[5]	100 ug/l	2/Month	Grab
Acenapthene	1.9 ug/l	1.9 ug/l	2/Month	Grab
Acenapthylene	--- ug/l	--- ug/l	2/Month	Grab
Anthracene	32000 ug/l	--- ug/l	2/Month	Grab
Benzo (ghi) Perylene	--- ug/l	--- ug/l	2/Month	Grab
Fluoranthene	112 ug/l	--- ug/l	2/Month	Grab
Fluorene	4240 ug/l	--- ug/l	2/Month	Grab
Napthalene	--- ug/l	20 ug/l	2/Month	Grab
Phenanthrene	--- ug/l	--- ug/l	2/Month	Grab
Pyrene	3200 ug/l	--- ug/l	2/Month	Grab
Total Polychlorinated Biphenyls (PCBs)	0.000064 ug/l	0.000064 ug/l	2/Month	Grab
Antimony	5.6 ug/l	5.6 ug/l	2/Month	Grab
Arsenic	1.12 ug/l[5]	55.2 ug/l	2/Month	Grab
Cadmium	7.08 ug/l	32.19 ug/l	2/Month	Grab
Chromium III (trivalent, total recoverable)	100 ug/l	--- ug/l	2/Month	Grab
Chromium VI (hexavalent, total recoverable)	40.28 ug/l	886.2 ug/l	2/Month	Grab
Copper	2.98 ug/l[5]	4.62 ug/l	2/Month	Grab

Lead (Total Recoverable)	6.81 ug/l	176.6 ug/l	2/Month	Grab
Mercury	0.12 ug/l[5]	1.69 ug/l	2/Month	Grab
Nickel (total recoverable)	6.62 ug/l	59.79 ug/l	2/Month	Grab
Selenium	56.91 ug/l	232.46 ug/l	2/Month	Grab
Silver	1.78 ug/l[5]	1.78 ug/l[5]	2/Month	Grab
Zinc (total recoverable)	68.5 ug/l	76.11 ug/l	2/Month	Grab
Iron (total recoverable)	--- ug/l	1000 ug/l	2/Month	Grab

Description of footnotes and symbols applicable to all monitoring classes:

[1]In accordance with Part I.B.2, the DEM reserves the right to increase monitoring frequency based on factors including, but not limited to, quality of influent data and duration of project.

[2]In accordance with Part II.B.2 during the first month of discharge additional sampling requirements are applicable.

[3] In accordance with Part II.A.1 the influent to the treatment system shall be monitored on a quarterly basis.

[4]Monitor flow and submit a flow log with the monitoring results. The flow log shall include the rate and duration of flow including the time(s) of day when flow commences and ceases. At a minimum, the flow must be reported each time a sample is collected.

[5] The limit at which compliance/noncompliance determinations will be based is the Quantitation Limit, which is defined as 20 ug/l for Total Residual Chlorine, 10 ug/l for Cyanide, 5 ug/l for Total Phthalates, 0.05 ug/l for Benzo (a) Anthracene, 2 ug/l for Benzo (a) Pyrene, 0.1 ug/l for Benzo (b) Fluoranthene, 2 ug/l for Benzo (k) Fluoranthene, 5 ug/l for Chrysene, 0.1 ug/l for Dibenzo (a,h) anthracene, 0.15 ug/l for Indeno (1,2,3-cd) Pyrene, 2 ug/l for Arsenic, 3 ug/l for Copper, 0.2 ug/l for Mercury, 2 ug/l for Silver and 10 ug/l for Polycyclic Aromatic Hydrocarbons. These values may be reduced by permit modification as more sensitive methods are approved by EPA and the State.

---Signifies a parameter which must be monitored and data must be reported; no limit has been established at this time.

xxx ignifies a parameter which will be limited based upon the design plans and specifications for each project.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the effluent of a groundwater treatment system. The two (2) grab samples taken per month shall be separated by a minimum of ten (10) days.

10. Discharge Category D – Sites Containing Volatile Organic Compound Only Discharging to Class AA receiving waters. During the period beginning the date of authorization to discharge and lasting until either the expiration of this general permit or termination of coverage, permittee(s) are authorized to discharge from an approved groundwater treatment system. Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations Concentration - Specify Units		Monitoring Requirement	
	Average Monthly	Maximum Daily	Measurement Frequency[1,2,3]	Sample Type
Flow	--- GPM	xxx GPM	Continuous[4]	Totalizer
Carbon Tetrachloride	1.84 ug/l	4.4 ug/l	2/Month	Grab
1,2 Dichlorobenzene	1.44 ug/l	63.2 ug/l	2/Month	Grab
1,3 Dichlorobenzene	6.96 ug/l	312 ug/l	2/Month	Grab
1,4 Dichlorobenzene	0.96 ug/l	5 ug/l	2/Month	Grab
Total Dichlorobenzene	--- ug/l	763 ug/l	2/Month	Grab
1,1 Dichloroethane	--- ug/l	70 ug/l	2/Month	Grab
1,2 Dichloroethane	3.04 ug/l	5 ug/l	2/Month	Grab
1,1 Dichloroethylene (DCE)	3.2 ug/l	3.2 ug/l	2/Month	Grab
cis 1,2 Dichloroethylene	--- ug/l	70 ug/l	2/Month	Grab
Methylene Chloride	4.6 ug/l[5]	4.6 ug/l[5]	2/Month	Grab
Tetrachloroethylene	4.24 ug/l	5 ug/l	2/Month	Grab
1,1,1 Trichloroethane	--- ug/l	200 ug/l	2/Month	Grab
1,1,2 Trichloroethane	4.72 ug/l	5 ug/l	2/Month	Grab
Trichloroethylene	5 ug/l	5 ug/l	2/Month	Grab
Vinyl Chloride	0.02 ug/l[5]	2 ug/l	2/Month	Grab
Total Petroleum Hydrocarbons	--- ug/l	1000 ug/l	2/Month	Grab
Total Phenols	4.48 ug/l	200.8 ug/l	2/Month	Grab
Pentachlorophenol	0.04 ug/l[5]	0.05 ug/l[5]	2/Month	Grab
Total Phthalates	3 ug/l[5]	--- ug/l	2/Month	Grab
Bis (2-Ethylhexyl) Phthalate	6 ug/l	6 ug/l	2/Month	Grab
Total Polychlorinated Biphenyls (PCBs)	0.000064 ug/l	0.000064 ug/l	2/Month	Grab
Acetone	--- ug/l	--- ug/l	2/Month	Grab
1,4 Dioxane	--- ug/l	--- ug/l	2/Month	Grab
Total BTEX	--- ug/l	100 ug/l	2/Month	Grab
Iron (total recoverable)	See Part II.E	See Part II.E	2/Month	Grab

Description of footnotes and symbols applicable to all monitoring classes:

[1]In accordance with Part I.B.2, the DEM reserves the right to increase monitoring frequency based on factors including, but not limited to, quality of influent data and duration of project.

[2]In accordance with Part II.B.2 during the first month of discharge additional sampling requirements are applicable.

[3] In accordance with Part II.A.1 the influent to the treatment system shall be monitored on a quarterly basis.

[4]Monitor flow and submit a flow log with the monitoring results. The flow log shall include the rate and duration of flow including the time(s) of day when flow commences and ceases. At a minimum, the flow must be reported each time a sample is collected.

[5] The limit at which compliance/noncompliance determinations will be based is the Quantitation Limit, which is defined as 0.5 ug/l for Vinyl Chloride, 1 ug/l for Pentachlorophenol, 5 ug/l for Total Phthalates, and 5 ug/l for Methylene Chloride. These values may be reduced by permit modification as more sensitive methods are approved by EPA and the State.

---Signifies a parameter which must be monitored and data must be reported; no limit has been established at this time.

xxx Signifies a parameter which will be limited based upon the design plans and specifications for each project.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the effluent of a groundwater treatment system. The two (2) grab samples taken per month shall be separated by a minimum of ten (10) days.

11. Discharge Category D – Sites Containing Volatile Organic Compound Only Discharging to Non-Class AA receiving waters. During the period beginning the date of authorization to discharge and lasting until either the expiration of this general permit or termination of coverage, permittee(s) are authorized to discharge from an approved groundwater treatment system. Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations Concentration - Specify Units		Monitoring Requirement	
	Average Monthly	Maximum Daily	Measurement Frequency[1,2,3]	Sample Type
Flow	--- GPM	xxx GPM	Continuous[4]	Totalizer
Carbon Tetrachloride	4.4 ug/l	4.4 ug/l	2/Month	Grab
1,2 Dichlorobenzene	1.44 ug/l	63.2 ug/l	2/Month	Grab
1,3 Dichlorobenzene	6.96 ug/l	312 ug/l	2/Month	Grab
1,4 Dichlorobenzene	0.96 ug/l	5 ug/l	2/Month	Grab
Total Dichlorobenzene	--- ug/l	763 ug/l	2/Month	Grab
1,1 Dichloroethane	--- ug/l	70 ug/l	2/Month	Grab
1,2 Dichloroethane	5 ug/l	5 ug/l	2/Month	Grab
1,1 Dichloroethylene	3.2 ug/l	3.2 ug/l	2/Month	Grab
cis- 1,2 Dichloroethylene	--- ug/l	70 ug/l	2/Month	Grab
Methylene Chloride	4.6 ug/l[5]	4.6 ug/l[5]	2/Month	Grab
Tetrachloroethylene	4.24 ug/l	5 ug/l	2/Month	Grab
1,1,1 Trichloroethane	--- ug/l	200 ug/l	2/Month	Grab
1,1,2 Trichloroethane	5 ug/l	5 ug/l	2/Month	Grab
Trichloroethylene	5 ug/l	5 ug/l	2/Month	Grab
Vinyl Chloride	1.92 ug/l	2 ug/l	2/Month	Grab
Total Petroleum Hydrocarbons	--- ug/l	1000 ug/l	2/Month	Grab
Total Phenols	4.48 ug/l	200.8 ug/l	2/Month	Grab
Pentachlorophenol	0.04 ug/l[5]	0.05 ug/l[5]	2/Month	Grab
Total Phthalates	3 ug/l[5]	--- ug/l	2/Month	Grab
Bis (2-Ethylhexyl) Phthalate	6 ug/l	6 ug/l	2/Month	Grab
Total Polychlorinated Biphenyls	0.000512 ug/l	0.000064 ug/l	2/Month	Grab
Acetone	--- ug/l	--- ug/l	2/Month	Grab
1,4 Dioxane	--- ug/l	--- ug/l	2/Month	Grab
Total BTEX	--- ug/l	100 ug/l	2/Month	Grab
Iron (total recoverable)	See Part II.E	See Part II.E	2/Month	Grab

Description of footnotes and symbols applicable to all monitoring classes:

[1]In accordance with Part I.B.2, the DEM reserves the right to increase monitoring frequency based on factors including, but not limited to, quality of influent data and duration of project.

[2]In accordance with Part II.B.2 during the first month of discharge additional sampling requirements are applicable.

[3] In accordance with Part II.A.1 the influent to the treatment system shall be monitored on a quarterly basis.

[4]Monitor flow and submit a flow log with the monitoring results. The flow log shall include the rate and duration of flow including the time(s) of day when flow commences and ceases. At a minimum, the flow must be reported each time a sample is collected.

[5] The limit at which compliance/noncompliance determinations will be based is the Quantitation Limit, which is defined as 1 ug/l for Pentachlorophenol, 5 ug/l for Total Phthalates, and 5 ug/l for Methylene Chloride. This value may be reduced by permit modification as more sensitive methods are approved by EPA and the State.

---Signifies a parameter which must be monitored and data must be reported; no limit has been established at this time.

xxx Signifies a parameter which will be limited based upon the design plans and specifications for each project.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the effluent of a groundwater treatment system. The two (2) grab samples taken per month shall be separated by a minimum of ten (10) days.

12. Discharge Category D – Sites Containing Volatile Organic Compound Only Discharging to Class SA or SB receiving waters. During the period beginning the date of authorization to discharge and lasting until either the expiration of this general permit or termination of coverage, permittee(s) are authorized to discharge from an approved groundwater treatment system. Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations Concentration - Specify Units		Monitoring Requirement	
	Average Monthly	Maximum Daily	Measurement Frequency[1,2,3]	Sample Type
Flow	--- GPM	xxx GPM	Continuous[4]	Totalizer
Carbon Tetrachloride	4.4 ug/l	4.4 ug/l	2/Month	Grab
1,2 Dichlorobenzene	600 ug/l	600 ug/l	2/Month	Grab
1,3 Dichlorobenzene	320 ug/l	320 ug/l	2/Month	Grab
1,4 Dichlorobenzene	5 ug/l	5 ug/l	2/Month	Grab
Total Dichlorobenzene	--- ug/l	763 ug/l	2/Month	Grab
1,1 Dichloroethane	--- ug/l	70 ug/l	2/Month	Grab
1,2 Dichloroethane	5 ug/l	5 ug/l	2/Month	Grab
1,1 Dichloroethylene	3.2 ug/l	3.2 ug/l	2/Month	Grab
cis - 1,2 Dichloroethylene	--- ug/l	70 ug/l	2/Month	Grab
Methylene Chloride	4.6 ug/l[5]	4.6 ug/l[5]	2/Month	Grab
Tetrachloroethylene	5 ug/l	5 ug/l	2/Month	Grab
1,1,1 Trichloroethane	--- ug/l	200 ug/l	2/Month	Grab
1,1,2 Trichloroethane	5 ug/l	5 ug/l	2/Month	Grab
Trichloroethylene	5 ug/l	5 ug/l	2/Month	Grab
Vinyl Chloride	1.92 ug/l	2 ug/l	2/Month	Grab
Total Petroleum Hydrocarbons	--- ug/l	1,000 ug/l	2/Month	Grab
Total Phenols	300 ug/l	300 ug/l	2/Month	Grab
Pentachlorophenol	1 ug/l	1 ug/l	2/Month	Grab
Total Phthalates	3 ug/l[3]	--- ug/l	2/Month	Grab
Bis (2-Ethylhexyl) Phthalate	6 ug/l	6 ug/l	2/Month	Grab
Total Polychlorinated Biphenyls (PCBs)	0.000064 ug/l	0.000064 ug/l	2/Month	Grab
Acetone	--- ug/l	--- ug/l	2/Month	Grab
1,4 Dioxane	--- ug/l	--- ug/l	2/Month	Grab
Total BTEX	100 ug/l	100 ug/l	2/Month	Grab
Iron (total recoverable)	--- ug/l	1000 ug/l	2/Month	Grab

Description of footnotes and symbols applicable to all monitoring classes:

[1]In accordance with Part I.B.2, the DEM reserves the right to increase monitoring frequency based on factors including, but not limited to, quality of influent data and duration of project.

[2]In accordance with Part II.B.2 during the first month of discharge additional sampling requirements are applicable.

[3] In accordance with Part II.A.1 the influent to the treatment system shall be monitored on a quarterly basis.

[4]Monitor flow and submit a flow log with the monitoring results. The flow log shall include the rate and duration of flow including the time(s) of day when flow commences and ceases. At a minimum, the flow must be reported each time a sample is collected.

[5] The limit at which compliance/noncompliance determinations will be based is the Quantitation Limit, which is defined as 5 ug/l for Total Phthalates and 5 ug/l for Methylene Chloride. These values may be reduced by permit modification as more sensitive methods are approved by EPA and the State.

---Signifies a parameter which must be monitored and data must be reported; no limit has been established at this time.

xxx Signifies a parameter which will be limited based upon the design plans and specifications for each project.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the effluent of a groundwater treatment system. The two (2) grab samples taken per month shall be separated by a minimum of ten (10) days.

13. Discharge Category E – Sites Containing Volatile Organic Compounds and Other Contaminants Discharging to Class AA receiving waters. During the period beginning the date of authorization to discharge and lasting until either the expiration of this general permit or termination of coverage, permittee(s) are authorized to discharge from an approved groundwater treatment system. Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations Concentration - Specify Units		Monitoring Requirement	
	Average Monthly	Maximum Daily	Measurement Frequency[1,2,3]	Sample Type
Flow	--- GPM	xxx GPM	Continuous[4]	Totalizer
Total Suspended Solids	30,000 ug/l	--- ug/l	2/Month	Grab
Total Residual Chlorine	11 ug/l[5]	19 ug/l[5]	2/Month	Grab
Total Petroleum Hydrocarbons	--- ug/l	1000 ug/l	2/Month	Grab
Cyanide	4.16 ug/l[5]	17.6 ug/l	2/Month	Grab
Benzene	4.72 ug/l	5 ug/l	2/Month	Grab
Toluene	11.2 ug/l	508 ug/l	2/Month	Grab
Ethylbenzene	28.8 ug/l	1280 ug/l	2/Month	Grab
(m,p,o) Xylenes	2.4 ug/l	106.4 ug/l	2/Month	Grab
Total BTEX	--- ug/l	100 ug/l	2/Month	Grab
Ethylene dibromide	--- ug/l	0.05 ug/l	2/Month	Grab
Methyl-t-Butyl Ether	--- ug/l	70 ug/l	2/Month	Grab
tert-Amyl Methyl Ether	--- ug/l	--- ug/l	2/Month	Grab
Carbon Tetrachloride	1.84 ug/l	4.4 ug/l	2/Month	Grab
1,4 Dichlorobenzene	0.96 ug/l	5 ug/l	2/Month	Grab
1,2 Dichlorobenzene	1.44 ug/l	63.2 ug/l	2/Month	Grab
1,3 Dichlorobenzene	6.96 ug/l	312 ug/l	2/Month	Grab
Total Dichlorobenzene	--- ug/l	763 ug/l	2/Month	Grab
1,1 Dichloroethane	--- ug/l	70 ug/l	2/Month	Grab
1,2 Dichloroethane	3.04 ug/l	5 ug/l	2/Month	Grab
1,1 Dichloroethylene	3.2 ug/l	3.2 ug/l	2/Month	Grab
cis - 1,2 Dichloroethylene	--- ug/l	70 ug/l	2/Month	Grab
Dichloromethane	--- ug/l	4.6 ug/l	2/Month	Grab
Tetrachloroethylene	4.24 ug/l	5 ug/l	2/Month	Grab
1,1,1 Trichloroethane	--- ug/l	200 ug/l	2/Month	Grab
1,1,2 Trichloroethane	4.72 ug/l	5 ug/l	2/Month	Grab
Trichloroethylene	5 ug/l	5 ug/l	2/Month	Grab
Vinyl Chloride	0.02 ug/l[3]	2 ug/l	2/Month	Grab

Acetone	--- ug/l	--- ug/l	2/Month	Grab
1,4 Dioxane	--- ug/l	--- ug/l	2/Month	Grab
Total Phenols	4.48 ug/l	200.8 ug/l	2/Month	Grab
Pentachlorophenol	0.04 ug/l[5]	0.05 ug/l[5]	2/Month	Grab
Total Phthalates	3 ug/l[5]	--- ug/l	2/Month	Grab
Bis (2-Ethylhexyl) Phthalate	6 ug/l	6 ug/l	2/Month	Grab
Total Group I Polycyclic Aromatic Hydrocarbons	0.03 ug/l[5]	10 ug/l	2/Month	Grab
Benzo (a) Anthracene	--- ug/l	0.0038 ug/l[5]	2/Month	Grab
Benzo (a) Pyrene	--- ug/l	0.0038 ug/l[5]	2/Month	Grab
Benzo (b) Fluoranthene	--- ug/l	0.0038 ug/l[5]	2/Month	Grab
Benzo (k) Fluoranthene	--- ug/l	0.0038 ug/l[5]	2/Month	Grab
Chrysene	--- ug/l	0.0038 ug/l[5]	2/Month	Grab
Dibenzo (a,h) anthracene	--- ug/l	0.0038 ug/l[5]	2/Month	Grab
Indeno (1,2,3-cd) Pyrene	--- ug/l	0.0038 ug/l[5]	2/Month	Grab
Total Group II Polycyclic Aromatic Hydrocarbons	0.03 ug/l[5]	100 ug/l	2/Month	Grab
Acenapthene	1.52 ug/l	1.9 ug/l	2/Month	Grab
Acenapthylene	--- ug/l	---ug/l	2/Month	Grab
Anthracene	6640 ug/l	--- ug/l	2/Month	Grab
Benzo (ghi) Perylene	--- ug/l	--- ug/l	2/Month	Grab
Fluoranthene	3.52 ug/l	159.2 ug/l	2/Month	Grab
Fluorene	880 ug/l	--- ug/l	2/Month	Grab
Napthalene	2.08 ug/l	20 ug/l	2/Month	Grab
Phenanthrene	--- ug/l	--- ug/l	2/Month	Grab
Pyrene	664 ug/l	--- ug/l	2/Month	Grab
Total Polychlorinated Biphenyls	0.000064 ug/l	0.000064 ug/l	2/Month	Grab
Antimony	See Part II.E	See Part II.E	2/Month	Grab
Arsenic	See Part II.E	See Part II.E	2/Month	Grab
Cadmium	See Part II.E	See Part II.E	2/Month	Grab
Chromium III (trivalent, total recoverable)	See Part II.E	See Part II.E	2/Month	Grab
Chromium VI (hexavalent, total recoverable)	See Part II.E	See Part II.E	2/Month	Grab
Copper	See Part II.E	See Part II.E	2/Month	Grab
Lead (total recoverable)	See Part II.E	See Part II.E	2/Month	Grab

Mercury	See Part II.E	See Part II.E	2/Month	Grab
Nickel (total recoverable)	See Part II.E	See Part II.E	2/Month	Grab
Selenium	See Part II.E	See Part II.E	2/Month	Grab
Silver	See Part II.E	See Part II.E	2/Month	Grab
Zinc (total recoverable)	See Part II.E	See Part II.E	2/Month	Grab
Iron (total recoverable)	See Part II.E	See Part II.E	2/Month	Grab

Description of footnotes and symbols applicable to all monitoring classes:

[1]In accordance with Part I.B.2, the DEM reserves the right to increase monitoring frequency based on factors including, but not limited to, quality of influent data and duration of project.

[2]In accordance with Part II.B.2 during the first month of discharge additional sampling requirements are applicable.

[3] In accordance with Part II.A.1 the influent to the treatment system shall be monitored on a quarterly basis.

[4]Monitor flow and submit a flow log with the monitoring results. The flow log shall include the rate and duration of flow including the time(s) of day when flow commences and ceases. At a minimum, the flow must be reported each time a sample is collected.

[5] The limit at which compliance/noncompliance determinations will be based is the Quantitation Limit, which is defined as 20 ug/l for Total Residual Chlorine, 10 ug/l for Cyanide, 0.5 ug/l for Vinyl Chloride, 1 ug/l for Pentachlorophenol, 5 ug/l for Total Phthalates, 0.05 ug/l for Benzo (a) Anthracene, 2 ug/l for Benzo (a) Pyrene, 0.1 ug/l for Benzo (b) Fluoranthene, 2 ug/l for Benzo (k) Fluoranthene, 5 ug/l for Chrysene, 0.1 ug/l for Dibenzo (a,h) anthracene, 0.15 ug/l for Indeno (1,2,3-cd) Pyrene, and 10 ug/l for Total Polycyclic Aromatic Hydrocarbons. These values may be reduced by permit modification as more sensitive methods are approved by EPA and the State.

---Signifies a parameter which must be monitored and data must be reported; no limit has been established at this time.

xxx Signifies a parameter which will be limited based upon the design plans and specifications for each project.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the effluent of a groundwater treatment system. The two (2) grab samples taken per month shall be separated by a minimum of ten (10) days.

