

Fact Sheet
Rhode Island Pollutant Discharge Elimination System (RIPDES)
2019 Remediation General Permit (RGP)

Background

In accordance with Chapter 46-12 of the Rhode Island General Laws, the discharge of pollutants to Waters of the State via a point source discharge is prohibited unless in compliance with the terms and conditions of a Rhode Island Pollutant Discharge Elimination System (RIPDES) permit issued in accordance with State Regulations. Therefore, the discharges associated with the treatment of remediation wastewaters to Waters of the State require a RIPDES Permit. The Rhode Island Department of Environmental Management (DEM), Office of Water Resources, has determined that the most efficient approach in permitting these discharges is to utilize a general permit. This affords the Office the ability to issue one permit to cover several categories of dischargers.

The purpose of this general permit is to cover discharges associated with the treatment of remediation wastewaters within the State. The primary benefit of using a general permit, as opposed to issuing several individual permits, is that it would streamline the permitting process allowing remedial activities to proceed without any unnecessary delays, while affording equal environmental protection. As opposed to individual permits, the general permit does not require a public notice each time a specific discharge is authorized. The permits streamlining would reduce the application period, thereby effectively allowing DEM to respond quicker to environmental concerns and produce savings to potential applicants.

Summary of Changes

A summary of changes is provided below, with wording taken from the permit italicized for emphasis:

1. Part I.A.2: Added the term “and related activities” to the sources listed which are eligible to discharge treated wastewater to surface waters under the Remediation General Permit.
2. Part I.A.3.b: Added “State or Federally” to those remediation discharges that may adversely affect a listed, or a proposed to be listed, endangered or threatened species or its critical habitat.
3. Part I.B.2: Electronic reporting language for the submission of NOIs was added as seen below. The electronic submission is dependent on an electronic reporting tool becoming available.

All NOIs must be submitted to the Director by hard copy (See Part II.F.9), unless an electronic reporting tool becomes available during the period covered under this permit that DEM implements (See 40 CFR 127.26(h)) according to DEM’s NPDES Electronic Reporting Rule Phase 2 Implementation Plan.

4. Part I.B.3: Revised deadline to submit a new NOI from (90) to (30) days prior to commencement of discharge.

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 thirty (30) days prior to the commencement of such discharge.

5. Part I.B.5: Added language that the owner/operator of permitted facilities under the RGP must notify that discharges authorized under the RGP no longer occur within thirty (30) days of the permanent cessation of the discharge.

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. *This notification must be made within thirty (30) days of the permanent cessation of the discharge.*

6. Part II.A.2.c: Revised language regarding water quality requirements regarding erosion and sedimentation by merging the former Part II.A.10.b requirement from the 2013 RIPDES RGP with this part.

The discharge shall not cause or contribute to any erosion, stream scouring, or sedimentation caused directly or indirectly by the discharge.

7. Part II.A.2.d: Added language to include pH water quality based narrative limits from the Rhode Island Water Quality Regulations for both freshwater and saltwater receiving waters.

d. The pH of the discharge shall not be:

- i. Freshwaters (classifications AA, Non-Class AA): less than 6.5 nor greater than 9.0 standard units at any time, or as naturally occurs, unless these values are exceeded as a result of the approved treatment processes; or*
- ii. Saltwaters (classifications SA or SB): less than 6.5 nor greater than 8.5 standard units but not more than 0.2 units outside of the normally occurring range, unless these values are exceeded as result of the approved treatment processes.*

8. Part II.A.6.a: Added language regarding what defines if a pollutant listed in the NOI is “believed absent”.

A pollutant is “believed absent” if it was sampled in the influent and measured as non-detect relative to the detection limits in Part II.G. A pollutant may also be “believed absent” if the pollutant has not been sampled but, there are no known sources of the pollutant in the influent wastewater and the pollutant will not be added or generated prior to discharge.