14. Discharge Category E – Sites Containing Volatile Organic Compounds and Other Contaminants Discharging to Non-Class AA receiving waters. During the period beginning the date of authorization to discharge and lasting until either the expiration of this general permit or termination of coverage, permittee(s) are authorized to discharge from an approved groundwater treatment system. Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations Concentration - Specify Units		Monitoring Requirement	
	Average Monthly	Maximum Daily	Measurement Frequency[1,2,3]	Sample Type
Flow	--- GPM	xxx GPM	Continuous[4]	Totalizer
Total Suspended Solids	30,000 ug/l	--- ug/l	2/Month	Grab
Total Residual Chlorine	11 ug/l[5]	19 ug/l[5]	2/Month	Grab
Total Petroleum Hydrocarbons	--- ug/l	1,000 ug/l	2/Month	Grab
Cyanide	4.16 ug/l[5]	17.6 ug/l	2/Month	Grab
Benzene	4.72 ug/l	5 ug/l	2/Month	Grab
Toluene	11.2 ug/l	508 ug/l	2/Month	Grab
Ethylbenzene	28.8 ug/l	1280 ug/l	2/Month	Grab
Total Xylenes (m,p,o)	2.4 ug/l	106.4 ug/l	2/Month	Grab
Total BTEX	--- ug/l	100 ug/l	2/Month	Grab
Ethylene dibromide	--- ug/l	0.05 ug/l	2/Month	Grab
Methyl-t-Butyl Ether	--- ug/l	70 ug/l	2/Month	Grab
tert-Amyl Methyl Ether	--- ug/l	--- ug/l	2/Month	Grab
Carbon Tetrachloride	4.4 ug/l	4.4 ug/l	2/Month	Grab
1,4 Dichlorobenzene	0.96 ug/l	5 ug/l	2/Month	Grab
1,2 Dichlorobenzene	1.44 ug/l	63.2 ug/l	2/Month	Grab
1,3 Dichlorobenzene	6.96 ug/l	312 ug/l	2/Month	Grab
Total Dichlorobenzene	--- ug/l	763 ug/l	2/Month	Grab
1,1 Dichloroethane	--- ug/l	70 ug/l	2/Month	Grab
1,2 Dichloroethane	5 ug/l	5 ug/l	2/Month	Grab
1,1 Dichloroethylene	3.2 ug/l	3.2 ug/l	2/Month	Grab
cis-1,2 Dichloroethylene	--- ug/l	70 ug/l	2/Month	Grab
Dichloromethane	--- ug/l	4.6 ug/l	2/Month	Grab
Tetrachloroethylene	4.24 ug/l	5 ug/l	2/Month	Grab
1,1,1 Trichloroethane	--- ug/l	200 ug/l	2/Month	Grab
1,1,2 Trichloroethane	5 ug/l	5 ug/l	2/Month	Grab
Trichloroethylene	5 ug/l	5 ug/l	2/Month	Grab
Vinyl Chloride	1.92 ug/l	2 ug/l	2/Month	Grab

Acetone	--- ug/l	--- ug/l	2/Month	Grab
1,4 Dioxane	--- ug/l	--- ug/l	2/Month	Grab
Total Phenols	4.48 ug/l	200.8 ug/l	2/Month	Grab
Pentachlorophenol	0.04 ug/l[5]	0.05 ug/l[5]	2/Month	Grab
Total Phthalates	3 ug/l[5]	--- ug/l	2/Month	Grab
Bis (2-Ethylhexyl) Phthalate	6 ug/l	6 ug/l	2/Month	Grab
Total Group I Polycyclic Aromatic Hydrocarbons	0.14 ug/l[5]	10 ug/l	2/Month	Grab
Benzo (a) Anthracene	--- ug/l	0.0038 ug/l[5]	2/Month	Grab
Benzo (a) Pyrene	--- ug/l	0.0038 ug/l[5]	2/Month	Grab
Benzo (b) Fluoranthene	--- ug/l	0.0038 ug/l[5]	2/Month	Grab
Benzo (k) Fluoranthene	--- ug/l	0.0038 ug/l[5]	2/Month	Grab
Chrysene	--- ug/l	0.0038 ug/l[5]	2/Month	Grab
Dibenzo (a,h) anthracene	--- ug/l	0.0038 ug/l[5]	2/Month	Grab
Indeno (1,2,3-cd) Pyrene	--- ug/l	0.0038 ug/l[5]	2/Month	Grab
Total Group II Polycyclic Aromatic Hydrocarbons	0.14 ug/l[5]	100 ug/l	2/Month	Grab
Acenapthene	1.52 ug/l	1.9 ug/l	2/Month	Grab
Acenapthylene	--- ug/l	--- ug/l	2/Month	Grab
Anthracene	32,000 ug/l	--- ug/l	2/Month	Grab
Benzo (ghi) Perylene	--- ug/l	--- ug/l	2/Month	Grab
Fluoranthene	3.52 ug/l	159.2 ug/l	2/Month	Grab
Fluorene	4240 ug/l	--- ug/l	2/Month	Grab
Napthalene	2.08 ug/l	20 ug/l	2/Month	Grab
Phenanthrene	--- ug/l	--- ug/l	2/Month	Grab
Pyrene	3200 ug/l	--- ug/l	2/Month	Grab
Total Polychlorinated Biphenyls	0.000512 ug/l	0.000064 ug/l	2/Month	Grab
Antimony	See Part II.E	See Part II.E	2/Month	Grab
Arsenic	See Part II.E	See Part II.E	2/Month	Grab
Cadmium	See Part II.E	See Part II.E	2/Month	Grab
Chromium III (trivalent, total recoverable)	See Part II.E	See Part II.E	2/Month	Grab
Chromium VI (hexavalent, total recoverable)	See Part II.E	See Part II.E	2/Month	Grab
Copper	See Part II.E	See Part II.E	2/Month	Grab
Lead (total recoverable)	See Part II.E	See Part II.E	2/Month	Grab
Mercury	See Part II.E	See Part II.E	2/Month	Grab
Nickel (total recoverable)	See Part II.E	See Part II.E	2/Month	Grab

Selenium	See Part II.E	See Part II.E	2/Month	Grab
Silver	See Part II.E	See Part II.E	2/Month	Grab
Zinc (total recoverable)	See Part II.E	See Part II.E	2/Month	Grab
Iron (total recoverable)	See Part II.E	See Part II.E	2/Month	Grab

Description of footnotes and symbols applicable to all monitoring classes:

[1]In accordance with Part I.B.2, the DEM reserves the right to increase monitoring frequency based on factors including, but not limited to, quality of influent data and duration of project.

[2]In accordance with Part II.B.2 during the first month of discharge additional sampling requirements are applicable.

[3] In accordance with Part II.A.1 the influent to the treatment system shall be monitored on a quarterly basis.

[4]Monitor flow and submit a flow log with the monitoring results. The flow log shall include the rate and duration of flow including the time(s) of day when flow commences and ceases. At a minimum, the flow must be reported each time a sample is collected.

[5] The limit at which compliance/noncompliance determinations will be based is the Quantitation Limit, which is defined as 20 ug/l for Total Residual Chlorine, 10 ug/l for Cyanide, 1 ug/l for Pentachlorophenol, 5 ug/l for Total Phthalates, 0.05 ug/l for Benzo (a) Anthracene, 2 ug/l for Benzo (a) Pyrene, 0.1 ug/l for Benzo (b) Fluoranthene, 2 ug/l for Benzo (k) Fluoranthene, 5 ug/l for Chrysene, 0.1 ug/l for Dibenzo (a,h) anthracene, 0.15 ug/l for Indeno (1,2,3-cd) Pyrene, and 10 ug/l for Total Polycyclic Aromatic Hydrocarbons. These values may be reduced by permit modification as more sensitive methods are approved by EPA and the State.

---Signifies a parameter which must be monitored and data must be reported; no limit has been established at this time.

xxx Signifies a parameter which will be limited based upon the design plans and specifications for each project.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the effluent of a groundwater treatment system. The two (2) grab samples taken per month shall be separated by a minimum of ten (10) days.

15. Discharge Category E – Sites Containing Volatile Organic Compounds and Other Contaminants Discharging to SA and SB receiving waters. During the period beginning the date of authorization to discharge and lasting until either the expiration of this general permit or termination of coverage, permittee(s) are authorized to discharge from an approved groundwater treatment system. Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations Concentration - Specify Units		Monitoring Requirement	
	Average Monthly	Maximum Daily	Measurement Frequency[1,2,3]	Sample Type
Flow	--- GPM	xxx GPM	Continuous[4]	Totalizer
Total Suspended Solids	30,000 ug/l	--- ug/l	2/Month	Grab
Total Residual Chlorine	7.5 ug/l[5]	13 ug/l[5]	2/Month	Grab
Total Petroleum Hydrocarbons	--- ug/l	1000 ug/l	2/Month	Grab
Cyanide	0.8 ug/l[5]	0.8 ug/l[5]	2/Month	Grab
Benzene	5 ug/l	5 ug/l	2/Month	Grab
Toluene	12000 ug/l	--- ug/l	2/Month	Grab
Ethylbenzene	1680 ug/l	--- ug/l	2/Month	Grab
Total Xylenes (m,p,o)	--- ug/l	--- ug/l	2/Month	Grab
Total BTEX	100 ug/l	100 ug/l	2/Month	Grab
Ethylene dibromide	--- ug/l	0.05 ug/l	2/Month	Grab
Methyl-t-Butyl Ether	--- ug/l	70 ug/l	2/Month	Grab
tert-Amyl Methyl Ether	--- ug/l	--- ug/l	2/Month	Grab
Carbon Tetrachloride	4.4 ug/l	4.4 ug/l	2/Month	Grab
1,4 Dichlorobenzene	5 ug/l	5 ug/l	2/Month	Grab
1,2 Dichlorobenzene	600 ug/l	600 ug/l	2/Month	Grab
1,3 Dichlorobenzene	320 ug/l	320 ug/l	2/Month	Grab
Total Dichlorobenzene	--- ug/l	763 ug/l	2/Month	Grab
1,1 Dichloroethane	--- ug/l	70 ug/l	2/Month	Grab
1,2 Dichloroethane	5 ug/l	5 ug/l	2/Month	Grab
1,1 Dichloroethylene	3.2 ug/l	3.2 ug/l	2/Month	Grab
cis-1,2 Dichloroethylene	--- ug/l	70 ug/l	2/Month	Grab
Dichloromethane	--- ug/l	4.6 ug/l	2/Month	Grab
Tetrachloroethylene	5 ug/l	5 ug/l	2/Month	Grab
1,1,1 Trichloroethane	--- ug/l	200 ug/l	2/Month	Grab
1,1,2 Trichloroethane	5 ug/l	5 ug/l	2/Month	Grab
Trichloroethylene	5 ug/l	5 ug/l	2/Month	Grab
Vinyl Chloride	1.92 ug/l	2 ug/l	2/Month	Grab
Acetone	--- ug/l	--- ug/l	2/Month	Grab

1,4 Dioxane	--- ug/l	--- ug/l	2/Month	Grab
Total Phenols	300 ug/l	300 ug/l	2/Month	Grab
Pentachlorophenol	1 ug/l	1 ug/l	2/Month	Grab
Total Phthalates	3 ug/l[5]	--- ug/l	2/Month	Grab
Bis (2-Ethylhexyl) Phthalate	6 ug/l	6 ug/l	2/Month	Grab
Total Group I Polycyclic Aromatic Hydrocarbons	0.14 ug/l[5]	10 ug/l	2/Month	Grab
Benzo (a) Anthracene	0.0038 ug/l[5]	0.0038 ug/l[5]	2/Month	Grab
Benzo (a) Pyrene	0.0038 ug/l[5]	0.0038 ug/l[5]	2/Month	Grab
Benzo (b) Fluoranthene	0.0038 ug/l[5]	0.0038 ug/l[5]	2/Month	Grab
Benzo (k) Fluoranthene	0.0038 ug/l[5]	0.0038 ug/l[5]	2/Month	Grab
Chrysene	0.0038 ug/l[5]	0.0038 ug/l[5]	2/Month	Grab
Dibenzo (a,h) anthracene	0.0038 ug/l[5]	0.0038 ug/l[5]	2/Month	Grab
Indeno (1,2,3-cd) Pyrene	0.0038 ug/l[5]	0.0038 ug/l[5]	2/Month	Grab
Total Group II Polycyclic Aromatic Hydrocarbons	0.14 ug/l[5]	100 ug/l	2/Month	Grab
Acenapthene	1.9 ug/l	1.9 ug/l	2/Month	Grab
Acenapthylene	--- ug/l	--- ug/l	2/Month	Grab
Anthracene	32000 ug/l	--- ug/l	2/Month	Grab
Benzo (ghi) Perylene	--- ug/l	--- ug/l	2/Month	Grab
Fluoranthene	112 ug/l	--- ug/l	2/Month	Grab
Fluorene	4240 ug/l	--- ug/l	2/Month	Grab
Napthalene	--- ug/l	20 ug/l	2/Month	Grab
Phenanthrene	--- ug/l	--- ug/l	2/Month	Grab
Pyrene	3200 ug/l	--- ug/l	2/Month	Grab
Total Polychlorinated Biphenyls (PCBs)	0.000064 ug/l	0.000064 ug/l	2/Month	Grab
Antimony	5.6 ug/l	5.6 ug/l	2/Month	Grab
Arsenic	1.12 ug/l[5]	55.2 ug/l	2/Month	Grab
Cadmium	7.08 ug/l	32.19 ug/l	2/Month	Grab
Chromium III (trivalent, total recoverable)	100 ug/l	--- ug/l	2/Month	Grab
Chromium VI (hexavalent, total recoverable)	40.28 ug/l	886.2 ug/l	2/Month	Grab
Copper	2.98 ug/l[5]	4.62 ug/l	2/Month	Grab
Lead (Total Recoverable)	6.81 ug/l	176.6 ug/l	2/Month	Grab
Mercury	0.12 ug/l[5]	1.69 ug/l	2/Month	Grab
Nickel (total recoverable)	6.62 ug/l	59.79 ug/l	2/Month	Grab
Selenium	56.91 ug/l	232.46 ug/l	2/Month	Grab

Silver	1.78 ug/l[5]	1.78 ug/l[5]	2/Month	Grab
Zinc (total recoverable)	68.5 ug/l	76.11 ug/l	2/Month	Grab
Iron (total recoverable)	--- ug/l	1000 ug/l	2/Month	Grab

Description of footnotes and symbols applicable to all monitoring classes:

[1]In accordance with Part I.B.2, the DEM reserves the right to increase monitoring frequency based on factors including, but not limited to, quality of influent data and duration of project.

[2]In accordance with Part II.B.2 during the first month of discharge additional sampling requirements are applicable.

[3] In accordance with Part II.A.1 the influent to the treatment system shall be monitored on a quarterly basis.

[4]Monitor flow and submit a flow log with the monitoring results. The flow log shall include the rate and duration of flow including the time(s) of day when flow commences and ceases. At a minimum, the flow must be reported each time a sample is collected.

[5] The limit at which compliance/noncompliance determinations will be based is the Quantitation Limit, which is defined as 20 ug/l for Total Residual Chlorine, 10 ug/l for Cyanide, 5 ug/l for Total Phthalates, 0.05 ug/l for Benzo (a) Anthracene, 2 ug/l for Benzo (a) Pyrene, 0.1 ug/l for Benzo (b) Fluoranthene, 2 ug/l for Benzo (k) Fluoranthene, 5 ug/l for Chrysene, 0.1 ug/l for Dibenzo (a,h) anthracene, 0.15 ug/l for Indeno (1,2,3-cd) Pyrene, 2 ug/l for Arsenic, 3 ug/l for Copper, 0.2 ug/l for Mercury, 2 ug/l for Silver, and 10 ug/l for Total Polycyclic Aromatic Hydrocarbons. These values may be reduced by permit modification as more sensitive test methods are approved by EPA and the State.

---Signifies a parameter which must be monitored and data must be reported; no limit has been established at this time.

xxx Signifies a parameter which will be limited based upon the design plans and specifications for each project.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the effluent of a groundwater treatment system. The two (2) grab samples taken per month shall be separated by a minimum of ten (10) days.

16. Discharge Category F – Sites Containing Primarily Metals Discharging to Class AA receiving waters. During the period beginning the date of authorization to discharge and lasting until either the expiration of this general permit or termination of coverage, permittee(s) are authorized to discharge from an approved groundwater treatment system. Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations Concentration - Specify Units		Monitoring Requirement	
	Average Monthly	Maximum Daily	Measurement Frequency[1,2,3]	Sample Type
Flow	--- GPM	xxx GPM	Continuous[4]	Totalizer
Antimony	See Part II.E	See Part II.E	2/Month	Grab
Arsenic	See Part II.E	See Part II.E	2/Month	Grab
Cadmium	See Part II.E	See Part II.E	2/Month	Grab
Chromium III (trivalent, total recoverable)	See Part II.E	See Part II.E	2/Month	Grab
Chromium VI (hexavalent, total recoverable)	See Part II.E	See Part II.E	2/Month	Grab
Copper	See Part II.E	See Part II.E	2/Month	Grab
Lead (total recoverable)	See Part II.E	See Part II.E	2/Month	Grab
Mercury	See Part II.E	See Part II.E	2/Month	Grab
Nickel (total recoverable)	See Part II.E	See Part II.E	2/Month	Grab
Selenium	See Part II.E	See Part II.E	2/Month	Grab
Silver	See Part II.E	See Part II.E	2/Month	Grab
Zinc (total recoverable)	See Part II.E	See Part II.E	2/Month	Grab
Iron (total recoverable)	See Part II.E	See Part II.E	2/Month	Grab
Cyanide	4.16 ug/l[5]	17.6 ug/l	2/Month	Grab
Carbon Tetrachloride	1.84 ug/l	4.4 ug/l	2/Month	Grab
1,2 Dichlorobenzene	1.44 ug/l	63.2 ug/l	2/Month	Grab
1,3 Dichlorobenzene	6.96 ug/l	312 ug/l	2/Month	Grab
1,4 Dichlorobenzene	0.96 ug/l	5 ug/l	2/Month	Grab
Total Dichlorobenzene	--- ug/l	763 ug/l	2/Month	Grab
1,1 Dichloroethane	--- ug/l	70 ug/l	2/Month	Grab
1,2 Dichloroethane	3.04 ug/l	5 ug/l	2/Month	Grab
1,1 Dichloroethylene	3.2 ug/l	3.2 ug/l	2/Month	Grab
cis 1,2 Dichloroethylene	--- ug/l	70 ug/l	2/Month	Grab
Methylene Chloride	4.6 ug/l[5]	4.6 ug/l[5]	2/Month	Grab
Tetrachloroethylene	4.24 ug/l	5 ug/l	2/Month	Grab

1,1,1 Trichloroethane	--- ug/l	200 ug/l	2/Month	Grab
1,1,2 Trichloroethane	4.72 ug/l	5 ug/l	2/Month	Grab
Trichloroethylene	5 ug/l	5 ug/l	2/Month	Grab
Vinyl Chloride	0.02 ug/l[5]	2 ug/l	2/Month	Grab
Total Suspended Solids	30,000 ug/l	--- ug/l	2/Month	Grab

Description of footnotes and symbols applicable to all monitoring classes:

[1]In accordance with Part I.B.2, the DEM reserves the right to increase monitoring frequency based on factors including, but not limited to, quality of influent data and duration of project.

[2]In accordance with Part II.B.2 during the first month of discharge additional sampling requirements are applicable.

[3] In accordance with Part II.A.1 the influent to the treatment system shall be monitored on a quarterly basis.

[4]Monitor flow and submit a flow log with the monitoring results. The flow log shall include the rate and duration of flow including the time(s) of day when flow commences and ceases. At a minimum, the flow must be reported each time a sample is collected.

[5] The limit at which compliance/noncompliance determinations will be based is the Quantitation Limit, which is defined as 10 ug/l for Cyanide, 0.5 ug/l for Vinyl Chloride, and 5 ug/l for Methylene Chloride. These values may be reduced by permit modification as more sensitive methods are approved by EPA and the State.

---Signifies a parameter which must be monitored and data must be reported; no limit has been established at this time.

xxxSignifies a parameter which will be limited based upon the design plans and specifications for each project.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the effluent of a groundwater treatment system. The two (2) grab samples taken per month shall be separated by a minimum of ten (10) days.

17. Discharge Category F – Sites Containing Primarily Metals Discharging to Non-Class AA receiving waters. During the period beginning the date of authorization to discharge and lasting until either the expiration of this general permit or termination of coverage, permittee(s) are authorized to discharge from an approved groundwater treatment system. Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations Concentration - Specify Units		Monitoring Requirement	
	Average Monthly	Maximum Daily	Measurement Frequency[1,2,3]	Sample Type
Flow	--- GPM	xxx GPM	Continuous[4]	Totalizer
Antimony	See Part II.E	See Metals Table	2/Month	Grab
Arsenic	See Part II.E	See Metals Table	2/Month	Grab
Cadmium	See Part II.E	See Metals Table	2/Month	Grab
Chromium III (trivalent, total recoverable)	See Part II.E	See Metals Table	2/Month	Grab
Chromium VI (hexavalent, total recoverable)	See Part II.E	See Metals Table	2/Month	Grab
Copper	See Part II.E	See Metals Table	2/Month	Grab
Lead (total recoverable)	See Part II.E	See Metals Table	2/Month	Grab
Mercury	See Part II.E	See Metals Table	2/Month	Grab
Nickel (total recoverable)	See Part II.E	See Metals Table	2/Month	Grab
Selenium	See Part II.E	See Metals Table	2/Month	Grab
Silver	See Part II.E	See Metals Table	2/Month	Grab
Zinc (total recoverable)	See Part II.E	See Metals Table	2/Month	Grab
Iron (total recoverable)	See Part II.E	See Metals Table	2/Month	Grab
Cyanide	4.16 ug/l[5]	17.6 ug/l	2/Month	Grab
Carbon Tetrachloride	4.4 ug/l	4.4 ug/l	2/Month	Grab
1,2 Dichlorobenzene	1.44 ug/l	63.2 ug/l	2/Month	Grab
1,3 Dichlorobenzene	6.96 ug/l	312 ug/l	2/Month	Grab
1,4 Dichlorobenzene	0.96 ug/l	5 ug/l	2/Month	Grab
Total Dichlorobenzene	--- ug/l	763 ug/l	2/Month	Grab
1,1 Dichloroethane	--- ug/l	70 ug/l	2/Month	Grab
1,2 Dichloroethane	5 ug/l	5 ug/l	2/Month	Grab
1,1 Dichloroethylene	3.2 ug/l	3.2 ug/l	2/Month	Grab
cis-1,2 Dichloroethylene	--- ug/l	70 ug/l	2/Month	Grab
Methylene Chloride	4.6 ug/l[5]	4.6 ug/l[5]	2/Month	Grab
Tetrachloroethylene	4.24 ug/l	5 ug/l	2/Month	Grab

1,1,1 Trichloroethane	--- ug/l	200 ug/l	2/Month	Grab
1,1,2 Trichloroethane	5 ug/l	5 ug/l	2/Month	Grab
Trichloroethylene	5 ug/l	5 ug/l	2/Month	Grab
Vinyl Chloride	1.92 ug/l	2 ug/l	2/Month	Grab
Total Suspended Solids	30,000 ug/l	--- ug/l	2/Month	Grab

Description of footnotes and symbols applicable to all monitoring classes:

[1]In accordance with Part I.B.2, the DEM reserves the right to increase monitoring frequency based on factors including, but not limited to, quality of influent data and duration of project.

[2]In accordance with Part II.B.2 during the first month of discharge additional sampling requirements are applicable.

[3] In accordance with Part II.A.1 the influent to the treatment system shall be monitored on a quarterly basis.

[4]Monitor flow and submit a flow log with the monitoring results. The flow log shall include the rate and duration of flow including the time(s) of day when flow commences and ceases. At a minimum, the flow must be reported each time a sample is collected.

[5]The limit at which compliance/noncompliance determinations will be based is the Quantitation Limit, which is defined as 10 ug/l for Cyanide and 5 ug/l for Methylene Chloride. This value may be reduced by permit modification as more sensitive test methods are approved by EPA and the State.

---Signifies a parameter which must be monitored and data must be reported; no limit has been established at this time.

xxx Signifies a parameter which will be limited based upon the design plans and specifications for each project.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the effluent of a groundwater treatment system. The two (2) grab samples taken per month shall be separated by a minimum of ten (10) days.

18. Discharge Category F – Sites Containing Primarily Metals Discharging to Class SA and SB receiving waters. During the period beginning the date of authorization to discharge and lasting until either the expiration of this general permit or termination of coverage, permittee(s) are authorized to discharge from an approved groundwater treatment system. Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations Concentration - Specify Units		Monitoring Requirement	
	Average Monthly	Maximum Daily	Measurement Frequency[1,2,3]	Sample Type
Flow	--- GPM	xxx GPM	Continuous[4]	Totalizer
Antimony	5.6 ug/l	5.6 ug/l	2/Month	Grab
Arsenic	1.12 ug/l[5]	55.2 ug/l	2/Month	Grab
Cadmium	7.08 ug/l	32.19 ug/l	2/Month	Grab
Chromium III (trivalent, total recoverable)	100 ug/l	--- ug/l	2/Month	Grab
Chromium VI (hexavalent, total recoverable)	40.28 ug/l	886.2 ug/l	2/Month	Grab
Copper	2.98 ug/l[5]	4.62 ug/l	2/Month	Grab
Lead (Total Recoverable)	6.81 ug/l	176.6 ug/l	2/Month	Grab
Mercury	0.12 ug/l[5]	1.69 ug/l	2/Month	Grab
Nickel (total recoverable)	6.62 ug/l	59.79 ug/l	2/Month	Grab
Selenium	56.91 ug/l	232.46 ug/l	2/Month	Grab
Silver	1.78 ug/l[5]	1.78 ug/l[5]	2/Month	Grab
Zinc (total recoverable)	68.5 ug/l	76.11 ug/l	2/Month	Grab
Iron (total recoverable)	--- ug/l	1000 ug/l	2/Month	Grab
Cyanide	0.8 ug/l[5]	0.8 ug/l[5]	2/Month	Grab
Carbon Tetrachloride	4.4 ug/l	4.4 ug/l	2/Month	Grab
1,2 (or o) Dichlorobenzene	600 ug/l	600 ug/l	2/Month	Grab
1,3 (or m) Dichlorobenzene	320 ug/l	320 ug/l	2/Month	Grab
1,4 (or p) Dichlorobenzene	5 ug/l	5 ug/l	2/Month	Grab
Total Dichlorobenzene	--- ug/l	763 ug/l	2/Month	Grab
1,1 Dichloroethane	--- ug/l	70 ug/l	2/Month	Grab
1,2 Dichloroethane	5 ug/l	5 ug/l	2/Month	Grab
1,1 Dichloroethylene	3.2 ug/l	3.2 ug/l	2/Month	Grab
cis-1,2 Dichloroethylene	--- ug/l	70 ug/l	2/Month	Grab

Methylene Chloride	4.6 ug/l[5]	4.6 ug/l[5]	2/Month	Grab
Tetrachloroethylene	5 ug/l	5 ug/l	2/Month	Grab
1,1,1 Trichloroethane	--- ug/l	200 ug/l	2/Month	Grab
1,1,2 Trichloroethane	5 ug/l	5 ug/l	2/Month	Grab
Trichloroethylene	5 ug/l	5 ug/l	2/Month	Grab
Vinyl Chloride	1.92 ug/l	2 ug/l	2/Month	Grab
Total Suspended Solids	30,000 ug/l	--- ug/l	2/Month	Grab

Description of footnotes and symbols applicable to all monitoring classes:

[1]In accordance with Part I.B.2, the DEM reserves the right to increase monitoring frequency based on factors including, but not limited to, quality of influent data and duration of project.

[2]In accordance with Part II.B.2 during the first month of discharge additional sampling requirements are applicable.

[3] In accordance with Part II.A.1 the influent to the treatment system shall be monitored on a quarterly basis.

[4]Monitor flow and submit a flow log with the monitoring results. The flow log shall include the rate and duration of flow including the time(s) of day when flow commences and ceases. At a minimum, the flow must be reported each time a sample is collected.

[5]The limit at which compliance/noncompliance determinations will be based is the Quantitation Limit, which is defined as 2 ug/l for Arsenic, 3 ug/l for Copper, 2 ug/l for Silver, 10 ug/l for Silver, and 5 ug/l for Methylene Chloride. These values may be reduced by permit modification as more sensitive methods are approved by EPA and the State.

---Signifies a parameter which must be monitored and data must be reported; no limit has been established at this time.

xxx Signifies a parameter which will be limited based upon the design plans and specifications for each project.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the effluent of a groundwater treatment system. The two (2) grab samples taken per month shall be separated by a minimum of ten (10) days.

19. Category G – Contaminated Construction Dewatering Sites Discharging to Class AA receiving waters. During the period beginning the date of authorization to discharge and lasting until either the expiration of this general permit or termination of coverage, permittee(s) are authorized to discharge from an approved groundwater treatment system. Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations Concentration - Specify Units		Monitoring Requirement	
	Average Monthly	Maximum Daily	Measurement Frequency[1,2,3]	Sample Type
Flow	--- GPM	xxx GPM	Continuous[4]	Totalizer
Total Suspended Solids	30,000 ug/l	--- ug/l	2/Month	Grab
Total Residual Chlorine	11 ug/l[5]	19 ug/l[5]	2/Month	Grab
Total Petroleum Hydrocarbons	--- ug/l	1000 ug/l	2/Month	Grab
Cyanide	4.16 ug/l[5]	17.6 ug/l	2/Month	Grab
Benzene	4.72 ug/l	5 ug/l	2/Month	Grab
Toluene	11.2 ug/l	508 ug/l	2/Month	Grab
Ethylbenzene	28.8 ug/l	1280 ug/l	2/Month	Grab
Total Xylenes (m,p,o)	2.4 ug/l	106.4 ug/l	2/Month	Grab
Total BTEX	--- ug/l	100 ug/l	2/Month	Grab
Ethylene dibromide	--- ug/l	0.05 ug/l	2/Month	Grab
Methyl t Butyl Ether	--- ug/l	70 ug/l	2/Month	Grab
Tert Amyl Methyl Ether	--- ug/l	--- ug/l	2/Month	Grab
Carbon Tetrachloride	1.84 ug/l	4.4 ug/l	2/Month	Grab
1,4 Dichlorobenzene	0.96 ug/l	5 ug/l	2/Month	Grab
1,2 Dichlorobenzene	1.44 ug/l	63.2 ug/l	2/Month	Grab
1,3 Dichlorobenzene	6.96 ug/l	312 ug/l	2/Month	Grab
Total Dichlorobenzene	--- ug/l	763 ug/l	2/Month	Grab
1,1 Dichloroethane	--- ug/l	70 ug/l	2/Month	Grab
1,2 Dichloroethane	3.04 ug/l	5 ug/l	2/Month	Grab
1,1 Dichloroethylene	3.2 ug/l	3.2 ug/l	2/Month	Grab
cis - 1,2 Dichloroethylene	--- ug/l	70 ug/l	2/Month	Grab
Dichloromethane	--- ug/l	4.6 ug/l	2/Month	Grab
Tetrachloroethylene	4.24 ug/l	5 ug/l	2/Month	Grab
1,1,1 Trichloroethane	--- ug/l	200 ug/l	2/Month	Grab
1,1,2 Trichloroethane	4.72 ug/l	5 ug/l	2/Month	Grab
Trichloroethylene	5 ug/l	5 ug/l	2/Month	Grab
Vinyl Chloride	0.02 ug/l[5]	2 ug/l	2/Month	Grab
Acetone	--- ug/l	--- ug/l	2/Month	Grab

1,4 Dioxane	--- ug/l	--- ug/l	2/Month	Grab
Total Phenols	4.48 ug/l	200.8 ug/l	2/Month	Grab
Pentachlorophenol	0.04 ug/l[5]	0.05 ug/l[5]	2/Month	Grab
Total Phthalates	3 ug/l[5]	--- ug/l	2/Month	Grab
Bis (2-Ethylhexyl) Phthalate	6 ug/l	6 ug/l	2/Month	Grab
Total Group I Polycyclic Aromatic Hydrocarbons	0.03 ug/l[5]	10 ug/l	2/Month	Grab
Benzo (a) Anthracene	--- ug/l	0.0038 ug/l[5]	2/Month	Grab
Benzo (a) Pyrene	--- ug/l	0.0038 ug/l[5]	2/Month	Grab
Benzo (b) Fluoranthene	--- ug/l	0.0038 ug/l[5]	2/Month	Grab
Benzo (k) Fluoranthene	--- ug/l	0.0038 ug/l[5]	2/Month	Grab
Chrysene	--- ug/l	0.0038 ug/l[5]	2/Month	Grab
Dibenzo (a,h) anthracene	--- ug/l	0.0038 ug/l[5]	2/Month	Grab
Indeno (1,2,3-cd) Pyrene	--- ug/l	0.0038 ug/l[5]	2/Month	Grab
Total Group II Polycyclic Aromatic Hydrocarbons	0.03 ug/l[5]	100 ug/l	2/Month	Grab
Acenapthene	1.52 ug/l	1.9 ug/l	2/Month	Grab
Acenapthylene	--- ug/l	--- ug/l	2/Month	Grab
Anthracene	6640 ug/l	--- ug/l	2/Month	Grab
Benzo (ghi) Perylene	--- ug/l	--- ug/l	2/Month	Grab
Fluoranthene	3.52 ug/l	159.2 ug/l	2/Month	Grab
Fluorene	880 ug/l	--- ug/l	2/Month	Grab
Napthalene	2.08 ug/l	20 ug/l	2/Month	Grab
Phenanthrene	--- ug/l	--- ug/l	2/Month	Grab
Pyrene	664 ug/l	--- ug/l	2/Month	Grab
Total Polychlorinated Biphenyls	0.000064 ug/l	0.000064 ug/l	2/Month	Grab
Antimony	See Part II.E	See Part II.E	2/Month	Grab
Arsenic	See Part II.E	See Part II.E	2/Month	Grab
Cadmium	See Part II.E	See Part II.E	2/Month	Grab
Chromium III (trivalent, total recoverable)	See Part II.E	See Part II.E	2/Month	Grab
Chromium VI (hexavalent, total recoverable)	See Part II.E	See Part II.E	2/Month	Grab
Copper	See Part II.E	See Part II.E	2/Month	Grab
Lead (total recoverable)	See Part II.E	See Part II.E	2/Month	Grab
Mercury	See Part II.E	See Part II.E	2/Month	Grab
Nickel (total recoverable)	See Part II.E	See Part II.E	2/Month	Grab
Selenium	See Part II.E	See Part II.E	2/Month	Grab

Silver	See Part II.E	See Part II.E	2/Month	Grab
Zinc (total recoverable)	See Part II.E	See Part II.E	2/Month	Grab
Iron (total recoverable)	See Part II.E	See Part II.E	2/Month	Grab

Description of footnotes and symbols applicable to all monitoring classes:

[1]In accordance with Part I.B.2, the DEM reserves the right to increase monitoring frequency based on factors including, but not limited to, quality of influent data and duration of project.

[2]In accordance with Part II.B.2 during the first month of discharge additional sampling requirements are applicable.

[3] In accordance with Part II.A.1 the influent to the treatment system shall be monitored on a quarterly basis.

[4]Monitor flow and submit a flow log with the monitoring results. The flow log shall include the rate and duration of flow including the time(s) of day when flow commences and ceases. At a minimum, the flow must be reported each time a sample is collected.

[5] The limit at which compliance/noncompliance determinations will be based is the Quantitation Limit, which is defined as 20 ug/l for Total Residual Chlorine, 10 ug/l for Cyanide, 0.5 ug/l for Vinyl Chloride, 1 ug/l for Pentachlorophenol, 5 ug/l for Total Phthalates, 0.05 ug/l for Benzo (a) Anthracene, 2 ug/l for Benzo (a) Pyrene, 0.1 ug/l for Benzo (b) Fluoranthene, 2 ug/l for Benzo (k) Fluoranthene, 5 ug/l for Chrysene, 0.1 ug/l for Dibenzo (a,h) anthracene, 0.15 ug/l for Indeno (1,2,3-cd) Pyrene, and 10 ug/l for Total Polycyclic Aromatic Hydrocarbons. These values may be reduced by permit modification as more sensitive methods are approved by EPA and the State.

---Signifies a parameter which must be monitored and data must be reported; no limit has been established at this time.

xxx Signifies a parameter which will be limited based upon the design plans and specifications for each project.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the effluent of a groundwater treatment system. The two (2) grab samples taken per month shall be separated by a minimum of ten (10) days.

20. Category G – Contaminated Construction Dewatering Sites Discharging to Non- Class AA receiving waters. During the period beginning the date of authorization to discharge and lasting until either the expiration of this general permit or termination of coverage, permittee(s) are authorized to discharge from an approved groundwater treatment system. Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations Concentration - Specify Units		Monitoring Requirement	
	Average Monthly	Maximum Daily	Measurement Frequency[1,2,3]	Sample Type
Flow	--- GPM	xxx GPM	Continuous[4]	Totalizer
Total Suspended Solids	30,000 ug/l	--- ug/l	2/Month	Grab
Total Residual Chlorine	11 ug/l[5]	19 ug/l[5]	2/Month	Grab
Total Petroleum Hydrocarbons	--- ug/l	1000 ug/l	2/Month	Grab
Cyanide	4.16 ug/l[5]	17.6 ug/l	2/Month	Grab
Benzene	4.72 ug/l	5 ug/l	2/Month	Grab
Toluene	11.2 ug/l	508 ug/l	2/Month	Grab
Ethylbenzene	28.8 ug/l	1280 ug/l	2/Month	Grab
Total Xylenes (m,p,o)	2.4 ug/l	106.4 ug/l	2/Month	Grab
Total BTEX	--- ug/l	100 ug/l	2/Month	Grab
Ethylene dibromide	--- ug/l	0.05 ug/l	2/Month	Grab
Methyl- t- Butyl Ether	--- ug/l	70 ug/l	2/Month	Grab
tert-Amyl Methyl Ether	--- ug/l	--- ug/l	2/Month	Grab
Carbon Tetrachloride	4.4 ug/l	4.4 ug/l	2/Month	Grab
1,4 Dichlorobenzene	0.96 ug/l	5 ug/l	2/Month	Grab
1,2 Dichlorobenzene	1.44 ug/l	63.2 ug/l	2/Month	Grab
1,3 Dichlorobenzene	6.96 ug/l	312 ug/l	2/Month	Grab
Total Dichlorobenzene	--- ug/l	763 ug/l	2/Month	Grab
1,1 Dichloroethane	--- ug/l	70 ug/l	2/Month	Grab
1,2 Dichloroethane	5 ug/l	5 ug/l	2/Month	Grab
1,1 Dichloroethylene	3.2 ug/l	3.2 ug/l	2/Month	Grab
Cis - 1,2 Dichloroethylene	--- ug/l	70 ug/l	2/Month	Grab
Dichloromethane	--- ug/l	4.6 ug/l	2/Month	Grab
Tetrachloroethylene	4.24 ug/l	5 ug/l	2/Month	Grab
1,1,1 Trichloroethane	--- ug/l	200 ug/l	2/Month	Grab
1,1,2 Trichloroethane	5 ug/l	5 ug/l	2/Month	Grab
Trichloroethylene	5 ug/l	5 ug/l	2/Month	Grab
Vinyl Chloride	1.92 ug/l	2 ug/l	2/Month	Grab

Acetone	--- ug/l	--- ug/l	2/Month	Grab
1,4 Dioxane	--- ug/l	--- ug/l	2/Month	Grab
Total Phenols	4.48 ug/l	200.8 ug/l	2/Month	Grab
Pentachlorophenol	0.04 ug/l[5]	0.05 ug/l[5]	2/Month	Grab
Total Phthalates	3 ug/l[5]	--- ug/l	2/Month	Grab
Bis (2-Ethylhexyl) Phthalate	6 ug/l	6 ug/l	2/Month	Grab
Total Group I Polycyclic Aromatic Hydrocarbons	0.14 ug/l[5]	10 ug/l	2/Month	Grab
Benzo (a) Anthracene	--- ug/l	0.0038 ug/l[5]	2/Month	Grab
Benzo (a) Pyrene	--- ug/l	0.0038 ug/l[5]	2/Month	Grab
Benzo (b) Fluoranthene	--- ug/l	0.0038 ug/l[5]	2/Month	Grab
Benzo (k) Fluoranthene	--- ug/l	0.0038 ug/l[5]	2/Month	Grab
Chrysene	--- ug/l	0.0038 ug/l[5]	2/Month	Grab
Dibenzo (a,h) anthracene	--- ug/l	0.0038 ug/l[5]	2/Month	Grab
Indeno (1,2,3-cd) Pyrene	--- ug/l	0.0038 ug/l[5]	2/Month	Grab
Total Group II Polycyclic Aromatic Hydrocarbons	0.14 ug/l[5]	100 ug/l	2/Month	Grab
Acenapthene	1.52 ug/l	1.9 ug/l	2/Month	Grab
Acenapthylene	--- ug/l	--- ug/l	2/Month	Grab
Anthracene	32,000 ug/l	--- ug/l	2/Month	Grab
Benzo (ghi) Perylene	--- ug/l	--- ug/l	2/Month	Grab
Fluoranthene	3.52 ug/l	159.2 ug/l	2/Month	Grab
Fluorene	4240 ug/l	--- ug/l	2/Month	Grab
Napthalene	2.08 ug/l	20 ug/l	2/Month	Grab
Phenanthrene	--- ug/l	--- ug/l	2/Month	Grab
Pyrene	3200 ug/l	--- ug/l	2/Month	Grab
Total Polychlorinated Biphenyls	0.000512 ug/l	0.000064 ug/l	2/Month	Grab
Antimony	See Part II.E	See Part II.E	2/Month	Grab
Arsenic	See Part II.E	See Part II.E	2/Month	Grab
Cadmium	See Part II.E	See Part II.E	2/Month	Grab
Chromium III (trivalent, total recoverable)	See Part II.E	See Part II.E	2/Month	Grab
Chromium VI (hexavalent, total recoverable)	See Part II.E	See Part II.E	2/Month	Grab
Copper	See Part II.E	See Part II.E	2/Month	Grab

Lead (total recoverable)	See Part II.E	See Part II.E	2/Month	Grab
Mercury	See Part II.E	See Part II.E	2/Month	Grab
Nickel (total recoverable)	See Part II.E	See Part II.E	2/Month	Grab
Selenium	See Part II.E	See Part II.E	2/Month	Grab
Silver	See Part II.E	See Part II.E	2/Month	Grab
Zinc (total recoverable)	See Part II.E	See Part II.E	2/Month	Grab
Iron (total recoverable)	See Part II.E	See Part II.E	2/Month	Grab

Description of footnotes and symbols applicable to all monitoring classes:

[1]In accordance with Part I.B.2, the DEM reserves the right to increase monitoring frequency based on factors including, but not limited to, quality of influent data and duration of project.

[2]In accordance with Part II.B.2 during the first month of discharge additional sampling requirements are applicable.

[3] In accordance with Part II.A.1 the influent to the treatment system shall be monitored on a quarterly basis.

[4]Monitor flow and submit a flow log with the monitoring results. The flow log shall include the rate and duration of flow including the time(s) of day when flow commences and ceases. At a minimum, the flow must be reported each time a sample is collected.

[5] The limit at which compliance/noncompliance determinations will be based is the Quantitation Limit, which is defined as 20 ug/l for Total Residual Chlorine,10 ug/l for Cyanide, 1 ug/l for Pentachlorophenol, 5 ug/l for Total Phthalates, 0.05 ug/l for Benzo (a) Anthracene, 2 ug/l for Benzo (a) Pyrene, 0.1 ug/l for Benzo (b) Fluoranthene, 2 ug/l for Benzo (k) Fluoranthene, 5 ug/l for Chrysene, 0.1 ug/l for Dibenzo (a,h) anthracene, 0.15 ug/l for Indeno (1,2,3-cd) Pyrene, and 10 ug/l for Polycyclic Aromatic Hydrocarbons. These values may be reduced by permit modification as more sensitive methods are approved by EPA and the State.

---Signifies a parameter which must be monitored and data must be reported; no limit has been established at this time.

xxxSignifies a parameter which will be limited based upon the design plans and specifications for each project.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the effluent of a groundwater treatment system. The two (2) grab samples taken per month shall be separated by a minimum of ten (10) days.