9. Part II.A.6.b: Revised language regarding the monitoring of pollutants not covered by the RGP (similar to EPA 2017 RGP).

Regardless of certification of chemicals as “believed absent”, or not being listed in the monitoring requirements for Categories A through J in Part II.D below, the Director may provide written notice to any operator, requiring monitoring of specific parameters on a case-by-case basis. Any such notice will briefly state the reasons for the monitoring, the parameters to be monitored, frequency and period of monitoring, sample types, and reporting requirements.

10. Part II.A.6.d: Added language for reduction in monitoring frequency to require a minimum of (3) consecutive months and (10) samples for each parameter for which reduction is being requested.

To be eligible for a reduction, the permittee must provide 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 for a minimum of three (3) consecutive months and ten (10) samples for each parameter for which reduction is being requested.

11. Part II.A.9: Added specific conditions for the discharge of chemicals and additives. Includes specific information to be submitted to DEM in the NOI.

9. Conditions for Discharges of Chemicals and Additives

a. The permittee shall not discharge any chemical or additive, including, but not limited to: algaecides/biocides, antifoams, coagulants, corrosion/scale inhibitors/coatings, disinfectants, flocculants, neutralizing agents, oxidants, oxygen scavengers, pH conditioners, surfactants and bioremedial agents, including microbes, which was not reported in the NOI submitted to DEM for a site.

- b. *Upon authorization to discharge, chemicals and/or additives which have been disclosed to the DEM may be discharged up to the frequency and level disclosed, provided that such discharge does not violate any permit conditions or Rhode Island water quality standards.*
- c. *The DEM may request additional information to provide authorization to discharge chemicals and/or additives, including but not limited to: Whole Effluent Toxicity testing.*
- d. *To request authorization to discharge chemicals and/or additives in the NOI submitted to DEM for a site the permittee must submit the following information in writing, at a minimum, in accordance with Part II.F.4.d of this general permit:*

- i. *All information required in Part II.F.4.d;*
- ii. *The applicant must certify that the addition of such chemicals:*
 - a) *Will not add any pollutants in concentrations which exceed permit effluent limitations;*
 - b) *Will not exceed any applicable water quality standard; and*
 - c) *Will not add any pollutants that would justify the application of permit conditions that are different from or absent in this permit; or*
- iii. *The applicant must disclose any pollutants different from or absent in this permit that may be present in discharges with the addition of the chemicals and/or additives. Additional monitoring and/or Whole Effluent Toxicity testing may be required.*

12. Part II.A.10: Merged the previous 2013 RIPDES RGP requirements regarding erosion, scouring, and sedimentation with Water Quality Requirements as noted above in Item 6.

13. Part II.B.1.b: Removed language regarding the use of alternative test methods. All samples shall be tested using the analytical methods approved under 40 CFR 136.

14. Part II.B.3: Added more prescriptive recordkeeping requirements regarding on-site records and retention of records.

a. *On-site Records – The following records must be maintained on-site and/or with the operator to be made available upon inspection and/or request by DEM:*

- i. *A complete copy of this General Permit.*
- ii. *A copy of DEM's authorization to discharge and any subsequent modifications.*
- iii. *Copies of information submitted to DEM and the municipality in which the site is located.*
- iv. *Copies of any correspondence received from the DEM and the municipality in which the site is located regarding permit coverage.*
- v. *Any records of monitoring instrumentation, field monitoring, and visual observations (e.g. portable organic vapor monitoring, turbidity meter, visible sheen observations).*

- vi. *Any records of system operation and maintenance.*
- vii. *Any records of site inspections and employee training.*
- viii. *Any other records as listed in Part III.O of this permit.*

b. *Retention of Records – Operators must retain the records specified above for a minimum of five (5) years from the date of the sample, measurement, report or notice, whichever applies.*

15. Part II.B.4: Updated monitoring and reporting language to include electronic submission of DMRs using NetDMR for discharges lasting (12) months or more. Discharges lasting less than (12) months may submit hardcopy DMRs. Also, includes instructions for submission as attachments in NetDMR, other reports/requests to be made by hardcopy, and more detail on verbal notifications.