21. Category G – Contaminated Construction Dewatering Sites Discharging to Class SA and SB receiving waters. During the period beginning the date of authorization to discharge and lasting until either the expiration of this general permit or termination of coverage, permittee(s) are authorized to discharge from an approved groundwater treatment system. Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations Concentration - Specify Units		Monitoring Requirement	
	Average Monthly	Maximum Daily	Measurement Frequency[1,2,3]	Sample Type
Flow	--- GPM	xxx GPM	Continuous[4]	Totalizer
Total Suspended Solids	30,000 ug/l	--- ug/l	2/Month	Grab
Total Residual Chlorine	7.5 ug/l[5]	13 ug/l[5]	2/Month	Grab
Total Petroleum Hydrocarbons	--- ug/l	1000 ug/l	2/Month	Grab
Cyanide	0.8 ug/l[5]	0.8 ug/l[5]	2/Month	Grab
Benzene	5 ug/l	5 ug/l	2/Month	Grab
Toluene	12000 ug/l	--- ug/l	2/Month	Grab
Ethylbenzene	1680 ug/l	--- ug/l	2/Month	Grab
Total Xylenes (m,p,o)	--- ug/l	--- ug/l	2/Month	Grab
Total BTEX	100 ug/l	100 ug/l	2/Month	Grab
Ethylene dibromide	--- ug/l	0.05 ug/l	2/Month	Grab
Methyl-t-butyl Ether	--- ug/l	70 ug/l	2/Month	Grab
Tert-Amyl Methyl Ether	--- ug/l	--- ug/l	2/Month	Grab
Carbon Tetrachloride	4.4 ug/l	4.4 ug/l	2/Month	Grab
1,4 Dichlorobenzene	5 ug/l	5 ug/l	2/Month	Grab
1,2 Dichlorobenzene	600 ug/l	600 ug/l	2/Month	Grab
1,3 Dichlorobenzene	320 ug/l	320 ug/l	2/Month	Grab
Total Dichlorobenzene	--- ug/l	763 ug/l	2/Month	Grab
1,1 Dichloroethane	--- ug/l	70 ug/l	2/Month	Grab
1,2 Dichloroethane	5 ug/l	5 ug/l	2/Month	Grab
1,1 Dichloroethylene	3.2 ug/l	3.2 ug/l	2/Month	Grab
Cis-1,2 Dichloroethylene	--- ug/l	70 ug/l	2/Month	Grab
Dichloromethane	--- ug/l	4.6 ug/l	2/Month	Grab
Tetrachloroethylene	5 ug/l	5 ug/l	2/Month	Grab
1,1,1 Trichloroethane	--- ug/l	200 ug/l	2/Month	Grab
1,1,2 Trichloroethane	5 ug/l	5 ug/l	2/Month	Grab
Trichloroethylene	5 ug/l	5 ug/l	2/Month	Grab
Vinyl Chloride	1.92 ug/l	2 ug/l	2/Month	Grab

Acetone	--- ug/l	--- ug/l	2/Month	Grab
1,4 Dioxane	--- ug/l	--- ug/l	2/Month	Grab
Total Phenols	300 ug/l	300 ug/l	2/Month	Grab
Pentachlorophenol	1 ug/l	1 ug/l	2/Month	Grab
Total Phthalates	3 ug/l[5]	--- ug/l	2/Month	Grab
Bis (2-Ethylhexyl) Phthalate	6 ug/l	6 ug/l	2/Month	Grab
Total Group I Polycyclic Aromatic Hydrocarbons	0.14 ug/l[5]	10 ug/l	2/Month	Grab
Benzo (a) Anthracene	0.0038 ug/l[5]	0.0038 ug/l[5]	2/Month	Grab
Benzo (a) Pyrene	0.0038 ug/l[5]	0.0038 ug/l[5]	2/Month	Grab
Benzo (b) Fluoranthene	0.0038 ug/l[5]	0.0038 ug/l[5]	2/Month	Grab
Benzo (k) Fluoranthene	0.0038 ug/l[5]	0.0038 ug/l[5]	2/Month	Grab
Chrysene	0.0038 ug/l[5]	0.0038 ug/l[5]	2/Month	Grab
Dibenzo (a,h) anthracene	0.0038 ug/l[5]	0.0038 ug/l[5]	2/Month	Grab
Ideno (1,2,3-cd) Pyrene	0.0038 ug/l[5]	0.0038 ug/l[5]	2/Month	Grab
Total Group II Polycyclic Aromatic Hydrocarbons	0.14 ug/l[5]	100 ug/l[5]	2/Month	Grab
Acenapthene	1.9 ug/l	1.9 ug/l	2/Month	Grab
Acenapthylene	--- ug/l	--- ug/l	2/Month	Grab
Anthracene	32000 ug/l	--- ug/l	2/Month	Grab
Benzo (ghi) Perylene	--- ug/l	--- ug/l	2/Month	Grab
Fluoranthene	112 ug/l	--- ug/l	2/Month	Grab
Fluorene	4240 ug/l	--- ug/l	2/Month	Grab
Napthalene	--- ug/l	20 ug/l	2/Month	Grab
Phenanthrene	--- ug/l	--- ug/l	2/Month	Grab
Pyrene	3200 ug/l	--- ug/l	2/Month	Grab
Total Polychlorinated Biphenyls (PCBs)	0.000064 ug/l	0.000064 ug/l	2/Month	Grab
Antimony	5.6 ug/l	5.6 ug/l	2/Month	Grab
Arsenic	1.12 ug/l[5]	55.2 ug/l	2/Month	Grab
Cadmium	7.08 ug/l	32.19 ug/l	2/Month	Grab
Chromium III (trivalent, total recoverable)	100 ug/l	--- ug/l	2/Month	Grab
Chromium VI (hexavalent, total recoverable)	40.28 ug/l	886.2 ug/l	2/Month	Grab
Copper	2.98 ug/l[5]	4.62 ug/l	2/Month	Grab
Lead (total recoverable)	6.81 ug/l	176.6 ug/l	2/Month	Grab
Mercury	0.12 ug/l[5]	1.69 ug/l	2/Month	Grab

Nickel (total recoverable)	6.62 ug/l	59.79 ug/l	2/Month	Grab
Selenium	56.91 ug/l	232.46 ug/l	2/Month	Grab
Silver	1.78 ug/l[5]	1.78 ug/l[5]	2/Month	Grab
Zinc (total recoverable)	68.5 ug/l	76.11 ug/l	2/Month	Grab
Iron (total recoverable)	--- ug/l	1000 ug/l	2/Month	Grab

Description of footnotes and symbols applicable to all monitoring classes:

[1]In accordance with Part I.B.2, the DEM reserves the right to increase monitoring frequency based on factors including, but not limited to, quality of influent data and duration of project.

[2]In accordance with Part II.B.2 during the first month of discharge additional sampling requirements are applicable.

[3] In accordance with Part II.A.1 the influent to the treatment system shall be monitored on a quarterly basis.

[4]Monitor flow and submit a flow log with the monitoring results. The flow log shall include the rate and duration of flow including the time(s) of day when flow commences and ceases. At a minimum, the flow must be reported each time a sample is collected.

[5]The limit at which compliance/noncompliance determinations will be based is the Quantitation Limit, which is defined as 20 ug/l for Total Residual Chlorine, 10 ug/l for Cyanide, 5 ug/l for Total Phthalates, 0.05 ug/l for Benzo (a) Anthracene, 2 ug/l for Benzo (a) Pyrene, 0.1 ug/l for Benzo (b) Fluoranthene, 2 ug/l for Benzo (k) Fluoranthene, 5 ug/l for Chrysene, 0.1 ug/l for Dibenzo (a,h) anthracene, 0.15 ug/l for Indeno (1,2,3-cd) Pyrene, 2 ug/l for Arsenic, 3 ug/l for Copper, 0.2 ug/l for Mercury, 2 ug/l for Silver, and 10 ug/l for Polycyclic Aromatic Hydrocarbons. These values may be reduced by permit modification as more sensitive methods are approved by EPA and the State.

---Signifies a parameter which must be monitored and data must be reported; no limit has been established at this time.

xxxSignifies a parameter which will be limited based upon the design plans and specifications for each project.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the effluent of a groundwater treatment system. The two (2) grab samples taken per month shall be separated by a minimum of ten (10) days.

22. Category H. Sites Engaged in Contaminated Aquifer Pump Testing, Contaminated Well Development or Rehabilitation Discharging to Class AA receiving waters. During the period beginning the date of authorization to discharge and lasting until either the expiration of this general permit or termination of coverage, permittee(s) are authorized to discharge from an approved groundwater treatment system. Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations Concentration - Specify Units		Monitoring Requirement	
	Average Monthly	Maximum Daily	Measurement Frequency[1,2,3]	Sample Type
Flow	--- GPM	xxx GPM	Continuous[4]	Totalizer
Total Suspended Solids	30,000 ug/l	--- ug/l	2/Month	Grab
Total Residual Chlorine	11 ug/l[5]	19 ug/l[5]	2/Month	Grab
Total Petroleum Hydrocarbons	--- ug/l	1000 ug/l	2/Month	Grab
Cyanide	4.16 ug/l[5]	17.6 ug/l	2/Month	Grab
Benzene	4.72 ug/l	5 ug/l	2/Month	Grab
Toluene	11.2 ug/l	508 ug/l	2/Month	Grab
Ethylbenzene	28.8 ug/l	1280 ug/l	2/Month	Grab
Total Xylenes (m,p,o)	2.4 ug/l	106.4 ug/l	2/Month	Grab
Total BTEX	--- ug/l	100 ug/l	2/Month	Grab
Ethylene dibromide	--- ug/l	0.05 ug/l	2/Month	Grab
Methyl-t-Butyl Ether	--- ug/l	70 ug/l	2/Month	Grab
tert-Amyl Methyl Ether	--- ug/l	--- ug/l	2/Month	Grab
Carbon Tetrachloride	1.84 ug/l	4.4 ug/l	2/Month	Grab
1,4 Dichlorobenzene	0.96 ug/l	5 ug/l	2/Month	Grab
1,2 Dichlorobenzene	1.44 ug/l	63.2 ug/l	2/Month	Grab
1,3 Dichlorobenzene	6.96 ug/l	312 ug/l	2/Month	Grab
Total Dichlorobenzene	--- ug/l	763 ug/l	2/Month	Grab
1,1 Dichloroethane	--- ug/l	70 ug/l	2/Month	Grab
1,2 Dichloroethane	3.04 ug/l	5 ug/l	2/Month	Grab
1,1 Dichloroethylene	3.2 ug/l	3.2 ug/l	2/Month	Grab
cis 1,2 Dichloroethylene	--- ug/l	70 ug/l	2/Month	Grab
Dichloromethane	--- ug/l	4.6 ug/l	2/Month	Grab
Tetrachloroethylene	4.24 ug/l	5 ug/l	2/Month	Grab
1,1,1 Trichloroethane	--- ug/l	200 ug/l	2/Month	Grab
1,1,2 Trichloroethane	4.72 ug/l	5 ug/l	2/Month	Grab
Trichloroethylene	5 ug/l	5 ug/l	2/Month	Grab
Vinyl Chloride	0.02 ug/l[5]	2 ug/l	2/Month	Grab

Acetone	--- ug/l	--- ug/l	2/Month	Grab
1,4 Dioxane	--- ug/l	--- ug/l	2/Month	Grab
Total Phenols	4.48 ug/l	200.8 ug/l	2/Month	Grab
Pentachlorophenol	0.04 ug/l[5]	0.05 ug/l[5]	2/Month	Grab
Total Phthalates	3 ug/l[5]	--- ug/l	2/Month	Grab
Bis (2-Ethylhexyl) Phthalate	6 ug/l	6 ug/l	2/Month	Grab
Total Group I Polycyclic Aromatic Hydrocarbons	0.03 ug/l[5]	10 ug/l	2/Month	Grab
Benzo (a) Anthracene	--- ug/l	0.0038 ug/l[5]	2/Month	Grab
Benzo (a) Pyrene	--- ug/l	0.0038 ug/l[5]	2/Month	Grab
Benzo (b) Fluoranthene	--- ug/l	0.0038 ug/l[5]	2/Month	Grab
Benzo (k) Fluoranthene	--- ug/l	0.0038 ug/l[5]	2/Month	Grab
Chrysene	--- ug/l	0.0038 ug/l[5]	2/Month	Grab
Dibenzo (a,h) anthracene	--- ug/l	0.0038 ug/l[5]	2/Month	Grab
Indeno (1,2,3-cd) Pyrene	--- ug/l	0.0038 ug/l[5]	2/Month	Grab
Total Group II Polycyclic Aromatic Hydrocarbons	0.03 ug/l[5]	100 ug/l	2/Month	Grab
Acenapthene	1.52 ug/l	1.9 ug/l	2/Month	Grab
Acenapthylene	--- ug/l	--- ug/l	2/Month	Grab
Anthracene	6640 ug/l	--- ug/l	2/Month	Grab
Benzo (ghi) Perylene	--- ug/l	--- ug/l	2/Month	Grab
Fluoranthene	3.52 ug/l	159.2 ug/l	2/Month	Grab
Fluorene	880 ug/l	--- ug/l	2/Month	Grab
Napthalene	2.08 ug/l	20 ug/l	2/Month	Grab
Phenanthrene	--- ug/l	--- ug/l	2/Month	Grab
Pyrene	664 ug/l	--- ug/l	2/Month	Grab
Total Polychlorinated Biphenyls	0.000064 ug/l	0.000064 ug/l	2/Month	Grab
Antimony	See Part II.E	See Part II.E	2/Month	Grab
Arsenic	See Part II.E	See Part II.E	2/Month	Grab
Cadmium	See Part II.E	See Part II.E	2/Month	Grab
Chromium III (trivalent, total recoverable)	See Part II.E	See Part II.E	2/Month	Grab
Chromium VI (hexavalent, total recoverable)	See Part II.E	See Part II.E	2/Month	Grab
Copper	See Part II.E	See Part II.E	2/Month	Grab
Lead (total recoverable)	See Part II.E	See Part II.E	2/Month	Grab

Mercury	See Part II.E	See Part II.E	2/Month	Grab
Nickel (total recoverable)	See Part II.E	See Part II.E	2/Month	Grab
Selenium	See Part II.E	See Part II.E	2/Month	Grab
Silver	See Part II.E	See Part II.E	2/Month	Grab
Zinc (total recoverable)	See Part II.E	See Part II.E	2/Month	Grab
Iron (total recoverable)	See Part II.E	See Part II.E	2/Month	Grab

Description of footnotes and symbols applicable to all monitoring classes:

[1]In accordance with Part I.B.2, the DEM reserves the right to increase monitoring frequency based on factors including, but not limited to, quality of influent data and duration of project.

[2]In accordance with Part II.B.2 during the first month of discharge additional sampling requirements are applicable.

[3] In accordance with Part II.A.1 the influent to the treatment system shall be monitored on a quarterly basis.

[4]Monitor flow and submit a flow log with the monitoring results. The flow log shall include the rate and duration of flow including the time(s) of day when flow commences and ceases. At a minimum, the flow must be reported each time a sample is collected.

[5] The limit at which compliance/noncompliance determinations will be based is the Quantitation Limit, which is defined as 20 ug/l for Total Residual Chlorine, 10 ug/l for Cyanide, 0.5 ug/l for Vinyl Chloride, 1 ug/l for Pentachlorophenol, 5 ug/l for Total Phthalates, 0.05 ug/l for Benzo (a) Anthracene, 2 ug/l for Benzo (a) Pyrene, 0.1 ug/l for Benzo (b) Fluoranthene, 2 ug/l for Benzo (k) Fluoranthene, 5 ug/l for Chrysene, 0.1 ug/l for Dibenzo (a,h) anthracene, 0.15 ug/l for Indeno (1,2,3-cd) Pyrene, and 10 ug/l for Polycyclic Aromatic Hydrocarbons. These values may be reduced by permit modification as more sensitive methods are approved by EPA and the State.

--- Signifies a parameter which must be monitored and data must be reported; no limit has been established at this time.

xxx Signifies a parameter which will be limited based upon the design plans and specifications for each project.
Samples taken in compliance with the monitoring requirements specified above shall be taken at the effluent of a groundwater treatment system. The two (2) grab samples taken per month shall be separated by a minimum of ten (10) days.

23. Category H. Sites Engaged in Contaminated Aquifer Pump Testing, Contaminated Well Development or Rehabilitation Discharging to Non-Class AA receiving waters. During the period beginning the date of authorization to discharge and lasting until either the expiration of this general permit or termination of coverage, permittee(s) are authorized to discharge from an approved groundwater treatment system. Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations Concentration - Specify Units		Monitoring Requirement	
	Average Monthly	Maximum Daily	Measurement Frequency[1,2,3]	Sample Type
Flow	--- GPM	xxx GPM	Continuous[4]	Totalizer
Total Suspended Solids	30,000 ug/l	--- ug/l	2/Month	Grab
Total Residual Chlorine	11 ug/l[5]	19 ug/l[5]	2/Month	Grab
Total Petroleum Hydrocarbons	--- ug/l	1000 ug/l	2/Month	Grab
Cyanide	4.16 ug/l[5]	17.6 ug/l	2/Month	Grab
Benzene	4.72 ug/l	5 ug/l	2/Month	Grab
Toluene	11.2 ug/l	508 ug/l	2/Month	Grab
Ethylbenzene	28.8 ug/l	1280 ug/l	2/Month	Grab
Total Xylenes (m,p,o)	2.4 ug/l	106.4 ug/l	2/Month	Grab
Total BTEX	--- ug/l	100 ug/l	2/Month	Grab
Ethylene dibromide	--- ug/l	0.05 ug/l	2/Month	Grab
Methyl-t-Butyl Ether	--- ug/l	70 ug/l	2/Month	Grab
tert-Amyl Methyl Ether	--- ug/l	--- ug/l	2/Month	Grab
Carbon Tetrachloride	4.4 ug/l	4.4 ug/l	2/Month	Grab
1,4 Dichlorobenzene	0.96 ug/l	5 ug/l	2/Month	Grab
1,2 Dichlorobenzene	1.44 ug/l	63.2 ug/l	2/Month	Grab
1,3 Dichlorobenzene	6.96 ug/l	312 ug/l	2/Month	Grab
Total Dichlorobenzene	--- ug/l	763 ug/l	2/Month	Grab
1,1 Dichloroethane	--- ug/l	70 ug/l	2/Month	Grab
1,2 Dichloroethane	5 ug/l	5 ug/l	2/Month	Grab
1,1 Dichloroethylene	3.2 ug/l	3.2 ug/l	2/Month	Grab
cis-1,2 Dichloroethylene	--- ug/l	70 ug/l	2/Month	Grab
Dichloromethane	--- ug/l	4.6 ug/l	2/Month	Grab
Tetrachloroethylene	4.24 ug/l	5 ug/l	2/Month	Grab
1,1,1 Trichloroethane	--- ug/l	200 ug/l	2/Month	Grab
1,1,2 Trichloroethane	5 ug/l	5 ug/l	2/Month	Grab
Trichloroethylene	5 ug/l	5 ug/l	2/Month	Grab
Vinyl Chloride	1.92 ug/l	2 ug/l	2/Month	Grab

Acetone	--- ug/l	--- ug/l	2/Month	Grab
1,4 Dioxane	--- ug/l	--- ug/l	2/Month	Grab
Tota Phenols	4.48 ug/l	200.8 ug/l	2/Month	Grab
Pentachlorophenol	0.04 ug/l[5]	0.05 ug/l[5]	2/Month	Grab
Total Phthalates	3 ug/l[5]	--- ug/l	2/Month	Grab
Bis (2-Ethylhexyl) Phthalate	6 ug/l	6 ug/l	2/Month	Grab
Total Group I Polycyclic Aromatic Hydrocarbons	0.14 ug/l[5]	10 ug/l	2/Month	Grab
Benzo (a) Anthracene	--- ug/l	0.0038 ug/l[5]	2/Month	Grab
Benzo (a) Pyrene	--- ug/l	0.0038 ug/l[5]	2/Month	Grab
Benzo (b) Fluoranthene	--- ug/l	0.0038 ug/l[5]	2/Month	Grab
Benzo (k) Fluoranthene	--- ug/l	0.0038 ug/l[5]	2/Month	Grab
Chrysene	--- ug/l	0.0038 ug/l[5]	2/Month	Grab
Dibenzo (a,h) anthracene	--- ug/l	0.0038 ug/l[5]	2/Month	Grab
Indeno (1,2,3-cd) Pyrene	--- ug/l	0.0038 ug/l[5]	2/Month	Grab
Total Group II Polycyclic Aromatic Hydrocarbons	0.14 ug/l[5]	100 ug/l	2/Month	Grab
Acenapthene	1.52 ug/l	1.9 ug/l	2/Month	Grab
Acenapthylene	--- ug/l	--- ug/l	2/Month	Grab
Anthracene	32,000 ug/l	--- ug/l	2/Month	Grab
Benzo (ghi) Perylene	--- ug/l	--- ug/l	2/Month	Grab
Fluoranthene	3.52 ug/l	159.2 ug/l	2/Month	Grab
Fluorene	4240 ug/l	--- ug/l	2/Month	Grab
Napthalene	2.08 ug/l	20 ug/l	2/Month	Grab
Phenanthrene	--- ug/l	--- ug/l	2/Month	Grab
Pyrene	3200 ug/l	--- ug/l	2/Month	Grab
Total Polychlorinated Biphenyls	0.000512 ug/l	0.000064 ug/l	2/Month	Grab
Antimony	See Part II.E	See Part II.E	2/Month	Grab
Arsenic	See Part II.E	See Part II.E	2/Month	Grab
Cadmium	See Part II.E	See Part II.E	2/Month	Grab
Chromium III (trivalent, total recoverable)	See Part II.E	See Part II.E	2/Month	Grab
Chromium VI (hexavalent, total recoverable)	See Part II.E	See Part II.E	2/Month	Grab
Copper	See Part II.E	See Part II.E	2/Month	Grab
Lead (total recoverable)	See Part II.E	See Part II.E	2/Month	Grab

Mercury	See Part II.E	See Part II.E	2/Month	Grab
Nickel (total recoverable)	See Part II.E	See Part II.E	2/Month	Grab
Selenium	See Part II.E	See Part II.E	2/Month	Grab
Silver	See Part II.E	See Part II.E	2/Month	Grab
Zinc (total recoverable)	See Part II.E	See Part II.E	2/Month	Grab
Iron (total recoverable)	See Part II.E	See Part II.E	2/Month	Grab

Description of footnotes and symbols applicable to all monitoring classes:

[1]In accordance with Part I.B.2, the DEM reserves the right to increase monitoring frequency based on factors including, but not limited to, quality of influent data and duration of project.

[2]In accordance with Part II.B.2 during the first month of discharge additional sampling requirements are applicable.

[3] In accordance with Part II.A.1 the influent to the treatment system shall be monitored on a quarterly basis.

[4]Monitor flow and submit a flow log with the monitoring results. The flow log shall include the rate and duration of flow including the time(s) of day when flow commences and ceases. At a minimum, the flow must be reported each time a sample is collected.

[5] The limit at which compliance/noncompliance determinations will be based is the Quantitation Limit, which is defined as 20 ug/l for Total Residual Chlorine, 10 ug/l for Cyanide, 1 ug/l for Pentachlorophenol, 5 ug/l for Total Phthalates, 0.05 ug/l for Benzo (a) Anthracene, 2 ug/l for Benzo (a) Pyrene, 0.1 ug/l for Benzo (b) Fluoranthene, 2 ug/l for Benzo (k) Fluoranthene, 5 ug/l for Chrysene, 0.1 ug/l for Dibenzo (a,h) anthracene, 0.15 ug/l for Indeno (1,2,3-cd) Pyrene, and 10 ug/l for Total Polycyclic Aromatic Hydrocarbons. These values may be reduced by permit modification as more sensitive methods are approved by EPA and the State.

---Signifies a parameter which must be monitored and data must be reported; no limit has been established at this time.

xxx Signifies a parameter which will be limited based upon the design plans and specifications for each project.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the effluent of a groundwater treatment system. The two (2) grab samples taken per month shall be separated by a minimum of ten (10) days.

24. Category H. Sites Engaged in Contaminated Aquifer Pump Testing, Contaminated Well Development or Rehabilitation Discharging to Class SA or SB receiving waters. During the period beginning the date of authorization to discharge and lasting until either the expiration of this general permit or termination of coverage, permittee(s) are authorized to discharge from an approved groundwater treatment system. Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations Concentration - Specify Units		Monitoring Requirement	
	Average Monthly	Maximum Daily	Measurement Frequency[1,2,3]	Sample Type
Flow	--- GPM	xxx GPM	Continuous[4]	Totalizer
Total Suspended Solids	30,000 ug/l	--- ug/l	2/Month	Grab
Total Residual Chlorine	7.5 ug/l[5]	13 ug/l[5]	2/Month	Grab
Total Petroleum Hydrocarbons	--- ug/l	1000 ug/l	2/Month	Grab
Cyanide	0.8 ug/l[5]	0.8 ug/l[5]	2/Month	Grab
Benzene	5 ug/l	5 ug/l	2/Month	Grab
Toluene	12,000 ug/l	--- ug/l	2/Month	Grab
Ethylbenzene	1,680 ug/l	--- ug/l	2/Month	Grab
Total Xylenes (m,p,o)	--- ug/l	--- ug/l	2/Month	Grab
Total BTEX	100 ug/l	100 ug/l	2/Month	Grab
Ethylene dibromide	--- ug/l	0.05 ug/l	2/Month	Grab
Methyl-t-Butyl Ether	--- ug/l	70 ug/l	2/Month	Grab
tert-Amyl Methyl Ether	--- ug/l	--- ug/l	2/Month	Grab
Carbon Tetrachloride	4.4 ug/l	4.4 ug/l	2/Month	Grab
1,4 Dichlorobenzene	5 ug/l	5 ug/l	2/Month	Grab
1,2 Dichlorobenzene	600 ug/l	600 ug/l	2/Month	Grab
1,3 Dichlorobenzene	320 ug/l	320 ug/l	2/Month	Grab
Total Dichlorobenzene	--- ug/l	763 ug/l	2/Month	Grab
1,1 Dichloroethane	--- ug/l	70 ug/l	2/Month	Grab
1,2 Dichloroethane	5 ug/l	5 ug/l	2/Month	Grab
1,1 Dichloroethylene	3.2 ug/l	3.2 ug/l	2/Month	Grab
Cis-1,2 Dichloroethylene	--- ug/l	70 ug/l	2/Month	Grab
Dichloromethane	--- ug/l	4.6 ug/l	2/Month	Grab
Tetrachloroethylene	5 ug/l	5 ug/l	2/Month	Grab
1,1,1 Trichloroethane	--- ug/l	200 ug/l	2/Month	Grab
1,1,2 Trichloroethane	5 ug/l	5 ug/l	2/Month	Grab
Trichloroethylene	5 ug/l	5 ug/l	2/Month	Grab
Vinyl Chloride	1.92 ug/l	2 ug/l	2/Month	Grab

Acetone	--- ug/l	--- ug/l	2/Month	Grab
1,4 Dioxane	--- ug/l	--- ug/l	2/Month	Grab
Total Phenols	300 ug/l	300 ug/l	2/Month	Grab
Pentachlorophenol	1 ug/l	1 ug/l	2/Month	Grab
Total Phthalates	3 ug/l[3]	--- ug/l	2/Month	Grab
Bis (2-Ethylhexyl) Phthalate	6 ug/l	6 ug/l	2/Month	Grab
Total Group I Polycyclic Aromatic Hydrocarbons	0.14 ug/l[5]	10 ug/l[5]	2/Month	Grab
Benzo (a) Anthracene	0.0038 ug/l[5]	0.0038 ug/l[5]	2/Month	Grab
Benzo (a) Pyrene	0.0038 ug/l[5]	0.0038 ug/l[5]	2/Month	Grab
Benzo (b) Fluoranthene	0.0038 ug/l[5]	0.0038 ug/l[5]	2/Month	Grab
Benzo (k) Fluoranthene	0.0038 ug/l[5]	0.0038 ug/l[5]	2/Month	Grab
Chrysene	0.0038 ug/l[5]	0.0038 ug/l[5]	2/Month	Grab
Dibenzo (a,h) anthracene	0.0038 ug/l[5]	0.0038 ug/l[5]	2/Month	Grab
Indeno (1,2,3-cd) Pyrene	0.0038 ug/l[5]	0.0038 ug/l[5]	2/Month	Grab
Total Group II Polycyclic Aromatic Hydrocarbons	0.14 ug/l[5]	100 ug/l[5]	2/Month	Grab
Acenapthene	1.9 ug/l	1.9 ug/l	2/Month	Grab
Acenapthylene	--- ug/l	--- ug/l	2/Month	Grab
Anthracene	32,000 ug/l	--- ug/l	2/Month	Grab
Benzo (ghi) Perylene	--- ug/l	--- ug/l	2/Month	Grab
Fluoranthene	112 ug/l	--- ug/l	2/Month	Grab
Fluorene	4240 ug/l	--- ug/l	2/Month	Grab
Napthalene	--- ug/l	20 ug/l	2/Month	Grab
Phenanthrene	--- ug/l	--- ug/l	2/Month	Grab
Pyrene	3200 ug/l	--- ug/l	2/Month	Grab
Total Polychlorinated Biphenyls	0.000064 ug/l	0.000064 ug/l	2/Month	Grab
Antimony	5.6 ug/l	5.6 ug/l	2/Month	Grab
Arsenic	1.12 ug/l[5]	55.2 ug/l	2/Month	Grab
Cadmium	7.08 ug/l	32.19 ug/l	2/Month	Grab
Chromium III (trivalent, total recoverable)	100 ug/l	--- ug/l	2/Month	Grab
Chromium VI (hexavalent, total recoverable)	40.28 ug/l	886.2 ug/l	2/Month	Grab
Copper	2.98 ug/l[5]	4.62 ug/l	2/Month	Grab
Lead (total recoverable)	6.81 ug/l	176.6 ug/l	2/Month	Grab
Mercury	0.12 ug/l[5]	1.69 ug/l	2/Month	Grab
Nickel (total recoverable)	6.62 ug/l	59.79 ug/l	2/Month	Grab

Selenium	56.91 ug/l	232.46 ug/l	2/Month	Grab
Silver	1.78 ug/l[5]	1.78 ug/l[5]	2/Month	Grab
Zinc (total recoverable)	68.5 ug/l	76.11 ug/l	2/Month	Grab
Iron (total recoverable)	--- ug/l	1000 ug/l	2/Month	Grab

Description of footnotes and symbols applicable to all monitoring classes:

[1]In accordance with Part I.B.2, the DEM reserves the right to increase monitoring frequency based on factors including, but not limited to, quality of influent data and duration of project.

[2]In accordance with Part II.B.2 during the first month of discharge additional sampling requirements are applicable.

[3] In accordance with Part II.A.1 the influent to the treatment system shall be monitored on a quarterly basis.

[4]Monitor flow and submit a flow log with the monitoring results. The flow log shall include the rate and duration of flow including the time(s) of day when flow commences and ceases. At a minimum, the flow must be reported each time a sample is collected.

[5] The limit at which compliance/noncompliance determinations will be based is the Quantitation Limit, which is defined as 20 ug/l for Total Residual Chlorine, 10 ug/l for Cyanide, 5 ug/l for Total Phthalates, 0.05 ug/l for Benzo (a) Anthracene, 2 ug/l for Benzo (a) Pyrene, 0.1 ug/l for Benzo (b) Fluoranthene, 2 ug/l for Benzo (k) Fluoranthene, 5 ug/l for Chrysene, 0.1 ug/l for Dibenzo (a,h) anthracene, 0.15 ug/l for Indeno (1,2,3-cd) Pyrene, 2 ug/l for Arsenic, 3 ug/l for Copper, 0.2 ug/l for Mercury, 2 ug/l for Silver, and 10 ug/l for Total Polycyclic Aromatic Hydrocarbons. These values may be reduced by permit modification as more sensitive methods are approved by EPA and the State.

---Signifies a parameter which must be monitored and data must be reported; no limit has been established at this time.

xxx Signifies a parameter which will be limited based upon the design plans and specifications for each project.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the effluent of a groundwater treatment system. The two (2) grab samples taken per month shall be separated by a minimum of ten (10) days.

25. Category I. Hydrostatic Testing of Pipelines and Tanks Discharging to Class AA receiving waters. During the period beginning the date of authorization to discharge and lasting until either the expiration of this general permit or termination of coverage, permittee(s) are authorized to discharge from an approved groundwater treatment system. Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations Concentration - Specify Units		Monitoring Requirement	
	Average Monthly	Maximum Daily	Measurement Frequency[1,2,3]	Sample Type
Flow	--- GPM	xxx GPM	Continuous[4]	Totalizer
Total Suspended Solids	50,000 ug/l	--- ug/l	2/Month	Grab
Total Residual Chlorine	11 ug/l[5]	19 ug/l[5]	2/Month	Grab
Total Petroleum Hydrocarbons	--- ug/l	1000 ug/l	2/Month	Grab
Benzene	4.72 ug/l	5 ug/l	2/Month	Grab
Total BTEX	--- ug/l	100 ug/l	2/Month	Grab
Napthalene	2.08 ug/l	20 ug/l	2/Month	Grab
Ethylene dibromide	--- ug/l	0.05 ug/l	2/Month	Grab
Methyl-t-Butyl Ether	--- ug/l	70 ug/l	2/Month	Grab
tert-Butyl Alcohol	--- ug/l	--- ug/l	2/Month	Grab
tert-Amyl Methyl Ether	--- ug/l	--- ug/l	2/Month	Grab
Bis (2-Ethylhexyl) Phthalate	6 ug/l[5]	6 ug/l	2/Month	Grab
Total Group I Polycyclic Aromatic Hydrocarbons	0.03 ug/l[5]	10 ug/l	2/Month	Grab
Benzo (a) Anthracene	--- ug/l	0.0038 ug/l[5]	2/Month	Grab
Benzo (a) Pyrene	--- ug/l	0.0038 ug/l[5]	2/Month	Grab
Benzo (b) Fluoranthene	--- ug/l	0.0038 ug/l[5]	2/Month	Grab
Benzo (k) Fluoranthene	--- ug/l	0.0038 ug/l[5]	2/Month	Grab
Chrysene	--- ug/l	0.0038 ug/l[5]	2/Month	Grab
Dibenzo (a,h) anthracene	--- ug/l	0.0038 ug/l[5]	2/Month	Grab
Indeno (1,2,3-cd) Pyrene	--- ug/l	0.0038 ug/l[5]	2/Month	Grab
Lead (total recoverable)	See Part II.E	See Part II.E	2/Month	Grab
Nickel (total recoverable)	See Part II.E	See Part II.E	2/Month	Grab
Chromium III (trivalent, total recoverable)	See Part II.E	See Part II.E	2/Month	Grab

Chromium VI (hexavalent, total recoverable)	See Part II.E	See Part II.E	2/Month	Grab
Zinc (total recoverable)	See Part II.E	See Part II.E	2/Month	Grab
Iron (total recoverable)	See Part II.E	See Part II.E	2/Month	Grab

Description of footnotes and symbols applicable to all monitoring classes:

[1]In accordance with Part I.B.2, the DEM reserves the right to increase monitoring frequency based on factors including, but not limited to, quality of influent data and duration of project.

[2]In accordance with Part II.B.2 during the first month of discharge additional sampling requirements are applicable.

[3] In accordance with Part II.A.1 the influent to the treatment system shall be monitored on a quarterly basis.

[4]Monitor flow and submit a flow log with the monitoring results. The flow log shall include the rate and duration of flow including the time(s) of day when flow commences and ceases. At a minimum, the flow must be reported each time a sample is collected.

[5] The limit at which compliance/noncompliance determinations will be based is the Quantitation Limit, which is defined as 20 ug/l for Total Residual Chlorine, 0.05 ug/l for Benzo (a) Anthracene, 2 ug/l for Benzo (a) Pyrene, 0.1 ug/l for Benzo (b) Fluoranthene, 2 ug/l for Benzo (k) Fluoranthene, 5 ug/l for Chrysene, 0.1 ug/l for Dibenzo (a,h) anthracene, 0.15 ug/l for Indeno (1,2,3-cd) Pyrene, and 10 ug/l for Total Polycyclic Aromatic Hydrocarbons. These values may be reduced by permit modification as more sensitive methods are approved by EPA and the State.

---Signifies a parameter which must be monitored and data must be reported; no limit has been established at this time.

xxx Signifies a parameter which will be limited based upon the design plans and specifications for each project.
Samples taken in compliance with the monitoring requirements specified above shall be taken at the effluent of a groundwater treatment system. The two (2) grab samples taken per month shall be separated by a minimum of ten (10) days.

26. Category I. Hydrostatic Testing of Pipelines and Tanks Discharging to Non-Class AA receiving waters. During the period beginning the date of authorization to discharge and lasting until either the expiration of this general permit or termination of coverage, permittee(s) are authorized to discharge from an approved groundwater treatment system. Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations Concentration - Specify Units		Monitoring Requirement	
	Average Monthly	Maximum Daily	Measurement Frequency[1,2,3]	Sample Type
Flow	--- GPM	xxx GPM	Continuous[4]	Totalizer
Total Suspended Solids	50,000 ug/l	--- ug/l	2/Month	Grab
Total Residual Chlorine	11 ug/l[5]	19 ug/l[5]	2/Month	Grab
Total Petroleum Hydrocarbons	--- ug/l	1000 ug/l	2/Month	Grab
Benzene	4.72 ug/l	5 ug/l	2/Month	Grab
Total BTEX	--- ug/l	100 ug/l	2/Month	Grab
Napthalene	2.08 ug/l	20 ug/l	2/Month	Grab
Ethylene dibromide	--- ug/l	0.05 ug/l	2/Month	Grab
Methyl-t-Butyl Ether	--- ug/l	70 ug/l	2/Month	Grab
tert-Butyl Alcohol	--- ug/l	--- ug/l	2/Month	Grab
tert-Amyl Methyl Ether	--- ug/l	--- ug/l	2/Month	Grab
Bis (2-Ethylhexyl) Pthalate	6 ug/l	6 ug/l	2/Month	Grab
Total Group I Polycyclic Aromatic Hydrocarbons	0.14 ug/l[5]	10 ug/l	2/Month	Grab
Benzo(a) Anthracene	--- ug/l	0.0038 ug/l[5]	2/Month	Grab
Benzo (a) Pyrene	--- ug/l	0.0038 ug/l[5]	2/Month	Grab
Benzo (b) Fluoranthene	--- ug/l	0.0038 ug/l[5]	2/Month	Grab
Benzo (k) Fluoranthene	--- ug/l	0.0038 ug/l[5]	2/Month	Grab
Chrysene	--- ug/l	0.0038 ug/l[5]	2/Month	Grab
Dibenzo (a,h) anthracene	--- ug/l	0.0038 ug/l[5]	2/Month	Grab
Indeno (1,2,3-cd) Pyrene	--- ug/l	0.0038 ug/l[5]	2/Month	Grab
Lead (total Recoverable)	See Part II.E	See Part II.E	2/Month	Grab
Nickel (total recoverable)	See Part II.E	See Part II.E	2/Month	Grab
Chromium III (trivalent, total recoverable)	See Part II.E	See Part II.E	2/Month	Grab
Chromium VI (hexavalent, total recoverable)	See Part II.E	See Part II.E	2/Month	Grab
Zinc (total recoverable)	See Part II.E	See Part II.E	2/Month	Grab
Iron (total recoverable)	See Part II.E	See Part II.E	2/Month	Grab

Description of footnotes and symbols applicable to all monitoring classes:

[1]In accordance with Part I.B.2, the DEM reserves the right to increase monitoring frequency based on factors including, but not limited to, quality of influent data and duration of project.

[2]In accordance with Part II.B.2 during the first month of discharge additional sampling requirements are applicable.

[3] In accordance with Part II.A.1 the influent to the treatment system shall be monitored on a quarterly basis.

[4]Monitor flow and submit a flow log with the monitoring results. The flow log shall include the rate and duration of flow including the time(s) of day when flow commences and ceases. At a minimum, the flow must be reported each time a sample is collected.

[5] The limit at which compliance/noncompliance determinations will be based is the Quantitation Limit, which is defined as 20 ug/l for Total Residual Chlorine, 0.05 ug/l for Benzo (a) Anthracene, 2 ug/l for Benzo (a) Pyrene, 0.1 ug/l for Benzo (b) Fluoranthene, 2 ug/l for Benzo (k) Fluoranthene, 5 ug/l for Chrysene, 0.1 ug/l for Dibenzo (a,h) anthracene, 0.15 ug/l for Indeno (1,2,3-cd) Pyrene, and 10 ug/l for Total Polycyclic Aromatic Hydrocarbons. These values may be reduced by permit modification as more sensitive methods are approved by EPA and the State.

---Signifies a parameter which must be monitored and data must be reported; no limit has been established at this time.

xxx Signifies a parameter which will be limited based upon the design plans and specifications for each project.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the effluent of a groundwater treatment system. The two (2) grab samples taken per month shall be separated by a minimum of ten (10) days.

27. Category I. Hydrostatic Testing of Pipelines and Tanks Discharging to Class SA and SB receiving waters. During the period beginning the date of authorization to discharge and lasting until either the expiration of this general permit or termination of coverage, permittee(s) are authorized to discharge from an approved groundwater treatment system. Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations Concentration - Specify Units		Monitoring Requirement	
	Average Monthly	Maximum Daily	Measurement Frequency[1,2,3]	Sample Type
Flow	--- GPM	xxx GPM	Continuous[4]	Totalizer
Total Suspended Solids	50,000 ug/l	--- ug/l	2/Month	Grab
Total Residual Chlorine	7.5 ug/l[5]	13 ug/l[5]	2/Month	Grab
Total Petroleum Hydrocarbons	--- ug/l	1000 ug/l	2/Month	Grab
Benzene	5 ug/l	5 ug/l	2/Month	Grab
Total BTEX	100 ug/l	100 ug/l	2/Month	Grab
Napthalene	--- ug/l	20 ug/l	2/Month	Grab
Ethylene dibromide	--- ug/l	0.05 ug/l	2/Month	Grab
Methyl-t-Butyl Ether	--- ug/l	70 ug/l	2/Month	Grab
tert-Butyl Alcohol	--- ug/l	--- ug/l	2/Month	Grab
tert-Amyl Methyl Ether	--- ug/l	--- ug/l	2/Month	Grab
Bis (2-Ethylhexyl) Phthalate	6 ug/l	6 ug/l	2/Month	Grab
Total Group I Polycyclic Aromatic Hydrocarbons	0.14 ug/l[5]	10 ug/l	2/Month	Grab
Benzo (a) Anthracene	0.0038 ug/l[5]	0.0038 ug/l[5]	2/Month	Grab
Benzo (a) Pyrene	0.0038 ug/l[5]	0.0038 ug/l[5]	2/Month	Grab
Benzo (b) Fluoranthene	0.0038 ug/l[5]	0.0038 ug/l[5]	2/Month	Grab
Benzo (k) Fluoranthene	0.0038 ug/l[5]	0.0038 ug/l[5]	2/Month	Grab
Chrysene	0.0038 ug/l[5]	0.0038 ug/l[5]	2/Month	Grab
Dibenzo (a,h) anthracene	0.0038 ug/l[5]	0.0038 ug/l[5]	2/Month	Grab
Indeno (1,2,3-cd) Pyrene	0.0038 ug/l[5]	0.0038 ug/l[5]	2/Month	Grab
Lead (total recoverable)	6.81 ug/l	176.6 ug/l	2/Month	Grab
Nickel (total recoverable)	6.62 ug/l	59.79 ug/l	2/Month	Grab
Chromium III (trivalent, total recoverable)	100 ug/l	--- ug/l	2/Month	Grab
Chromium VI (hexavalent, total recoverable)	40.28 ug/l	886.2 ug/l	2/Month	Grab
Zinc (total recoverable)	68.5 ug/l	76.11 ug/l	2/Month	Grab
Iron (total recoverable)	--- ug/l	1000 ug/l	2/Month	Grab

Description of footnotes and symbols applicable to all monitoring classes:

[1]In accordance with Part I.B.2, the DEM reserves the right to increase monitoring frequency based on factors including, but not limited to, quality of influent data and duration of project.

[2]In accordance with Part II.B.2 during the first month of discharge additional sampling requirements are applicable.

[3] In accordance with Part II.A.1 the influent to the treatment system shall be monitored on a quarterly basis.

[4]Monitor flow and submit a flow log with the monitoring results. The flow log shall include the rate and duration of flow including the time(s) of day when flow commences and ceases. At a minimum, the flow must be reported each time a sample is collected.

[5] The limit at which compliance/noncompliance determinations will be based is the Quantitation Limit, which is defined as 20 ug/l for Total Residual Chlorine, 0.05 ug/l for Benzo (a) Anthracene, 2 ug/l for Benzo (a) Pyrene, 0.1 ug/l for Benzo (b) Fluoranthene, 2 ug/l for Benzo (k) Fluoranthene, 5 ug/l for Chrysene, 0.1 ug/l for Dibenzo (a,h) anthracene, 0.15 ug/l for Indeno (1,2,3-cd) Pyrene, and 10 ug/l for Total Polycyclic Aromatic Hydrocarbons. These values may be reduced by permit modification as more sensitive test methods are approved by EPA and the State.

---Signifies a parameter which must be monitored and data must be reported; no limit has been established at this time.

xxx Signifies a parameter which will be limited based upon the design plans and specifications for each project.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the effluent of a groundwater treatment system. The two (2) grab samples taken per month shall be separated by a minimum of ten (10) days.

28. Category J. Contaminated Sumps Discharging to Class AA receiving waters. During the period beginning the date of authorization to discharge and lasting until either the expiration of this general permit or termination of coverage, permittee(s) are authorized to discharge from an approved groundwater treatment system. Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations Concentration - Specify Units		Monitoring Requirement	
	Average Monthly	Maximum Daily	Measurement Frequency[1,2,3]	Sample Type
Flow	--- GPM	xxx GPM	Continuous[4]	Totalizer
Total Suspended Solids	30,000 ug/l	--- ug/l	2/Month	Grab
Total Residual Chlorine	11 ug/l[5]	19 ug/l[5]	2/Month	Grab
Total Petroleum Hydrocarbons	--- ug/l	1000 ug/l	2/Month	Grab
Cyanide	4.16 ug/l[5]	17.6 ug/l	2/Month	Grab
Benzene	4.72 ug/l	5 ug/l	2/Month	Grab
Toluene	11.2 ug/l	508 ug/l	2/Month	Grab
Ethylbenzene	28.8 ug/l	1280 ug/l	2/Month	Grab
Total Xylenes (m,p,o)	2.4 ug/l	106.4 ug/l	2/Month	Grab
Total BTEX	--- ug/l	100 ug/l	2/Month	Grab
Ethylene dibromide	--- ug/l	0.05 ug/l	2/Month	Grab
Methyl-t-Butyl Ether	--- ug/l	70 ug/l	2/Month	Grab
tert-Amyl Methyl Ether	--- ug/l	--- ug/l	2/Month	Grab
Carbon Tetrachloride	1.84 ug/l	4.4 ug/l	2/Month	Grab
1,4 Dichlorobenzene	0.96 ug/l	5 ug/l	2/Month	Grab
1,2 Dichlorobenzene	1.44 ug/l	63.2 ug/l	2/Month	Grab
1,3 Dichlorobenzene	6.96 ug/l	312 ug/l	2/Month	Grab
Total Dichlorobenzene	--- ug/l	763 ug/l	2/Month	Grab
1,1 Dichloroethane	--- ug/l	70 ug/l	2/Month	Grab
1,2 Dichloroethane	3.04 ug/l	5 ug/l	2/Month	Grab
1,1 Dichloroethylene	3.2 ug/l	3.2 ug/l	2/Month	Grab
Cis-1,2 Dichloroethylene	--- ug/l	70 ug/l	2/Month	Grab
Dichloromethane	--- ug/l	4.6 ug/l	2/Month	Grab
Tetrachloroethylene	4.24 ug/l	5 ug/l	2/Month	Grab
1,1,1 Trichloroethane	--- ug/l	200 ug/l	2/Month	Grab
1,1,2 Trichloroethane	4.72 ug/l	5 ug/l	2/Month	Grab
Trichloroethylene	5 ug/l	5 ug/l	2/Month	Grab
Vinyl Chloride	0.02 ug/l[5]	2 ug/l	2/Month	Grab

Acetone	--- ug/l	--- ug/l	2/Month	Grab
1,4 Dioxane	--- ug/l	--- ug/l	2/Month	Grab
Total Phenols	4.48 ug/l	200.8 ug/l	2/Month	Grab
Pentachlorophenol	0.04 ug/l[5]	0.05 ug/l[5]	2/Month	Grab
Total Phthalates	3 ug/l[5]	--- ug/l	2/Month	Grab
Bis (2-Ethylhexyl) Phthalate	6 ug/l	6 ug/l	2/Month	Grab
Total Group I Polycyclic Aromatic Hydrocarbons	0.03 ug/l[5]	10 ug/l	2/Month	Grab
Benzo (a) Anthracene	--- ug/l	0.0038 ug/l[5]	2/Month	Grab
Benzo (a) Pyrene	--- ug/l	0.0038 ug/l[5]	2/Month	Grab
Benzo (b) Fluoranthene	--- ug/l	0.0038 ug/l[5]	2/Month	Grab
Benzo (k) Fluoranthene	--- ug/l	0.0038 ug/l[5]	2/Month	Grab
Chrysene	--- ug/l	0.0038 ug/l[5]	2/Month	Grab
Dibenzo (a,h) anthracene	--- ug/l	0.0038 ug/l[5]	2/Month	Grab
Indeno (1,2,3-cd) Pyrene	--- ug/l	0.0038 ug/l[5]	2/Month	Grab
Total Group II Polycyclic Aromatic Hydrocarbons	0.03 ug/l[5]	100 ug/l	2/Month	Grab
Acenapthene	1.52 ug/l	1.9 ug/l	2/Month	Grab
Acenapthylene	--- ug/l	--- ug/l	2/Month	Grab
Anthracene	6640 ug/l	--- ug/l	2/Month	Grab
Benzo (ghi) Perylene	--- ug/l	--- ug/l	2/Month	Grab
Fluoranthene	3.52 ug/l	159.2 ug/l	2/Month	Grab
Fluorene	880 ug/l	--- ug/l	2/Month	Grab
Napthalene	2.08 ug/l	20 ug/l	2/Month	Grab
Phenanthrene	--- ug/l	--- ug/l	2/Month	Grab
Pyrene	664 ug/l	--- ug/l	2/Month	Grab
Total Polychlorinated Biphenyls (PCBs)	0.000064 ug/l	0.000064 ug/l	2/Month	Grab
Antimony	See Part II.E	See Part II.E	2/Month	Grab
Arsenic	See Part II.E	See Part II.E	2/Month	Grab
Cadmium	See Part II.E	See Part II.E	2/Month	Grab
Chromium III (trivalent, total recoverable)	See Part II.E	See Part II.E	2/Month	Grab
Chromium VI (hexavalent, total recoverable)	See Part II.E	See Part II.E	2/Month	Grab
Copper	See Part II.E	See Part II.E	2/Month	Grab
Lead (total recoverable)	See Part II.E	See Part II.E	2/Month	Grab

Mercury	See Part II.E	See Part II.E	2/Month	Grab
Nickel (total recoverable)	See Part II.E	See Part II.E	2/Month	Grab
Selenium	See Part II.E	See Part II.E	2/Month	Grab
Silver	See Part II.E	See Part II.E	2/Month	Grab
Zinc (total recoverable)	See Part II.E	See Part II.E	2/Month	Grab
Iron (total recoverable)	See Part II.E	See Part II.E	2/Month	Grab

Description of footnotes and symbols applicable to all monitoring classes:

[1]In accordance with Part I.B.2, the DEM reserves the right to increase monitoring frequency based on factors including, but not limited to, quality of influent data and duration of project.