The Permittee must report monitoring data to DEM on a quarterly basis, as follows:

i. For discharges lasting twelve (12) months or more, monitoring results obtained during the previous three (3) months shall be summarized and reported to DEM in discharge monitoring reports (DMRs) submitted electronically using the NetDMR reporting tool (<https://netdmr.epa.gov>). When the permittee submits DMRs using NetDMR, it is not required to submit hard copies of DMRs to DEM.

ii. For discharges lasting less than twelve (12) months, monitoring results obtained during the previous three (3) months shall be summarized and reported on a hard copy Discharge Monitoring Report Form postmarked no later than the 15th day of the month following the completed reporting quarter unless the permittee opts to submit an electronic DMR. A signed copy of this report shall be submitted to the address as listed in Part II.B.4.d below. Note: If the permittee opts to submit DMRs electronically using NetDMR, it is not required to submit hard copies to DEM.

16. Part II.B.4: Updated the reporting requirements to clarify which reports and/or requests shall be submitted to DEM as attachments in NetDMR or as hard copy to DEM.

c. *Submittal of Reports as NetDMR Attachments*

Unless otherwise specified in this permit, the permittee must submit electronic copies of documents in NetDMR that are directly related to the DMR. These include the following:

- *DMR Cover Letters*
- *Below Detection Limit summary tables*
- *Summary of hydrostatic test water transfer per Part II.B.7*

All other reports should be submitted to DEM as a hard copy via regular US mail (see Part II.B.4.d below).

d. *Submittal of Requests and Reports to DEM*

The following requests, reports, and information described in this permit shall be submitted as hard copy to the DEM.

- i. *Transfer of Permit notice*
- ii. *Request for changes in sampling location*
- iii. *Notice of activity which results in the discharge of any pollutant which is not otherwise*

limited in the permit per Part II.A.6.c

- iv. Request for reduction in testing frequency per Part II.A.6.d*
- v. Written notifications required under Part III*
- vi. Notice of unauthorized discharges*

17. Part II.B.4: Updated the notification requirements section of Part III to be more prescriptive.

e. Verbal Reports and Verbal Notifications

Any verbal reports or verbal notifications, if required in Parts I - III of this permit, shall be made to the DEM. This includes verbal reports and notifications required under twenty-four hour reporting as noted below. Verbal reports and verbal notifications shall be made to DEM at (401) 222-4700 or (401) 222-3070 at night.

Twenty-four hour reporting. The permittee shall immediately report any noncompliance which may endanger health or the environment by calling DEM at (401) 222-4700 or (401) 222-3070 at night.

A written submission shall also be provided within five (5) days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance 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 noncompliance.

The following information must be reported immediately:

- i. Any unanticipated bypass which causes a violation of any effluent limitation in the permit; or*
- ii. Any upset which causes a violation of any effluent limitation in the permit; or*
- iii. Any violation of a maximum daily discharge limitation for any of the pollutants specifically listed by the Director in the permit.*

The Director may waive the written report on a case-by-case basis if the oral report has been received within 24 hours.

18. Part II.D - E: Revisions to pollutant effluent limitations and/or monitor only requirements as noted below. Further detail will be provided in the 'Permit Basis and Explanation of Effluent Limitation Derivation' section of the Fact Sheet below.

- a. Added two (2) new pollutants (Ammonia, Ethanol) for discharges to AA, Non-AA waters, SA, and SB waters.
- b. Added TSS as a pollutant to Categories B and D for discharges to AA, Non-AA waters, SA, and SB waters.
- c. Added Total Copper as a pollutant to Category I for discharges to AA, Non-AA waters, SA, and SB waters.
- d. Added Footnote number 5 that requires Ethanol be analyzed using Method 1671.
- e. Adopted the most stringent of RI WQ Acute and EPA 2017 RGP TBEL as Daily Max. (TSS, Acetone, 1,4-Dioxane, Total Phthalates, Total Group 1 PAHs for Freshwater and Saltwater receiving waters; Metals for various dilution ranges for Freshwater receiving waters; and Cadmium, Chromium III, Chromium VI, and

Lead for Saltwater receiving waters)

- f. Updated some Monthly Average limits to be equal to Daily Maximum limits where Monthly Average > Daily Maximum (mainly for Metals with TBEL limits discharging to Freshwaters; See Appendix A4 and below section in the Fact Sheet)
- g. Updated Factsheet Appendix A and Appendix A4 to reflect above new pollutants and limit changes.

19. Part II.F.d: Updated NOI requirements section to include more specific chemical additive information. (see also above change #5)

The application must indicate any chemical or additive the permittee intends to use or store that will be applied to effluent prior to discharge or may otherwise be present in discharge(s) from the site. Chemicals and additives include, but are not limited to: algacides/biocides, antifoams, coagulants, corrosion/scale inhibitors, disinfectants, flocculants, neutralizing agents, oxidants, oxygen scavengers, pH conditioners and bioremedial agents, including microbes.

- i. *Provide the following information for each chemical or additive:*
 - a) *Product name, chemical formula, and manufacturer of the chemical, additive or remedial agent;*
 - b) *Purpose or use of the chemical/additive;*
 - c) *Safety Data Sheet (SDS) and Chemical Abstracts Service (CAS) Registry number for each chemical/additive;*
 - d) *The frequency (hourly, daily, etc.), duration (hours, days), quantity (maximum and average), and method of application for the chemical/additive;*
 - e) *Any material compatibility risks for storage and/or use including the control measures used to minimize such risks; and*
 - f) *If available, the vendor's reported aquatic toxicity (NOAEL and/or LC50 in percent for aquatic organism(s)).*
- ii. *Written rationale which demonstrates that the addition of such chemicals/additives:*
 - a) *Will not add any pollutants in concentrations which exceed permit effluent limitations;*
 - b) *Will not exceed any applicable State water quality standard; and*
 - c) *Will not add any pollutants that would justify the application of permit conditions that are different from or absent in this permit; or*
- iii. *Upon authorization to discharge, chemicals and/or additives which have been specifically disclosed in the NOI may be discharged up to the frequency and level disclosed, provided that such discharge does not violate the conditions of this permit or applicable State water quality standards. The DEM may request additional information to provide authorization to discharge chemicals and/or additives, including but not limited to WET testing. 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.*

20. Part II.G: Updated the QL table to include achievable QLs based on the 2017 EPA RGP, 2013 RIPDES RGP, and proposed effluent limits, and included language that all analyses of parameters required under the RGP must comply with the NPDES Sufficiently Sensitive Test Methods Reporting Rule.

All analyses of parameters under this general permit must comply with the National Pollutant Discharge Elimination System (NPDES): Use of Sufficiently Sensitive Test Methods for Permit Applications and Reporting rule. Only sufficiently sensitive test methods may be used for analyses of parameters under this general permit.

21. Updated dilution determination worksheet to using the USGS StreamStats website to determine 7Q10 flows for RI water bodies.

A DF for sites that discharge to freshwater receiving waters in Rhode Island is calculated using the equation below (Item 4). Alternate calculation methods for DFs may be acceptable if approved by the DEM. A DF for sites that discharge to saltwater receiving waters or non-flowing freshwater bodies (ponds or lakes) in Rhode Island is assumed to be 1:1, unless otherwise approved on a case-by-case basis by the DEM.