[2]In accordance with Part II.B.2 during the first month of discharge additional sampling requirements are applicable.

[3] In accordance with Part II.A.1 the influent to the treatment system shall be monitored on a quarterly basis.

[4]Monitor flow and submit a flow log with the monitoring results. The flow log shall include the rate and duration of flow including the time(s) of day when flow commences and ceases. At a minimum, the flow must be reported each time a sample is collected.

[5] The limit at which compliance/noncompliance determinations will be based is the Quantitation Limit, which is defined as 20 ug/l for Total Residual Chlorine, 10 ug/l for Cyanide, 0.5 ug/l for Vinyl Chloride, 1 ug/l for Pentachlorophenol, 5 ug/l for Total Phthalates, 0.05 ug/l for Benzo (a) Anthracene, 2 ug/l for Benzo (a) Pyrene, 0.1 ug/l for Benzo (b) Fluoranthene, 2 ug/l for Benzo (k) Fluoranthene, 5 ug/l for Chrysene, 0.1 ug/l for Dibenzo (a,h) anthracene, 0.15 ug/l for Indeno (1,2,3-cd) Pyrene, and 10 ug/l for Total Polycyclic Aromatic Hydrocarbons. These values may be reduced by permit modification as more sensitive methods are approved by EPA and the State.

--- Signifies a parameter which must be monitored and data must be reported; no limit has been established at this time.

xxx Signifies a parameter which will be limited based upon the design plans and specifications for each project.
Samples taken in compliance with the monitoring requirements specified above shall be taken at the effluent of a groundwater treatment system. The two (2) grab samples taken per month shall be separated by a minimum of ten (10) days.

29. Category J. Contaminated Sumps Discharging to Non-Class AA receiving waters. During the period beginning the date of authorization to discharge and lasting until either the expiration of this general permit or termination of coverage, permittee(s) are authorized to discharge from an approved groundwater treatment system. Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations Concentration - Specify Units		Monitoring Requirement	
	Average Monthly	Maximum Daily	Measurement Frequency[1,2,3]	Sample Type
Flow	--- GPM	xxx GPM	Continuous[4]	Totalizer
Total Suspended Solids	30,000 ug/l	--- ug/l	2/Month	Grab
Total Residual Chlorine	11 ug/l[5]	19 ug/l[5]	2/Month	Grab
Total Petroleum Hydrocarbons	--- ug/l	1000 ug/l	2/Month	Grab
Cyanide	4.16 ug/l[5]	17.6 ug/l	2/Month	Grab
Benzene	4.72 ug/l	5 ug/l	2/Month	Grab
Toluene	11.2 ug/l	508 ug/l	2/Month	Grab
Ethylbenzene	28.8 ug/l	1280 ug/l	2/Month	Grab
Total Xylenes (m,p,o)	2.4 ug/l	106.4 ug/l	2/Month	Grab
Total BTEX	--- ug/l	100 ug/l	2/Month	Grab
Ethylene dibromide	--- ug/l	0.05 ug/l	2/Month	Grab
Methyl-t-Butyl Ether	--- ug/l	70 ug/l	2/Month	Grab
tert-Amyl Methyl Ether	--- ug/l	--- ug/l	2/Month	Grab
Carbon Tetrachloride	4.4 ug/l	4.4 ug/l	2/Month	Grab
1,4 Dichlorobenzene	0.96 ug/l	5 ug/l	2/Month	Grab
1,2 Dichlorobenzene	1.44 ug/l	63.2 ug/l	2/Month	Grab
1,3 Dichlorobenzene	6.96 ug/l	312 ug/l	2/Month	Grab
Total Dichlorobenzene	--- ug/l	763 ug/l	2/Month	Grab
1,1 Dichloroethane	--- ug/l	70 ug/l	2/Month	Grab
1,2 Dichloroethane	5 ug/l	5 ug/l	2/Month	Grab
1,1 Dichloroethylene	3.2 ug/l	3.2 ug/l	2/Month	Grab
cis-1,2 Dichloroethylene	--- ug/l	70 ug/l	2/Month	Grab
Dichloromethane	--- ug/l	4.6 ug/l	2/Month	Grab
Tetrachloroethylene	4.24 ug/l	5 ug/l	2/Month	Grab
1,1,1 Trichloroethane	--- ug/l	200 ug/l	2/Month	Grab
1,1,2 Trichloroethane	5 ug/l	5 ug/l	2/Month	Grab
Trichloroethylene	5 ug/l	5 ug/l	2/Month	Grab

Vinyl Chloride	1.92 ug/l	2 ug/l	2/Month	Grab
Acetone	--- ug/l	--- ug/l	2/Month	Grab
1,4 Dioxane	--- ug/l	--- ug/l	2/Month	Grab
Total Phenols	4.48 ug/l	200.8	2/Month	Grab
Pentachlorophenol	0.04 ug/l[5]	0.05 ug/l[5]	2/Month	Grab
Total Phthalates	3 ug/l[5]	--- ug/l	2/Month	Grab
Bis (2-Ethylhexyl) Phthalate	6 ug/l	6 ug/l	2/Month	Grab
Total Group I Polycyclic Aromatic Hydrocarbons	0.14 ug/l[5]	10 ug/l	2/Month	Grab
Benzo (a) anthracene	--- ug/l	0.0038 ug/l[5]	2/Month	Grab
Benzo (a) Pyrene	--- ug/l	0.0038 ug/l[5]	2/Month	Grab
Benzo (b) Fluoranthene	--- ug/l	0.0038 ug/l[5]	2/Month	Grab
Benzo (k) Fluoranthene	--- ug/l	0.0038 ug/l[5]	2/Month	Grab
Chrysene	--- ug/l	0.0038 ug/l[5]	2/Month	Grab
Dibenzo (a,h) anthracene	--- ug/l	0.0038 ug/l[5]	2/Month	Grab
Indeno (1,2,3-cd) Pyrene	--- ug/l	0.0038 ug/l[5]	2/Month	Grab
Total Group II Polycyclic Aromatic Hydrocarbons	0.14 ug/l[5]	100 ug/l	2/Month	Grab
Acenapthene	1.52 ug/l	1.9 ug/l	2/Month	Grab
Acenapthylene	--- ug/l	--- ug/l	2/Month	Grab
Anthracene	32000 ug/l	--- ug/l	2/Month	Grab
Benzo (ghi) Perylene	--- ug/l	--- ug/l	2/Month	Grab
Fluoranthene	3.52 ug/l	159.2 ug/l	2/Month	Grab
Fluorene	4240 ug/l	--- ug/l	2/Month	Grab
Napthalene	2.08 ug/l	20 ug/l	2/Month	Grab
Phenanthrene	--- ug/l	--- ug/l	2/Month	Grab
Pyrene	3200 ug/l	--- ug/l	2/Month	Grab
Total Polychlorinated Biphenyls	0.000512 ug/l	0.000064 ug/l	2/Month	Grab
Antimony	See Part II.E	See Part II.E	2/Month	Grab
Arsenic	See Part II.E	See Part II.E	2/Month	Grab
Cadmium	See Part II.E	See Part II.E	2/Month	Grab
Chromium III (trivalent, total recoverable)	See Part II.E	See Part II.E	2/Month	Grab
Chromium VI (hexavalent, total recoverable)	See Part II.E	See Part II.E	2/Month	Grab

Copper	See Part II.E	See Part II.E	2/Month	Grab
Lead (totalrecoverable)	See Part II.E	See Part II.E	2/Month	Grab
Mercury	See Part II.E	See Part II.E	2/Month	Grab
Nickel (total recoverable)	See Part II.E	See Part II.E	2/Month	Grab
Selenium	See Part II.E	See Part II.E	2/Month	Grab
Silver	See Part II.E	See Part II.E	2/Month	Grab
Zinc (total recoverable)	See Part II.E	See Part II.E	2/Month	Grab
Iron (total recoverable)	See Part II.E	See Part II.E	2/Month	Grab

Description of footnotes and symbols applicable to all monitoring classes:

[1]In accordance with Part I.B.2, the DEM reserves the right to increase monitoring frequency based on factors including, but not limited to, quality of influent data and duration of project.

[2]In accordance with Part II.B.2 during the first month of discharge additional sampling requirements are applicable.

[3] In accordance with Part II.A.1 the influent to the treatment system shall be monitored on a quarterly basis.

[4]Monitor flow and submit a flow log with the monitoring results. The flow log shall include the rate and duration of flow including the time(s) of day when flow commences and ceases. At a minimum, the flow must be reported each time a sample is collected.

[5] The limit at which compliance/noncompliance determinations will be based is the Quantitation Limit, which is defined as 20 ug/l for Total Residual Chlorine,10 ug/l for Cyanide, 1 ug/l for Pentachlorophenol, 5 ug/l for Total Phthalates, 0.05 ug/l for Benzo (a) Anthracene, 2 ug/l for Benzo (a) Pyrene, 0.1 ug/l for Benzo (b) Fluoranthene, 2 ug/l for Benzo (k) Fluoranthene, 5 ug/l for Chrysene, 0.1 ug/l for Dibenzo (a,h) anthracene, 0.15 ug/l for Indeno (1,2,3-cd) Pyrene, and 10 ug/l for Total Polycyclic Aromatic Hydrocarbons. These values may be reduced by permit modification as more sensitive methods are approved by EPA and the State.

---Signifies a parameter which must be monitored and data must be reported; no limit has been established at this time.

xxx Signifies a parameter which will be limited based upon the design plans and specifications for each project.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the effluent of a groundwater treatment system. The two (2) grab samples taken per month shall be separated by a minimum of ten (10) days.

30. Category J. Contaminated Sumps Discharging to Class SA or SB receiving waters. During the period beginning the date of authorization to discharge and lasting until either the expiration of this general permit or termination of coverage, permittee(s) are authorized to discharge from an approved groundwater treatment system. Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations Concentration - Specify Units		Monitoring Requirement	
	Average Monthly	Maximum Daily	Measurement Frequency[1,2,3]	Sample Type
Flow	--- GPM	xxx GPM	Continuous[4]	Totalizer
Total Suspended Solids	30,000 ug/l	--- ug/l	2/Month	Grab
Total Residual Chlorine	7.5 ug/l[5]	13 ug/l[5]	2/Month	Grab
Total Petroleum Hydrocarbons	--- ug/l	1000 ug/l	2/Month	Grab
Cyanide	0.8 ug/l[5]	0.8 ug/l[5]	2/Month	Grab
Benzene	5 ug/l	5 ug/l	2/Month	Grab
Toluene	12,000 ug/l	--- ug/l	2/Month	Grab
Ethylbenzene	1,680 ug/l	--- ug/l	2/Month	Grab
Total Xylenes (m,p,o)	--- ug/l	--- ug/l	2/Month	Grab
Total BTEX	100 ug/l	100 ug/l	2/Month	Grab
Ethylene dibromide	--- ug/l	0.05 ug/l	2/Month	Grab
Methyl-t-Butyl Ether	--- ug/l	70 ug/l	2/Month	Grab
tert-Amyl Methyl Ether	--- ug/l	--- ug/l	2/Month	Grab
Carbon Tetrachloride	4.4 ug/l	4.4 ug/l	2/Month	Grab
1,4 Dichlorobenzene	5 ug/l	5 ug/l	2/Month	Grab
1,2 Dichlorobenzene	600 ug/l	600 ug/l	2/Month	Grab
1,3 Dichlorobenzene	320 ug/l	320 ug/l	2/Month	Grab
Total Dichlorobenzene	--- ug/l	763 ug/l	2/Month	Grab
1,1 Dichloroethane	--- ug/l	70 ug/l	2/Month	Grab
1,2 Dichloroethane	5 ug/l	5 ug/l	2/Month	Grab
1,1 Dichloroethylene	3.2 ug/l	3.2 ug/l	2/Month	Grab
Cis-1,2 Dichloroethylene	--- ug/l	70 ug/l	2/Month	Grab
Dichloromethane	--- ug/l	4.6 ug/l	2/Month	Grab
Tetrachloroethylene	5 ug/l	5 ug/l	2/Month	Grab
1,1,1 Trichloroethane	--- ug/l	200 ug/l	2/Month	Grab
1,1,2 Trichloroethane	5 ug/l	5 ug/l	2/Month	Grab
Trichloroethylene	5 ug/l	5 ug/l	2/Month	Grab
Vinyl Chloride	1.92 ug/l	2 ug/l	2/Month	Grab

Acetone	--- ug/l	--- ug/l	2/Month	Grab
1,4 Dioxane	--- ug/l	--- ug/l	2/Month	Grab
Total Phenols	300 ug/l	300 ug/l	2/Month	Grab
Pentachlorophenol	1 ug/l	1 ug/l	2/Month	Grab
Total Phthalates	3 ug/l[5]	--- ug/l	2/Month	Grab
Bis (2-Ethylhexyl) Phthalate	6 ug/l	6 ug/l	2/Month	Grab
Total Group I Polycyclic Aromatic Hydrocarbons	0.14 ug/l[5]	10 ug/l	2/Month	Grab
Benzo (a) Anthracene	0.0038 ug/l[5]	0.0038 ug/l[5]	2/Month	Grab
Benzo (a) Pyrene	0.0038 ug/l[5]	0.0038 ug/l[5]	2/Month	Grab
Benzo (b) Fluoranthene	0.0038 ug/l[5]	0.0038 ug/l[5]	2/Month	Grab
Benzo (k) Fluoranthene	0.0038 ug/l[5]	0.0038 ug/l[5]	2/Month	Grab
Chrysene	0.0038 ug/l[5]	0.0038 ug/l[5]	2/Month	Grab
Dibenzo (a,h) anthracene	0.0038 ug/l[5]	0.0038 ug/l[5]	2/Month	Grab
Indeno (1,2,3-cd) Pyrene	0.0038 ug/l[5]	0.0038 ug/l[5]	2/Month	Grab
Total Group II Polycyclic Aromatic Hydrocarbons	0.14 ug/l[5]	100 ug/l	2/Month	Grab
Acenapthene	1.9 ug/l	1.9 ug/l	2/Month	Grab
Acenapthylene	--- ug/l	--- ug/l	2/Month	Grab
Anthracene	32,000 ug/l	--- ug/l	2/Month	Grab
Benzo (ghi) Perylene	--- ug/l	--- ug/l	2/Month	Grab
Fluoranthene	112 ug/l	--- ug/l	2/Month	Grab
Fluorene	4240 ug/l	--- ug/l	2/Month	Grab
Napthalene	--- ug/l	20 ug/l	2/Month	Grab
Phenanthrene	--- ug/l	--- ug/l	2/Month	Grab
Pyrene	3200 ug/l	--- ug/l	2/Month	Grab
Total Polychlorinated Biphenyls (PCBs)	0.000064 ug/l	0.000064 ug/l	2/Month	Grab
Antimony	5.6 ug/l	5.6 ug/l	2/Month	Grab
Arsenic	1.12 ug/l[5]	55.2 ug/l	2/Month	Grab
Cadmium	7.08 ug/l	32.19 ug/l	2/Month	Grab
Chromium III (trivalent, total recoverable)	100 ug/l	--- ug/l	2/Month	Grab
Chromium VI (hexavalent, total recoverable)	40.28 ug/l	886.2 ug/l	2/Month	Grab
Copper	2.98 ug/l[5]	4.62 ug/l	2/Month	Grab
Lead (total recoverable)	6.81 ug/l	176.6 ug/l	2/Month	Grab
Mercury	0.12 ug/l[5]	1.69 ug/l	2/Month	Grab

Nickel (total recoverable)	6.62 ug/l	59.79 ug/l	2/Month	Grab
Selenium	56.91 ug/l	232.46 ug/l	2/Month	Grab
Silver	1.78 ug/l[5]	1.78 ug/l[5]	2/Month	Grab
Zinc (total recoverable)	68.5 ug/l	76.11 ug/l	2/Month	Grab
Iron (total recoverable)	--- ug/l	1000 ug/l	2/Month	Grab

Description of footnotes and symbols applicable to all monitoring classes:

[1]In accordance with Part I.B.2, the DEM reserves the right to increase monitoring frequency based on factors including, but not limited to, quality of influent data and duration of project.

[2]In accordance with Part II.B.2 during the first month of discharge additional sampling requirements are applicable.

[3] In accordance with Part II.A.1 the influent to the treatment system shall be monitored on a quarterly basis.

[4]Monitor flow and submit a flow log with the monitoring results. The flow log shall include the rate and duration of flow including the time(s) of day when flow commences and ceases. At a minimum, the flow must be reported each time a sample is collected.

[5]The limit at which compliance/noncompliance determinations will be based is the Quantitation Limit, which is defined as 20 ug/l for Total Residual Chlorine, 10 ug/l for Cyanide, 5 ug/l for Total Phthalates, 0.05 ug/l for Benzo (a) Anthracene, 2 ug/l for Benzo (a) Pyrene, 0.1 ug/l for Benzo (b) Fluoranthene, 2 ug/l for Benzo (k) Fluoranthene, 5 ug/l for Chrysene, 0.1 ug/l for Dibenzo (a,h) anthracene, 0.15 ug/l for Indeno (1,2,3-cd) Pyrene, 2 ug/l for Arsenic, 3 ug/l for Copper, 0.2 ug/l for Mercury, 2 ug/l for Silver and 10 ug/l for Total Polycyclic Aromatic Hydrocarbons. These values may be reduced by permit modification as more sensitive methods are approved by EPA and the State.

---Signifies a parameter which must be monitored and data must be reported; no limit has been established at this time.

xxx Signifies a parameter which will be limited based upon the design plans and specifications for each project.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the effluent of a groundwater treatment system. The two (2) grab samples taken per month shall be separated by a minimum of ten (10) days.

E. Metals Effluent Limitations (ug/l)

Dilution Range: <5				
Water Body Classification Limit Type	Class AA Freshwater Monthly Average	Class AA Freshwater Daily Maximum	Non-Class AA Freshwater Monthly Average	Non-Class AA Freshwater Daily Maximum
Antimony	4.48[1]	360	8	360
Arsenic	0.14[1]	272	1.12[1]	272
Cadmium	0.08[1]	0.42[1]	0.08[1]	0.42[1]
Chromium III	22.15	463.46	22.15	463.46
Chromium VI	9.15[1]	13.03	9.15[1]	13.03
Copper	2.28[1]	3.03	2.28[1]	3.03
Lead	0.44[1]	11.18	0.44[1]	11.18
Mercury	0.13[1]	1.32	0.14[1]	1.32
Nickel	12.92	116.17	12.92	116.17
Selenium	4[1]	16	4[1]	16
Silver	0.3[1]	0.3[1]	0.3[1]	0.3[1]
Zinc	29.61	29.61	29.61	29.61
Iron	240	Monitor Only	800	Monitor Only

Dilution Range: 5 to 10				
Water Body Classification Limit Type	Class AA Freshwater Monthly Average	Class AA Freshwater Daily Maximum	Non-Class AA Freshwater Monthly Average	Non-Class AA Freshwater Daily Maximum
Antimony	22.4	1800	40	1800
Arsenic	0.7[1]	1360	5.6	1360
Cadmium	0.4[1]	2.1	0.4[1]	2.1
Chromium III	110.75	2317.3	110.75	2317.3
Chromium VI	45.75	65.15	45.75	65.15
Copper	11.4	15.15	11.4	15.15
Lead	2.2[1]	55.9	2.2[1]	55.9
Mercury	0.65	6.6	0.7	6.6
Nickel	64.6	580.85	64.6	580.85
Selenium	20	80	20	80
Silver	1.5[1]	1.5[1]	1.5[1]	1.5[1]
Zinc	148.05	148.05	148.05	148.05
Iron	1200	Monitor Only	4000	Monitor Only

Dilution Range: 10 to 20				
Water Body Classification Limit Type	Class AA Freshwater Monthly Average	Class AA Freshwater Daily Maximum	Non-Class AA Freshwater Monthly Average	Non-Class AA Freshwater Daily Maximum
Antimony	44.8	3600	80	3600
Arsenic	1.4[1]	2720	11.2	2720
Cadmium	0.8	4.2	0.8	4.2
Chromium III	221.5	4634.6	221.5	4634.6
Chromium VI	91.5	130.3	91.5	130.3
Copper	22.8	30.3	22.8	30.3
Lead	4.4	111.8	4.4	111.8
Mercury	1.3	13.2	1.4	13.2
Nickel	129.2	1161.7	129.2	1161.7
Selenium	40	160	40	160
Silver	3	3	3	3
Zinc	296.1	296.1	296.1	296.1
Iron	2400	Monitor Only	8000	Monitor Only

Dilution Range: 20 to 40				
Water Body Classification Limit Type	Class AA Freshwater Monthly Average	Class AA Freshwater Daily Maximum	Non-Class AA Freshwater Monthly Average	Non-Class AA Freshwater Daily Maximum
Antimony	89.6	7200	160	7200
Arsenic	2.8	5440	22.4	5440
Cadmium	1.6	8.4	1.6	8.4
Chromium III	443	9269.2	443	9269.2
Chromium VI	183	260.6	183	260.6
Copper	45.6	60.6	45.6	60.6
Lead	8.8	223.6	8.8	223.6
Mercury	2.6	26.4	2.8	26.4
Nickel	258.4	2323.4	258.4	2323.4
Selenium	80	320	80	320
Silver	6	6	6	6
Zinc	592.2	592.2	592.2	592.2
Iron	4800	Monitor Only	16000	Monitor Only

Dilution Range: 40 to 60				
Water Body Classification Limit Type	Class AA Freshwater Monthly Average	Class AA Freshwater Daily Maximum	Non-Class AA Freshwater Monthly Average	Non-Class AA Freshwater Daily Maximum
Antimony	179.2	14400	320	14400
Arsenic	5.6	10880	44.8	1080
Cadmium	3.2	16.8	3.2	16.8
Chromium III	886	18538.4	886	18538.4
Chromium VI	366	521.2	366	521.2
Copper	91.2	121.2	91.2	121.2
Lead	17.6	447.2	17.6	447.2
Mercury	5.2	52.8	5.6	52.8
Nickel	516.8	4646.8	516.8	4646.8
Selenium	160	640	160	640
Silver	12	12	12	12
Zinc	1184.4	1184.4	1184.4	1184.4
Iron	9600	Monitor Only	32000	Monitor Only

Dilution Range: ≥ 60				
Water Body Classification Limit Type	Class AA Freshwater Monthly Average	Class AA Freshwater Daily Maximum	Non-Class AA Freshwater Monthly Average	Non-Class AA Freshwater Daily Maximum
Antimony	268.8	21600	480	21600
Arsenic	8.4	16320	67.2	16320
Cadmium	4.8	25.2	4.8	25.2
Chromium III	1329	27807.6	1329	27807.6
Chromium VI	549	781.8	549	781.8
Copper	136.8	181.8	136.8	181.8
Lead	26.4	670.8	26.4	670.8
Mercury	7.8	79.2	8.4	79.2
Nickel	775.2	6970.2	775.2	6970.2
Selenium	240	960	240	960
Silver	18	18	18	18
Zinc	1776.6	1776.6	1776.6	1776.6
Iron	14400	Monitor Only	48000	Monitor Only

[1] The limit at which compliance/noncompliance determinations will be based is the Quantitation Limit, which is defined as 5 ug/l for Antimony, 2 ug/l for Arsenic, 0.5 ug/l for Cadmium, 10 ug/l for Chromium VI, 3 ug/l for Copper, 3 ug/l for Lead, 0.2 ug/l for Mercury, 5 ug/l for Selenium, and 2 ug/l for Silver. These values may be reduced by permit modification as more sensitive methods are approved by EPA and the State.