1. *Using StreamStats: This online application is appropriate for determining drainage area ratios for nearby gages and uses the 7Q10s for available gages from the U.S. Geological Gazetteer reports (1984 Wandle et al.). StreamStats is available at:*

<http://water.usgs.gov/osw/streamstats>

2. *Follow the instructions in StreamStats. The location chosen must be where the treated groundwater or other treated wastewater discharges to the receiving water body. When the location has been chosen and the basin delineated, select the "Low-Flow Statistics" for the Regression Based Scenario. Then click Continue. This will bring up the Build a Report section. Again, click Continue.*
3. *Include a printout or otherwise attach the StreamStats Report with the Notice of Intent. An example StreamStats Report is included on the following page. The report should contain the 7 Day 10 Year Low Flow value for the selected location.*
4. *Calculate the dilution factor. 7Q10 indicates the "7 Day 10 Year Low Flow" as printed on the StreamStats Report. Use the following formula:*

$$DF = \frac{\{(7Q10) + (Treatment\ System\ Design\ Flow)\}}{\{Treatment\ System\ Design\ Flow\}}$$

22. Revised Notice of Intent (NOI) form to reflect the addition of new pollutants and chemical additive requirements as noted above.
23. Minor changes throughout the general permit that include arrangement of the permit, correction of grammatical and typographical errors, and removal of minor inconsistencies.

Applicability and Coverage

The enclosed general permit applies to all areas of the State of Rhode Island. This permit covers the discharge of wastewater to surface waters from a variety of sources. This permit covers: 1) discharges from 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, and related activities 2) site remediation where the spill or leak is not petroleum specific, such as sites contaminated with volatile organic compounds and/or metals, and related activities 3) construction dewatering of contaminated sites, including locations where sub-surface site investigations and/or soil characterization for disposal have revealed various pollutants associated with past industrialization, power generation, incineration, or other activity where no specific source of contamination is apparent, and related activities 4) dewatering of miscellaneous contaminated sites, such as remediation of contaminated sumps, aquifer pump testing to evaluate remediation of formerly contaminated sites, well development or rehabilitation at contaminated or formerly contaminated sites, and hydrostatic testing of fuel pipelines and tanks and related activities.

The general permit is divided up into ten (10) discharge categories. Each of the ten (10) categories of discharges under which an applicant or permittee may be granted coverage are categorized as follows: A. Gasoline Remediation Sites, B. Fuel Oil (and other Oils) Sites, C. Petroleum Sites Containing Other Pollutants, D. Volatile Organic Compound (VOC) Only Sites, E. VOC Sites Containing Other Contaminants, F. Sites Containing Primarily Metals, G. Contaminated Construction Dewatering, H. Aquifer Pump Testing and Well Development or Rehabilitation at Contaminated Sites, I. Hydrostatic Testing of Pipelines and Tanks, and J. Contaminated Sumps and Dikes.

During the process of developing the previous RIPDES Remediation General Permit (RIPDES RGP), the RIDEM used the 2017 USEPA National Pollutant Discharge Elimination System (NPDES) General Permit for Remediation Activity Discharges to Certain Waters of the Commonwealth of Massachusetts and the State of New Hampshire (EPA RGP) as a model for its permit. In developing the EPA RGP, the EPA reviewed the broad spectrum of potential pollutants which are typically encountered at contaminated sites and the technologies used to meet effluent requirements. The RIPDES program has had extensive experience permitting remediation related discharges through the issuance of general permits and through the traditional individual RIPDES permitting process. The RIPDES program agrees with the EPA's assertion that the majority of discharges contain common groups of pollutants, such as total suspended solids (TSS), petroleum hydrocarbons and/or other volatile organic compounds (VOC's) or semi-volatile organic compounds (SVOCs) including polynuclear aromatic hydrocarbons (PAHs). Similarly, as in Massachusetts and New Hampshire, nearly all of the discharges from remediation projects in Rhode Island have utilized off the shelf, economically viable and proven treatment systems including: 1) phase separation, 2) sedimentation, 3) filtration, 4) air stripping and/or 5) carbon adsorption. For metals removal, typical controls include chemical addition and filtration, pH adjustment and filtration, and ion exchange.

Although some common pollutants are more difficult to treat due to their physical characteristics, operations data submitted to EPA and the DEM RIPDES Program from the majority of dischargers using these systems indicate that very low effluent concentrations meeting current discharge standards, are routinely achieved. The most common volatile organic compounds such as Benzene, Toluene, Ethylbenzene, Xylenes (BTEX) in petroleum hydrocarbon discharges and the chlorinated solvents such as Trichloroethylene (TCE) and Tetrachloroethylene (PCE) can typically be treated to below laboratory detection levels by these common technologies.

The RIPDES RGP contains specific effluent limitations that are applicable to each of the ten discharge categories outlined above. For certain discharges such as hydrostatic test discharges, the permit contains specific additional requirements. Although the DEM does not specify particular technologies for meeting standards, each permit application is required to include treatment system design specifications which will be reviewed by the DEM RIPDES program for conformance with generally accepted engineering practices and the effluent limitations specified in the RIPDES RGP. In instances where proposed discharges include chemicals other than those included in the specific discharge category that applies to the discharge, or where applicants encounter particularly difficult pollutant control situations, the owner/operator may be required to submit an application for an individual RIPDES permit.

Permit Basis and Explanation of Effluent Limitation Derivation

General Requirements

Development of RIPDES permit limitations is a multi-step process consisting of the following steps: identifying applicable technology-based limits; calculating allowable water-quality based discharge levels based on in stream criteria, background data and available dilution; establishing Best Professional Judgement (BPJ) limits in accordance with Section 402 of the CWA; and assigning the most stringent as the final discharge limitations.

As indicated above, the DEM RIPDES Program is required to consider technology and water quality requirements when developing permit limits. 40 CFR Part 125, Subpart A, sets the criteria and standards that States must use to determine which technology-based requirements, requirements under Section 301(b) of the Act and/or requirements established on a case-by-case basis under Section 402(a)(1) of the Act, should be included in the permit.

The Clean Water Act requires that all discharges, at a minimum, must meet effluent limitations based on the technology-based treatment requirements for dischargers to control pollutants in their discharge. Section 301(b)(1)(A) of the Clean Water Act requires the application of Best Practicable Control Technology Currently Available (BPT) and Section 301(b)(2) of the Clean Water Act requires the application of Best Conventional Control Technology (BCT) for conventional pollutants, and Best Available Technology Economically Achievable (BAT) for non-conventional and toxic pollutants. BPT requirements were to be in effect by July 1, 1977 and BCT/BAT requirements by March 31, 1989. Thus, for all dischargers covered by this general permit, BCT/BAT requirements apply.

The EPA is continually developing Effluent Limitation Guidelines (ELGs) for industrial activities for BPT and BAT as directed in the original Federal Water Pollution Control Act Amendments of 1972. Although many ELGs have been developed, no ELGs have been developed which cover the types of discharges covered by this general permit. Therefore, as provided in Section 402(a)(1) of the Act, the EPA established technology based effluent limitations in the EPA RGP utilizing Best Professional Judgement (BPJ) to meet the requirements for BCT/BAT. The DEM has established similar technology based BPJ effluent limitations as the EPA's RGP and has incorporated these limitations into the RIPDES RGP as described below.

Under Section 301(b)(1)(C) of the CWA, discharges are also subject to effluent limitations based on water quality standards. Section 303(c) of the CWA requires every state to develop water quality standards applicable to all water bodies or segments of water bodies that lie within the State. Waters within the State are classified according to use and numerical and/or narrative standards are adopted and approved by EPA. Along with the BPJ-based effluent limitations described above, water quality standards were also used to establish water quality-based effluent limitations in EPA's RGP and in the RIPDES RGP.