F. NOTICE OF INTENT REQUIREMENTS

1. OWNER

Provide the legal name of the person, firm, public, municipal organization, or any other entity that owns the site described in the application. The name of the owner may or may not be the same as the name of the site. Provide the complete mailing address, telephone number and email address of the owner/contact person and title.

2. OPERATOR

Provide the legal name of the person, firm, public, municipal organization or any other entity that has day-to-day operations of the site described in this application. The complete mailing address of the operator along with the name, telephone number, and email address of the designated contact person is required as part of the application.

3. SITE INFORMATION

a. The applicant must provide a brief history of the site, the source of contamination, a description of the proposed remedial and/or dewatering activity creating the discharge, all available analytical data on impacted groundwater, a site plan showing location of monitoring and recovery wells, discharge point and receiving water, and an 8.5” x 11” photocopy of a USGS 1:24,000 topographic map depicting the site location extending at least one (1) mile beyond the property boundaries of the facility that clearly shows the legal boundaries of the facility and the location of each intake and outfall structure.

b. The applicant must provide the facility/site name, longitude and latitude, and the four digit SIC code that best represents the principal products or activities associated with the facility. The facility/site location (address, city, state, and zip) must also be provided. Each applicant must also state the type of spill or release pertaining to this NOI and the approximate duration of the project.

c. For the site in which the application is being submitted indicate if a prior RIPDES permit has been granted for the discharge. The application must include the prior RIPDES permit number if applicable.

d. For the site in which the application is being submitted indicate whether a prior RIPDES application has ever been filed for the discharge. If yes, please provide the date of the application filed and application number, if available.

e. For the site which the application is being submitted indicate whether the site/facility is currently covered by any other RIPDES permit including but not limited to: the RIPDES Multi-Sector Storm Water General Permit, the RIPDES Phase I or II Construction Storm Water General Permit, or an Individual RIPDES Permit, if so this information along with any applicable permit numbers must be provided with the application.

f. For the site in which the application is being submitted indicate whether the site/facility is subject to any other DEM permitting or any other action required by DEM, which is causing the generation of the discharge. If applicable, the applicant must provide the applicable permit number and the associated DEM contact name with the application.

g. The applicant must provide a description of the discharge activities for which the owner/applicant is seeking coverage.

h. The applicant must provide the following information about each discharge: the number of discharge points and the maximum and average flow rate of the discharge in cubic feet per second.

i. For the location of each outfall, the permittee must provide the latitude and longitude of the approximate center of the outfall to the nearest 15 seconds, for which the NOI is being submitted;

j. If the applicant intends to discharge hydrostatic test waters, the total volume of the discharge must be provided in gallons.

k. The applicant must indicate whether or not the discharge is intermittent or seasonal.

l. The applicant must provide the expected start and end dates of the discharge.

m. Based on the analysis of the sample(s) collected of the untreated influent, the applicant must indicate which sub-category the potential discharge falls within as specified in Table 1 located in Part I.A.2 of the permit.

4. TREATMENT SYSTEM INFORMATION

a. The applicant must provide a complete description of the treatment system including a flow schematic depicting all major control points such as alarms, sensors, valves and treatment units; design calculations on the expected treatment performance including removal efficiency, carbon consumption calculations including unit height and surface area, and the manufacturer's specifications on major components of the treatment system. The applicant must also provide a basis for all design calculations and properly reference all design assumptions in order for calculations to be replicated. Also, include a discussion on the need for iron treatment to address iron scaling and/or iron bacteria buildup. All plans and specifications on all treatment systems must be signed and certified by a professional engineer registered in the State of Rhode Island.

b. The application must identify each applicable treatment unit proposed for use, examples include: Oil/Water Separator, Granular Activated Carbon, Air Stripping, U/V Oxidation, Iron Treatment, Filtration, Ion Exchange, Bag Filters, Equalization Tanks, Air Strippers, Chlorination, Dechlorination, and/or other additional equipment that is not listed. If the system consists of GAC or Ion Exchange, provide time to carbon or resin exhaustion in days. If the system consists of air stripping, provide the air/water ratio.

c. The applicant must provide the proposed treatment system design flowrate, the maximum system capacity and the average flow rate of the treatment system in gallons per minute.

d. The application must include a description of any chemical additives being used, or planned for use, and must include Material Safety Data Sheets associated with each additive. The DEM may request further information regarding the chemical composition of each additive, potential toxic effects, or other information to insure that approval of the use of the additive will not cause or contribute to a violation of State water quality standards. Approval of coverage under the RGP will constitute approval of the use of the chemical additive(s). If coverage of the discharge under the RGP has already been granted and the use of a chemical additive becomes necessary, the permittee must notify the DEM and obtain approval prior to using any chemical additives.

5. RECEIVING WATER INFORMATION

a. The application must provide a description of the discharge pathway, including the names of the receiving waters.

b. The application must include a detailed map which indicates the site location and location of the outfall(s) to the receiving water. For multiple discharges, number the discharges sequentially. For indirect discharges, indicate the location of the discharge to the indirect conveyance and the discharge to surface waters. The map must include the location and distance to the nearest sanitary sewer.

c. The application must provide the state water quality classification of the receiving water.

d. If the proposed discharge is to freshwaters, provide the reported or calculated seven day ten year low flow (7Q10) of the receiving water in cubic feet per second (cfs) and attach any calculation sheets used to support stream flow and dilution calculations.

6. INFLUENT CHARACTERIZATION

a. Based on the analysis of the untreated influent, the applicant must indicate whether or not each listed chemical is believed present or believed absent in the potential discharge. Sample dates and locations must be provided.

b. For discharges where metals are believed present, the NOI must include the results of at least one (1) influent sample.

7. Any additional information that may be required by the DEM must be included as part of the NOI, if the Director determines that such information is reasonably necessary to determine whether or not to authorize the discharge under this permit.

8. OWNER/OPERATOR CERTIFICATION

a. The NOI must be signed by the operator and owner certifying under penalty of law that he/she has read and understands the conditions and terms of the above Remediation General Permit and that to the best of his or her knowledge and belief the information provided was true, accurate, and complete. The signatory must also certify that they are aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

9. WHERE TO SUBMIT. A completed and signed NOI must be submitted to the following address in accordance with the schedule in Part I.B.3:

Rhode Island Department of Environmental Management
RIPDES Program
235 Promenade Street
Providence, Rhode Island 02908

10. DEFICIENT NOI. If any portion of the NOI does not meet one or more of the minimum requirements of this part, then the applicant will be notified by a deficiency letter at any point within the review period. It is the responsibility of the applicant to make all required changes and resubmit the NOI. The review period will recommence upon the receipt of the revised NOI.

G. METHOD DETECTION LIMITS

The permittee shall assure that all testing required by this permit, is performed in conformance with methods listed in 40 CFR Part 136 or alternatives approved under Part I.B.1.b. In accordance with 40 CFR Part 136, EPA approved analysis techniques, quality assurance procedures and quality control procedures shall be followed for all reports required to be submitted under the RIPDES program. These procedures are described in "Methods for the Determination of Metals in Environmental Samples" (EPA/600/4-91/010) and "Methods for Chemical Analysis of Water and Wastes" (EPA/600/4-79/020).

If after conducting the complete Method of Standard Additions analysis, the laboratory is unable to determine a valid result, the laboratory shall report "could not be analyzed". Documentation supporting this claim shall be submitted along with the monitoring report. If valid analytical results are repeatedly unobtainable, DEM may require that the permittee determine a method detection limit (MDL) for their effluent or sludge as outlined in 40 CFR Part 136, Appendix B.

Therefore, all sample results shall be reported as; an actual value, "could not be analyzed", less than the reagent water MDL, or less than an effluent or sludge specific MDL. The effluent or sludge specific MDL must be calculated using the methods outlined in 40 CFR Part 136, Appendix B. Samples which have been diluted to ensure that the sample concentration will be within the linear dynamic range shall not be diluted to the extent that the analyte is not detected. If this should occur, the analysis shall be repeated using a lower degree of dilution.

When calculating sample averages for reporting on discharge monitoring reports (DMRs):

1. "could not be analyzed" data shall be excluded, and shall not be considered as failure to comply with the permit sampling requirements;

2. results reported as less than the MDL shall be included as values equal to the MDL, and the average shall be reported as "less than" the calculated value.

For compliance purposes, DEM will replace all data reported as less than the MDL with zeroes, provided that DEM determines that all appropriate EPA-approved methods were followed. If the recalculated average exceeds the permit limitation, it will be considered a violation.

Method Detection Limits			
Parameter	**MDL (ug/l)**	**Parameter**	**MDL (ug/l)**
Acenapthene	1.0	Anthracene	1.0
Acetone	5.0	Benzo (a) Anthracene	2.0
Benzene	1.0	Benzo (b) Fluoranthene	1.0
Benzo (a) Pyrene	2.0	Benzo (k) Fluoranthene	2.0
Benzo (ghi) Perylene	2.0	Carbon Tetrachloride	1.0
Bis (2-Ethylhexyl) Phthalate	1.0	Chrysene	1.0
Cis-1,2 Dichloroethylene	1.0	Cyanide	10.0
Dibenzo (a,h) anthracene	2.0	Dichloromethane	2.0
1,1 Dichloroethane	1.0	1,1 Dichloroethylene	1.0
1,1,1 Trichloroethane	1.0	1,1,2 Trichloroethane	1.0
1,2 Dichlorobenzene	1.0	1,2 Dichloroethane	1.0
1,3 Dichlorobenzene	1.0	1,4 Dichlorobenzene	1.0
1,4 Dioxane	1.0	Ethylbenzene	1.0
Ethylene dibromide	1.0	Fluoranthene	1.0
Fluorene	1.0	Indeno (1,2,3-cd) Pyrene	2.0
Iron	10.0	MTBE	1.0
Napthalene	1.0	Pentachlorophenol	1.0
Phenanthrene	1.0	Pyrene	1.0
Tert-Amyl Methyl Ether	0.5	Tetrachloroethylene	1.0
Toluene	1.0	Total Dichlorobenzene	5.0
Total Petroleum Hydrocarbons	5.0	Total Phenols	1.0
Total Phthalates	5.0	Total Polychlorinated Biphenyls	0.5
Total Suspended Solids	5000	Total Residual Chlorine	20.0
Trichloroethylene	1.0	Total Xylene	3.0
Antimony	3.0	Vinyl Chloride	1.0
Cadmium	0.1	Arsenic	1.0
Chromium VI	20.0	Chromium III	10.0
Lead	1.0	Copper	1.0
Nickel	1.0	Mercury	0.2
Silver	0.5	Selenium	2.0
Acenapthylene	1.0	Zinc	5.0

Part III: General Conditions of the Permit

A. Duty to Comply. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of Chapter 46-12 of the Rhode Island General Laws and the Clean Water Act and is grounds for enforcement action which may include permit termination, revocation and reissuance, modification, or denial of a permit renewal application and the imposition of penalties.

1. The permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the CWA for toxic pollutants within the time provided in the regulations that establish these standards or prohibitions, even if the permit has not yet been modified to incorporate this requirement.

2. Section 309 of the CWA provides significant penalties for any person who violates a permit condition implementing Sections 301, 302, 306, 307, 308, 318 or 405 of the CWA or any permit condition or limitation implementing any such sections in a permit issued under Section 402 of the CWA. Any person who violates any condition of this permit is subject to a civil penalty of up to $25,000 per day of such violation, as well as any other appropriate sanctions provided by Section 309 of the CWA. Section 309(c)(4) of the CWA provides that any person who knowingly makes any false material statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including reports of compliance or noncompliance shall, upon conviction, be punished by a fine of up to $10,000 or by imprisonment of not more than two years, or by both.

3. Chapter 46-12 of the Rhode Island General Laws provides that any person who violates a permit condition is subject to a civil penalty of not more than $25,000 per day of such violation. Any person who willfully or negligently violates a permit condition is subject to a criminal penalty of not more than $25,000 per day of such violation and imprisonment for not more than five (5) years, or both. Any person who knowingly makes any false statement in connection with the permit is subject to a criminal penalty of not more than $5,000 for each instance of violation or by imprisonment for not more than thirty (30) days, or both.

B. Continuation of the Expired General Permit. Provided the permittee has re-applied in accordance with paragraph C. below, an expired general permit continues in force and effect until a new general permit is issued. Only those facilities previously authorized to discharge under the expired permit are covered by the continued permit.

C. Duty to Reapply. If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain coverage under a new permit. The permittee shall submit a new application at least 180 days before the expiration date of the existing permit, unless permission for a later date has been granted by the Director.

D. Need to Halt or Reduce Activity Not a Defense. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

E. Duty to Mitigate. The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

F. Duty to Provide Information. The permittee shall furnish to the Department, within a reasonable time, any information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee shall furnish to the Director any copies of records required to be kept by this permit.

G. Signatory Requirements. All Notices of Intent, reports, certifications or information either submitted to the Director, or that this permit requires to be maintained by the permittee, shall be signed and certified in accordance with Rule 12 of the RIPDES regulations. Rhode Island General Laws, Chapter 46-12 provides that any person who knowingly makes any false statements, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance shall, upon conviction, be punished by a fine of up to $5,000 per violation, or by imprisonment for not more than thirty (30) days per violation, or by both.

H. Oil and Hazardous Substance Liability. Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under Section 311 of the CWA.

I. Release in Excess of Reportable Quantities. If a release in excess of reportable quantities occurs, the permittee must notify the Office of Water Resources immediately. This permit does not relieve the permittee of the reporting requirements of 40 CFR 117 and 40 CFR 302.

J. Property Rights. The issuance of this permit does not convey any property rights of any sort, nor any exclusive privileges, nor does it authorize any injury to private property nor any invasion of personal rights, nor any infringement of Federal, State, or local laws or regulations.

K. Severability. The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances and the remainder of this permit shall not be affected thereby.

L. Transfers. This permit is not transferable to any person except after notice to the Director. The Director may require the operator to apply for and obtain an individual permit, as stated in Part III.T of this permit.

M. State Laws. Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable state law.

N. Proper Operations and Maintenance. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. Proper operation and maintenance requires the operations of backup or auxiliary facilities or similar systems, installed by a permittee only when necessary to achieve compliance with the conditions of the permit.

O. Monitoring and Records

1. Samples and measurements taken for the purpose of monitoring shall be representative of the volume and nature of the discharge over the sampling and reporting period.

2. The permittee shall retain records of all monitoring including all calibration and maintenance records and all original strip chart recordings from continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least five (5) years from the date of the sample, measurement, report or application. This period may be extended by request of the Director at any time.

3. Records of monitoring information shall include:
   a. The date, exact place, and time of sampling or measurements;
   b. The individual(s) who performed the sampling or measurements;
   c. The date(s) analyses were performed;
   d. The individual(s) who performed the analyses;
   e. The analytical techniques or methods used; and
   f. The results of such analyses.

4. Monitoring must be conducted according to test procedures approved under 40 CFR 136 and applicable Rhode Island regulations, unless other test procedures have been specified in this permit.

5. The CWA provides that any person who falsifies, tampers with, or knowingly renders inaccurate, any monitoring device or method required to be maintained under this permit shall upon conviction, be punished by a fine of up to $10,000 per violation or by imprisonment for not more than six months per violation, or by both. Chapter 46-12 of the Rhode Island General Laws also provides that such acts are subject to a fine of up to $5,000 per violation, or by imprisonment for not more than thirty (30) days per violation, or by both.

6. Monitoring results must be reported on a Discharge Monitoring Report (DMR).

7. If the permittee monitors any pollutants more frequently than required by this permit, using test procedures approved under 40 CFR 136, applicable State regulations, or as specified in this permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR.

P. Bypass of Treatment System

1. *Anticipated Bypass.* If the permittee knows in advance of the need for a bypass, he or she shall notify this Department in writing at least ten days prior to the date of the bypass. Such notice shall include the anticipated quantity and the anticipated effect of the bypass.

2. *Unanticipated Bypass.* The permittee shall submit notice of an unanticipated bypass. Any information regarding the unanticipated bypass shall be provided orally within twenty-four hours from the time the permittee became aware of the circumstances. A written submission shall also be provided within five days of the time the permittee became aware of the bypass. The written submission shall contain a description of the bypass and its cause; the period of the bypass, including exact dates and times, and if the bypass has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate and prevent reoccurrence of the bypass.

3. *Prohibition of Bypass*

   a. Bypass is prohibited and enforcement action against the permittee may be taken for the bypass unless:

      1. The bypass was unavoidable to prevent loss of life, personal injury or severe property damage;
      2. There was no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated waste, or maintenance during normal periods of equipment downtime. This condition is not satisfied if the permittee should, in the exercise of reasonable engineering judgement, have installed adequate backup equipment to prevent a bypass which occurred during normal periods of equipment downtime or preventative maintenance; and
      3. The permittee submitted notices as required in paragraphs 1 and 2 above.

   b. The Director may approve an anticipated bypass after considering its adverse effects, if the Director determines that it will meet the three conditions of paragraph 3a, above.

Q. Upset Conditions

1. An upset constitutes an affirmative defense to an action brought for noncompliance with technology based permit limitations if the requirements of paragraph 2 are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.

2. A permittee who wishes to establish an affirmative defense of an upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence, that:

   a. An upset occurred and the permittee can identify the specific causes(s) of the upset;

b. The permitted facility was at the time being properly operated;

c. The permittee submitted notice of the upset as required in Rule 14.08 of the RIPDES Regulations; and

d. The permittee complied with any remedial measures required under Rule 14.05 of the RIPDES Regulations.

3. In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.

R. Inspection and Entry. The permittee shall allow the Director or an authorized representative of DEM, upon presentation of credentials and other documents as may be required by law, to:

1. Enter upon the permittee's premises where a regulated facility or activity is located or conducted or where records must be kept under the conditions of this permit;

2. Have access to and copy at reasonable times any records that must be kept under the conditions of this permit;

3. Inspect at reasonable times any facilities, equipment, or operations regulated or required under this permit; and

4. Sample or monitor any substances or parameters at any location, at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the CWA or Rhode Island General Law.

S. Permit Actions. This permit may be modified, revoked and reissued, or terminated for cause, including but not limited to: violation of any terms or conditions of this permit; obtaining the permit by misrepresentation or failure to disclose all relevant facts; or a change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not constitute a stay of any permit condition.

T. Requiring an Individual Permit

1. The Director may require any owner or operator authorized to discharge under this permit to apply for and obtain an individual permit. Any interested person may petition the Director to take action under this paragraph. The Director may determine at his or her own discretion that an individual permit is required.

2. Any owner or operator authorized to discharge by this permit may request to be excluded from coverage of this permit by applying for an individual permit. The owner or operator shall submit an individual application (Form 1 and Form 2D or Form 2C) with reasons supporting the request to the Director. The request may be granted, if the reasons cited by the owner or operator are adequate to support the request. The Director shall notify the permittee within a timely fashion as to whether or not the request has been granted.

3. If a permittee requests or is required to obtain coverage under an individual permit, then authorization to discharge under this permit shall automatically be terminated on the date of issuance of the individual permit. Until such time, this permit shall remain fully in force.

U. Reopener Clause The Director reserves the right to make appropriate revisions to this permit in order to incorporate any appropriate effluent limitations, schedules of compliance, or other provisions which may be authorized under the CWA or State Law. In accordance with Rule 15 and 23 of the RIPDES Regulations, if any effluent standard or prohibition, or water quality standard is promulgated under the CWA or under State Law which is more stringent than any limitation on the pollutants limited in this permit, or controls pollutantsnot limited in the permit; then the Director may promptly reopen the permit and modify or revoke and reissue the permit to conform to the applicable standard.

V. Availability of Reports. Except for data determined to be confidential under Part II.U. below, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the DEM at 235 Promenade Street, Providence Rhode Island. As required by the CWA, effluent data shall not be considered confidential. Knowingly making any false statement on any such report may result in the imposition of criminal penalties as provided for in Section 309 of the CWA and under section 46-12-14 of the Rhode Island General Laws.

W. Confidentiality of Information

1. Any information submitted to DEM pursuant to these regulations may be claimed as confidential by the submitter, consistent with Rhode Island General Law 38-2-2. Any such claim must be asserted at the time of the submission in the manner prescribed on the application form or instructions or, in the case of other submissions, by stamping the words "confidential business information" on each page containing such information. If no claim is made at the time of submission, DEM may make the information available to the public without further notice.

2. Claims of confidentiality for the following information will be denied:

   a. The name and address of any permit application or permittee;

   b. Permit applications, permits and any attachments thereto; and

   c. RIPDES effluent data.

X. Right to Appeal. Within thirty (30) days of receipt of notice of final authorization, the permittee or any interested person may submit a request to the Director for an adjudicatory hearing to appeal the decision to be covered under the general permit. The request for a hearing must conform to the requirements of Rule 49 of the RIPDES Regulations.

RHODE ISLAND POLLUTANT DISCHARGE ELIMINATION SYSTEM (RIPDES) REMEDIATION GENERAL PERMIT
NOTICE OF INTENT (NOI)
(revised 10/09)

DEM USE ONLY
Date Received
Amount Received $
RIPDES# **RIG**
Approval Date
Data Entry Date
Data Entry Initials

I. OWNER			
Name:			
Mailing Address:			
City:	State:	Zip:	Phone: ( )
Contact Person:		Title:	
Email Address of Owner:			
II. OPERATOR (if different from owner)			
Name:			
Mailing Address:			
City:	State:	Zip:	Phone: ( )
Contact Person:		Title:	
Email Address of Contact Person:			
III. SITE INFORMATION			
a. Please include the following items as part of the NOI: brief history of the site, the source of contamination; a description of the proposed remedial and/or dewatering activity creating the discharge; all available analytical data on impacted groundwater; a site plan showing location of monitoring and recovery wells, discharge point, and receiving waters; and an 8.5" x 11" photocopy of a USGS 1:24,000 topographic map depicting site location.			
Facility/Site Name:			
Facility/Site: Longitude:	Latitude:	SIC code(s):	
Facility Address:			
City:	State:	Zip:	
Type of Spill or Release:		Approximate Duration of Project:	

b. Has a prior NPDES permit been granted for the discharge? Yes __ No __, if yes number:_____

c. Has a prior NPDES application (Form 1 & 2C) ever been filed for the discharge? Yes __ No __, if yes provide date of application and application number if available.

d. Is the site/facility covered by any other DEM permit including: 1. multi-sector storm water general permit, 2. phase I or II construction storm water general permit, 3. Individual RIPDES Permit, if so please list them below:

_____

e. Is the site/facility subject to any other DEM permitting or other action which is causing the generation of the discharge? Yes __ or No __

If "Yes" please list the applicable permit numbers and DEM contacts here: _____

_____.

IV. DISCHARGE INFORMATION

a. Describe the discharge activities for which the owner/applicant is seeking coverage:

b. Provide the following information for each discharge:

Number of Discharge Points: _____

Maximum Flow Rate (cubic feet per second): _____ Is the maximum flow a design value? Y__ N__

Average Flow Rate (cubic feet per second): _____

c. Latitude and Longitude of the center of each outfall: pt. 1: long. _____ _lat. _____, pt.2 long._____ lat. _____, pt.3 long. _____ lat. _____, pt.4 long _____ lat _____, pt.5 long _____ lat _____, pt. 6 long _____ lat. _____.

d. If hydrostatic testing, total volume of the discharge (gallons):

e. Is the discharge intermittent ___ or seasonal___?

f. Expected dates of discharge (mm/dd/yy): Start: ____/____/____ End: ____/____/____

g. Based on the analysis of sample(s) of the untreated influent, the applicant must check the box of the sub-categories that the potential discharge falls within:

☐ A) Gasoline Only, ☐ B) Fuel Oils (and Other Oils) Sites, ☐ C) Petroluem Sites Containing Other Pollutants

☐ D) VOC Only Sites, ☐ E) VOC Sites Containing Other Contaminants ☐ F) Sites Containing Primarily Metals

☐ G) Contaminated Construction Dewatering,

☐ H) Aquifer Pump Testing, Well Development, or Rehabiliation of Contaminated Wells

☐ I) Hydrostatic Testing of Pipelines and Tanks ☐ J) Contaminated Sump Discharge

V. TREATMENT SYSTEM INFORMATION

a. **Attach a complete description of the treatment system including**: a flow schematic depicting all major control points (i.e., alarms, sensors, valves) and treatment units; design calculations on the expected treatment performance (i.e., removal efficiency, carbon consumption calculations) including unit height and surface area; and manufacturers' specifications on major components of the treatment system. Also provide a basis for all design calculations and properly reference all design assumptions in order for calculations to be replicated. Include a discussion on the need for iron treatment to address iron scaling and/or iron bacteria build-up. Plans and specifications on all treatment systems must be signed and certified by a professional engineer registered in the State of Rhode Island.

b. Identify each applicable treatment unit (check all that apply):
☐ Oil/Water Separator, ☐ Granular Activated Carbon, ☐ Air Stripping, ☐ U/V Oxidation, ☐ Iron Treatment,
☐ Filtration, ☐ Ion Exchange, ☐ Bag Filter, ☐ Equalization Tanks, ☐Chlorination, ☐ Dechlorination,
☐ Other (please specify):_____
If system consists of GAC or Ion Exchange, provide time to carbon or resin exhaustion (days):
If system consists of air stripping, provide air/water ratio:

c. Treatment System Design Flow (gpm):	d. Treatment System Maximum System Capacity (gpm):

e. Average Flow Rate of Treatment System (gpm):

f. Provide a description of chemical additives being used or planned to be used (attach MSDS sheets for each):

VI. RECEIVING WATER INFORMATION

a. Identify the discharge pathway: ☐ Direct, ☐ Indirect, ☐ Storm Drain, ☐ River/brook, ☐ Wetlands,

☐ Other (describe): _____

b. Provide a narrative description of the discharge pathway, including the names of the receiving waters:

c. Attach a detailed map(s) indicating the site location and location of the outfall to the receiving water:

1. For multiple discharges, number the discharges sequentially.

2. For indirect discharges, indicate the location of the discharge to the indirect conveyance and the discharge to surface waters. The map should include the location and distance to the nearest sanitary sewer.

d. Provide the Water Quality Classification of the receiving water: _____.

e. If the proposed discharge is to freshwaters, provide the reported or calculated seven day-ten year low flow (7Q10) of the receiving water for the point of discharge in cubic feet per second (cfs): _____. Attach any calculation sheets used to support stream flow and dilution calculations.

f. Is the receiving water a listed 303(d) water quality impaired or limited water? ☐ Yes ☐ No, If yes for which pollutant(s)?:

g. Is there a TMDL? ☐ Yes ☐ No If Yes, for which pollutants?

VII. INFLUENT CHARACTERIZATION (attach raw analytical data, include sample date and location)							
Pollutant	**Believed Absent (Y/N)**	**Believed Present (Y/N)**	**Sample Type And Number**	**Test Method Minimum Level**	**Average (ug/l)**	**Max. (ug/l)**	**Design (ug/l)**
Total Suspended Solids							
Total Residual Chlorine							
Total Petroleum Hydrocarbons							
Cyanide							
Benzene							
Toluene							
Ethylbenzene							
Total Xylenes (m,p,o)							
Total BTEX							
Ethylene dibromide							
Methyl-t-Butyl Ether (MTBE)							
Tert-Butyl Alcohol							
Tert-Amyl Methyl Ether							
Carbon Tetrachloride							
1,4 Dichlorobenzene							
1,2 Dichlorobenzene							
1,3 Dichlorobenzene							
Total Dichlorobenzene							
1,1 Dichloroethane							
1,2 Dichloroethane							
1,1 Dichloroethylene							
cis - 1,2 Dichloroethylene							
Dichloromethane							
Tetrachloroethylene							
1,1,1 Trichloroethane							
1,1,2 Trichloroethane							
Trichloroethylene							
Vinyl Chloride							
Acetone							
1,4 Dioxane							
Total Phenols							
Pentachlorophenol							
Total Phthalates							
Bis (2-Ethylhexyl) Phthalate							
Total Group I PAHs							

VII. INFLUENT CHARACTERIZATION (attach raw analytical data, include sample date and location)							
Pollutant	**Believed Absent (Y/N)**	**Believed Present (Y/N)**	**Sample Type And Number**	**Test Method Minimum Level**	**Average (ug/l)**	**Max. (ug/l)**	**Design (ug/l)**
Benzo (a) Anthracene							
Benzo (a) Pyrene							
Benzo (b) Fluoranthene							
Benzo (k) Fluoranthene							
Chrysene							
Dibenzo (a,h) anthracene							
Indeno (1,2,3-cd) Pyrene							
Total Group II PAHs							
Acenapthene							
Acenapthylene							
Anthracene							
Benzo (ghi) Perylene							
Fluoranthene							
Fluorene							
Naphthalene							
Phenanthrene							
Pyrene							
Total Polychlorinated Bipheyls							
Antimony							
Arsenic							
Cadmium							
Chromium III (trivalent, total recoverable)							
Chromium VI (hexavalent, total recoverable)							
Copper							
Lead (total recoverable)							
Mercury							
Nickel (total recoverable)							
Selenium							
Silver							
Zinc (total recoverable)							
Iron (total recoverable)							
Other (describe):							

VIII. OWNER/OPERATOR CERTIFICATION

I certify under penalty of law that I have read and understood all terms and conditions of the above-referenced General Permit. I also certify under penalty of law that this document and all attachments were prepared under the direction or supervision in accordance with a system design to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of a fine and imprisonment for knowing violations.

Print Owner's Name: _____

Print Owner's Title: _____

Signature: _____ Date: _____

Print Operator's Name:_____

Print Operator's Title: _____

Signature: _____ Date: _____

RHODE ISLAND POLLUTANT DISCHARGE ELIMINATION SYSTEM (RIPDES)
REMEDIATION GENERAL PERMIT
NOTICE OF INTENT (NOI)

I. OWNER

Give the legal name of the person, firm, public, municipal organization, or any other entity that owns the site described in this application. The name of the owner may or may not be the same as the name of the site. Enter the complete address, telephone number and email address of the owner/contact person and title. Check the appropriate choice indicating if the owner is a Federal, State/Tribal, Private or other entity.

II. OPERATOR

Complete this section only if the Operator is different from the Owner.
Give the legal name of the person, firm, public (municipal) organization or any other entity that has day-to-day operations of the site described in this application. Please provide complete mailing address city, state and zip of the operator. Also, include the contact person, title and email address.

III. SITE INFORMATION

a. Please include the following items as part of the NOI: a brief history of the site, the source of contamination, a brief description of the proposed remedial and/or dewatering activity creating the discharge, all available analytical data on impacted groundwater, a site plan showing location of monitoring and recovery wells, discharge point and receiving water, and an 8.5” x 11” photocopy of a USGS 1:24,000 topographic map depicting the site location.

   Provide the facility/site name, longitude and latitude, and SIC code(s). Provide the facility/site location (address, city, state and zip) and phone number. State the type of spill or release pertaining to this NOI and the approximate duration of the project.

b. For the site in which the application is being submitted indicate where a prior NPDES permit has been granted for the discharge. Yes or No. If yes, please provide the NPDS permit number.

c. For the site in which the application is being submitted indicate whether a prior NPDES application has ever been filed for the discharge. Yes or No. If yes, please provide the date of the appl8ication filed and application number, if available.

d. For the site in which the application is being submitted indicate whether the site/facility is covered by any other DEM permit including, but not limited to: multi-sector Stormwater general permit, 2. Phase I or II construction Stormwater general permit, 3. Individual RIDES Permit, if so please list them and provide permit numbers if available.

e. For the site in which the application is being submitted indicate where the site/facility is subject to any other DEM permitting or other action, which is causing the generation of the discharge. Yes or No. If Yes, please provide the applicable permit number and DEM contact in the space provided.

IV. DISCHARGE INFORMATION

a. Describe the discharge activities for which the owner/applicant is seeking coverage. Attach additional sheets if necessary.

b. Provide the following information about each discharge: the number of discharge points and the maximum and average flow rate of the discharge in cubic fee per second. If the maximum flow a design value please checks indicate with a check mark.

c. For each discharge indicate latitude and longitude within 100 feet.

d. If hydrostatic testing, please state the total volume of the discharge in gallons.

e. Please indicate if the discharge intermittent or seasonal.

f. Provide the expected start and end dates of discharge (month/day/year).

g. Based on the analysis of sample(s) of the untreated influent, the applicant must check the box of the sub-categories that the potential discharge falls within.

V. TREATMENT SYSTEM INFORMATION

a. Please attach a complete description of the treatment system including a flow schematic depicting all major control points such as alarms, sensors, valves and treatment units; design calculations on the expected treatment performance such as removal efficiency, carbon consumption calculations including unit height and surface area, and manufacturer's' specifications on major components of the treatment system. Please provide a basis for all design calculations and properly reference all design assumptions in order for calculations to be replicated. Also, include a discussion on the need for iron treatment to address iron scaling and/or iron bacteria build-up. Please note that the plans and specifications on all treatment systems must be signed and certified by a professional engineer registered in the State of Rhode Island.

b. Identify each applicable treatment unit, check all that apply: Oil/Water Separator, Granular Activated Carbon, Air Stripping, U/V Oxidation, Iron Treatment, Filtration, Ion Exchange, Bag Filter, Equalization Tanks, Chlorination, Dechlorination, and/or other additional equipment that is not listed. If the system consists of GAC or Ion Exchange, please provide time to carbon or resin exhaustion in days. If the system consists of air stripping, please provide air/water ratio.

c.-e. In the corresponding space, please provide the proposed treatment system **design** flow, **maximum system capacity** and **average flow rate** of the treatment system in **gpm.**

f. Describe any chemical additives being used, or planned to be used, attaché MSDS sheets for each. EPA may request further information regarding the chemical composition of the additive, potential toxic effects, or other information to insure that approval of the use of the additive will not cause or contribute to a violation of State water quality standards. Approval of coverage under the Remediation General Permit will constitute approval of the use of the chemical additive(s). If coverage of the discharge under the Remediation General Permit has already been granted and the use of a chemical additive becomes necessary, the permittee must obtain written approval from the department prior to using any additives not identified in the original NOI.

VI. RECEIVING WATER INFORMATION

a. Identify the discharge pathway by checking whether it is discharged directly to the receiving water, within the facility (e.g., through a sewer drain), to a storm drain, to a river or brook, to a wetland or other receiving body. If other, please describe.

b. Provide a narrative description of the discharge pathway, including the names of the receiving waters.

c. Attach a detailed map(s) indicating the site location and location of the outfall to the receiving water. For multiple discharges, number the discharges sequentially. For indirect discharges, indicate the location of the discharge to the indirect conveyance and the discharge to surface waters. The map should also include the location and distance to the nearest sanitary sewer as well as a locus of nearby sensitive receptors, such as surface waters, drinking water supplies and wetland areas.

d. Provide the state water quality classification of the receiving water.

e. If the proposed discharge is to freshwaters, provide the reported or calculated seven day-ten year low flow (7Q10) for the point of discharge in the receiving water in cubic feet per second (cfs). Please attach any calculation sheets used to support stream flow and dilution calculations.

f. Is the receiving water a listed 303(d) water quality impaired or limited water? If yes, for which pollutants?

g. Is there a TMDL? If so which pollutants?

h. Are any listed or threatened or endangered species, or designated critical habitat in proximity to the discharge. If yes, please list.

VII. INFLUENT CHARACTERIZATION

a. The applicant must indicate where each listed chemical is **believed present** or **believed absent** in the proposed discharge. The NOI includes a space for every pollutant covered by the RGP, however in some cases not all categories require confirmatory sampling for all of the pollutants listed on the NOI. Therefore, at a minimum confirmatory influent data must be provided for all pollutants listed on the limitations page corresponding to the discharge category associated with the proposed discharge. The only exception to this rule is in regard to metals influent sampling (See Part VII.b below for further instructions regarding metals influent sampling).

b. For discharges where metals are believed present due to anthropological impacts, metals sampling must be conducted at a minimum for those metals listed in the discharge category applicable to the proposed discharge. If metals are not believed to be present due to anthropological impacts confirmatory metals sampling is not required. If metals are believed to be present due to anthropological impacts please indicate where any metals in the influent have a reasonable potential to exceed the effluent limit in Part II.E of the Remediation General Permit. If yes, which metals?

c. For any metals which have reasonable potential to exceed the limits in Part II.E of the Remediation General Permit please provide the dilution factor applicable for metals.

d. Look up the limit calculated at the corresponding dilution factor in Part II.E of the Remediation General Permit. Do any of the metals in the influent have the potential to exceed the corresponding effluent limits in Part II.E (i.e. Is the influent concentration above the limit set at the calculated dilution factor. If yes, which metals?

VIII. OWNER/OPERATOR CERTIFICATION

The Notice of Intent must be signed by the operator and owner certifying under penalty of law that s/he has read the understands the conditions and terms of the above Remediation General permit to the best of knowledge and belief that the information reported was true, accurate and complete. The signatory (ies) are also aware that there are significant penalties for submitting false information, including the possibility of a fine and imprisonment for knowing violations. Please print and sign your name. Also please provide the date and title of signatory.

The original NOI must be sent to: Office of Water Resources – RIPDES Section – 235 Promenade St., Providence, RI 02908

Dilution Determination for use with the RIPDES Remediation General Permit

1. Determine the point of discharge. The point of discharge is the location where the effluent first enters a surface water body.

2. Using a USGS map and the gauge station list given in the attached USGS table of 7Q10 Statistics for Rhode Island Stations, locate the gauge station that is closest to the point of discharge. The gauge station must be in the same watershed as the point of discharge.

3. Find the drainage area of the watershed that is upstream of the gauge station. (Given in the attached table.)

   $DA_{\text{Upstream of Gauge}}$ =

4. Find the 7Q10 flow for the gauge station from the attached table.

   7Q10 Gauge =

5. Determine the drainage area of the watershed that is upstream from the point of discharge.

   $DA_{\text{Upstream of Discharge}}$ =

6. Calculate the equivalent 7Q10 flow using the following formula:

$$\text{7Q10 EQ} = \frac{\text{7Q10 Gauge}}{DA_{\text{Upstream of Gauge}}} \times DA_{\text{Upstream of Discharge}} =$$

7. Calculate the dilution factor using the following formula:

$$\text{Dilution Factor} = \frac{\{(\text{7Q10 EQ}) + (\text{System Design Flow})\}}{\{\text{System Design Flow}\}} =$$

7Q10 STATISTICS FOR RHODE ISLAND GAGING STATIONS

(Statistics Based on Start of Period of Record Through Indicated Water Year)

STATION NUMBER (Feet)	STATION NAME & LOCATION	STARTING WATER YEAR	DRAINAGE AREA (Sq. Miles)	7Q10 (Cubic Ft/Second)
	ACTIVE STATIONS[1]			
01109403	Ten Mile River @ East Providence	1988	53.1	15.56
01111300	Nipmuc River Near Harrisville	1965	16.0	0.37
01111500	Branch River @ Forestdale	1941	91.2	13.69
01112500	Blackstone River @ Woonsocket*	1930	416	102.25
01114000	Moshassuck River @ Providence**	1965	23.1	4.22
01114500	Woonasquatucket River @ Centerdale	1943	38.3	7.81
01116000	South Branch Pawtuxet River @ Wash-ington*	1942	63.8	17.08
01116500	Pawtuxet River @ Cranston*	1941	200	70.90
01117000	Hunt River Near East Greenwich**	1942	23.0	1.23
01117350	Chipuxet River @ West Kingston**	1959, 1973	9.99	2.82
01117420	Usquepaug River Near Usquepaug	1959, 1975	36.1	7.16
01117468	Beaver River Near Usquepaug	1976	8.87	2.01
01117500	Pawcatuck River @ Wood River Junction	1942	100	28.48
01117800	Wood River Near Arcadia	1965	35.2	7.24
01118000	Wood River @ Hope Valley	1942	72.4	20.65
01118500	Pawcatuck River @ Westerly	1942	295	69.59
	DISCONTINUED STATIONS[2]			
01106000	Adamsville Brook @ Adamsville	41-78	8.01	0.05
01111400	Chepachet River @ Chepachet	66-72	17.4	2.23
01112700	Blackstone River Tributary @ Woonsocket	67-74	2.22	NA
01115100	Mosquitohawk Brook Near North Scituate	67-74	3.06	NA
01115630	Nooseneck River @ Nooseneck	65-81	8.23	1.27
01115770	Carr River Near Nooseneck	65-79	6.73	0.66
01116300	Furnace Hill Brook @ Cranston	67-74	4.19	NA
01117600	Meadow Brook Near Carolina	67-74	5.53	0.11
01126200	Bucks Horn Brook @ Greene	67-74	5.52	0.50

[1]7Q10 based on data through Water Year 1993.
[2]7Q10 based on data through Water Year 1985.
*Affected by stream flow regulation.
**Affected by groundwater pumpage.
= Station installed in 1987, statistics based on four (4) years of record.
NA = Not Available - Statistics will not compute if flow is zero (0) on any day. These streams go dry occasionally during periods of low flow.

R.I. DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
Office of Water Resources

APPLICATION(S) FEES FORM

Please complete the information below and **submit this completed form and your check (payable to "R.I. General Treasurer") for the appropriate fee directly to**:

R.I. Department of Environmental Management
Office of Management Services
235 Promenade Street
Providence, RI 02908

***** FEES ARE NOT REFUNDABLE *****

APPLICANT'S NAME: _____

OWNER'S NAME: _____

SITE LOCATION: _____

APPLICATION TYPE (Permit, Order of Approval): **RIPDES General Permit (Remediation)**

NOTE: The application and all accompanying documents, including a copy of this fee form and method of payment, should be submitted to the Office of Water Resources, RIPDES Program, 235 Promenade Street, Providence, RI 02908-5767. Application review will be initiated only upon receipt of the complete application and fee.

FOR OFFICE USE ONLY

OMS Receipt Date: _____

Fee Amount Received: _____

Processor Initials: _____

OWR Telephone Number (401) 222-4700
OWR Telefax Number (401) 222-6177
DEM Telecommunications for the Deaf Dial 711

RHODE ISLAND POLLUTANT DISCHARGE ELIMINATION SYSTEM (RIPDES) REMEDIATION GENERAL PERMIT
NOTICE OF TERMINATION (NOT)
(revised 7/08)

DEM USE ONLY
Date Received
Amount Received $
RIPDES# **RIG** _____
Approval Date
Data Entry Date
Data Entry Initials

I. General Site Information. Please provide the following information about the site:

a. Name of Facility/Site:

b. Facility/Site address:

c. RIPDES Permit Number:

d. Photos documenting the capping or elimination of piping connecting the discharge to the receiving water must be provided as an attachment in order to process this permit termination request.

II. Owner Information

Legal Name:

City: State: Zip: Phone: ( )

Contact Person: Title:

Email Address of Contact Person:

III. Operator Information

Legal Name:

City: State: Zip: Phone: ( )

Contact Person:

Email Address of Contact Person:

IV. OWNER/OPERATOR CERTIFICATION

I certify under penalty of law that all discharges from the identified facility that are authorized by the "RIPDES Remediation General Permit" have been terminated. I understand that by submitting this Notice of Termination (NOT), I am no longer authorized to discharge waters covered by the RIPDES Remediation General Permit and that discharging pollutants from the activity covered by the RIPDES Remediation General Permit is unlawful under the Clean Water Act where the discharge is not authorized by a permit. I also understand that the submission of this NOT does not release an owner/operator from liability for any violation of the RIPDES Remediation General Permit or the Clean Water Act.

Print Owner's Name: _____

Print Owner's Title: _____

Signature: _____ Date: _____

Print Operator's Name: _____

Print Operator's Title: _____

Signature: _____ Date: _____

RHODE ISLAND POLLUTANT DISCHARGE ELIMINATION SYSTEM (RIPDES)
REMEDIATION GENERAL PERMIT
NOTICE OF TERMINATION (NOT)

INSTRUCTIONS

Operators of facilities and/or operations authorized under this permit shall notify the DEM of the termination of discharge(s) authorized under the general permit. The NOT must be either the suggested NOT form or another form of official correspondence containing the information required in the instructions below. The NOT must be completed and submitted within 30 days of the end of discharge(s).

A. Instructions for the NOT – The NOT requires the following information:

I. General Site Information
   a. Name of the facility
   b. Address of the facility or site for which the notification is submitted
   c. RIPDES Permit Number assigned in which the NOT is being submitted
   d. Photos or other documentation that capping or elimination of piping connecting the discharge to the receiving water. If this information is not received, your Termination application/ request will not be processed.

II. Owner Information
   a. Legal name of owner
   b. Address of owner which includes the City, State, and Zip.
   c. Phone number of owner
   d. The name of the contact person including their title.
   e. Email address of the contact person.

III. Operator Information
   a. Legal name and address of the entity who operates the facility
   b. Contact name, title, address, telephone number and email address of the operators who runs the facility for the permit in which termination is being submitted

IV. Owner/Operator Certification
   Signature of the above responsible parties, owner and operator, submitting the NOT claiming that discharging activities are no longer taking place. By signing the NOT does not release the owner/operator from liability for any violation of the RIPDES Remediation General Permit or the Clean Water Act.

The original NOT must be sent to: RIDEM - Office of Water Resources – RIPDES Section – 235 Promenade St., Providence, RI 02908