Limitations of Coverage

The following discharges are not authorized by this permit:

1. Discharges associated with the treatment of groundwater that has a reasonable potential to be contaminated with sources other than those specified in the permit.
2. Remediation discharges that may adversely affect a State or Federally listed, or a proposed to be listed, endangered or threatened species or its critical habitat.
3. Remediation discharges that may cause or contribute to a water quality violation.
4. Remediation discharges to the terminal reservoir of a public drinking water supply.
5. Remediation discharges to Class AA, A, or SA waters where the applicant failed to demonstrate to the satisfaction of the Director, that no reasonable alternative exists and that the discharge will not impair existing uses or the attainment of designated uses.
6. Discharges to a Publicly-Owned Treatment Works (POTWs).

7. Discharge of dredge drain back waters covered by CWA Section 401 and 404.
8. Discharges listed in an individual permit unless:
 - a. the permit has expired;
 - b. DEM has terminated the existing permit;
 - c. The discharges are separate from the currently permitted discharges; or
 - d. 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).
9. Discharges for which the Director makes a determination that an individual permit is required under the RIPDES Regulations.

Development of Effluent Limitations

In conducting research to develop the previous general permit, the DEM RIPDES Program had previously relied heavily on the development and supporting documents associated with the EPA RGP. Based on all of the available information from past permitting of general and individual permits associated with remediation sites, DEM along with the EPA has concluded that for nearly every site:

1. a comprehensive set of discharge parameters can be selected.
2. appropriate standards, both numerical and narrative, exist to evaluate and establish permit limitations, and
3. cost effective technology (BAT) currently exists and is in wide use to meet the limitations to ensure that water quality standards are met on a consistent basis.

In developing EPA's RGP, EPA determined that various types of discharges can be broadly grouped into categories of similar activities and, that within these activity groups, common pollutants are typically found. The DEM RIPDES Program and EPA are in agreement that the potential exists for any one or groups of chemicals listed as toxic or hazardous pollutants under various EPA and State water and remediation programs to be present at a contamination site. Based on available literature, reviews of existing permits as well as operational information from site remediation projects, EPA determined that it would be impractical and unnecessary to attempt to document and limit every contaminant that could be present in a discharge under the EPA RGP. Of the many individual chemicals potentially encountered in discharges covered by the RIPDES RGP, the physical/chemical characteristics of individual chemicals or compounds often make them useful as "indicator" pollutants for establishing technology-based (BAT) effluent limitations. Rather, than limiting all the possible pollutants in a common group, it is often more efficient to regulate an indicator contaminant. Different pollutants or classes of compounds may have varying susceptibilities to treatment by pollution control technologies. Certain pollutants or classes of pollutants may be more toxic than others, but the removal of an indicator chemical can ensure that other chemicals with similar characteristics will also be removed. For example, benzene is often used as an indicator compound in the control of the volatile organic compounds (e.g. toluene, ethylbenzene, and xylenes) in gasoline and other gasoline constituents due to similar chemical characteristics and behavior when available control methods are used.

Based on the information available, including discharge monitoring reports from more than 2,000 historical sites, EPA selected a limited number of pollutants for specific effluent limitations in the EPA RGP. In general, these pollutants represent those that are most commonly reported from the categories of activities being covered by the RIPDES RGP (See Table 1 Below). Additional parameters were evaluated by the EPA for inclusion in the EPA RGP but were not listed for a variety of reasons including: rarely found in discharges and common pollutants which are known to be removed along with indicator pollutants. The DEM RIPDES Program has determined that some parameters (for example, pesticide compounds) are infrequently encountered in discharges covered by this permit and if an owner/operator determines that a compound is a contaminant, an individual RIPDES permit may be required or another means of handling the wastewater may be necessary.

Table 1. RIPDES RGP Discharge Categories and Pollutants**A. Gasoline Remediation Sites**

Ethanol, Benzene, Toluene, & Ethylbenzene, Xylenes (BTEX), Naphthalene, Ethylene dibromide, Methyl-t-Butyl Ether (MTBE), tert-Butyl Alcohol, tert-Amyl Methyl Ether, Total Suspended Solids, Total Petroleum Hydrocarbons, Lead and Iron

B. Fuel Oil (and other Oils) Sites

Acetone, Total Suspended Solids, Total Petroleum Hydrocarbons, Naphthalene, Total Group I Polycyclic Aromatic Hydrocarbons, 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 Polycyclic Aromatic Hydrocarbons, Acenaphthene, Acenaphthylene, Anthracene, Benzo (ghi) Perylene, Fluoranthene, Fluorene, Phenanthrene, Pyrene, Benzene, Toluene, Ethylbenzene, Total Xylenes (m,p,o), Methyl-t-Butyl Ether, Total BTEX, Nickel, Chromium III (trivalent), Chromium VI, Zinc, and Iron

C. Petroleum Sites Containing Other Pollutants

Ammonia, Ethanol, 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, 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 Polycyclic Aromatic Hydrocarbons, 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 Polycyclic Aromatic Hydrocarbons, Acenaphthene, Acenaphthylene, Anthracene, Benzo (g,h,i) Perylene, Fluoranthene, Fluorene, Naphthalene, Phenanthrene, Pyrene, Total Polychlorinated Biphenyls, Antimony, Arsenic, Cadmium, Chromium III, Chromium VI, Copper, Lead, Mercury, Nickel, Selenium, Silver, Zinc, and Iron

D. Volatile Organic Compound (VOC) Only Sites

Carbon Tetrachloride, 1,2 Dichlorobenzene, 1,3 Dichlorobenzene, 1,4 Dichlorobenzene, Total Dichlorobenzene, 1,1 Dichloroethane, 1,2 Dichloroethane, 1,1 Dichloroethylene, cis 1,2 Dichloroethylene, Methylene Chloride, Tetrachloroethylene, 1,1,1 Trichloroethane, 1,1,2 Trichloroethane, Trichloroethylene, Vinyl Chloride, Total Petroleum Hydrocarbons, Total Phenols, Pentachlorophenol, Total Phthalates Bis (2-Ethylhexyl) Phthalate, Total Polychlorinated Biphenyls, Acetone, 1,4 Dioxane, Total BTEX, Iron, and Total Suspended Solids

E. VOC Sites Containing Other Contaminants

Ammonia, Ethanol, 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, 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 Polycyclic Aromatic Hydrocarbons, 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 Polycyclic Aromatic Hydrocarbons, Acenaphthene, Acenaphthylene, Anthracene, Benzo (g,h,i) Perylene, Fluoranthene, Fluorene, Naphthalene, Phenanthrene, Pyrene, Total Polychlorinated Biphenyls, Antimony, Arsenic, Cadmium, Chromium III, Chromium VI, Copper, Lead, Mercury, Nickel, Selenium, Silver, Zinc, and Iron

F. Sites Containing Primarily Metals

Antimony, Arsenic, Cadmium, Chromium III, Chromium VI, Copper, Lead, Mercury, Nickel, Selenium, Silver, Zinc, Iron, Cyanide, Carbon Tetrachloride, 1,2 Dichlorobenzene, 1,3 Dichlorobenzene, 1,4 Dichlorobenzene, Total Dichlorobenzene, 1,1 Dichloroethane, 1,2 Dichloroethane, 1,1 Dichloroethylene, cis-1,2 Dichloroethylene, Methylene Chloride, Tetrachloroethylene, 1,1,1 Trichloroethane, 1,1,2 Trichloroethane, Trichloroethylene, Vinyl Chloride, Total Suspended Solids.

G. Contaminated Construction Dewatering

Ammonia, Ethanol, 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, 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 Polycyclic Aromatic Hydrocarbons, 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 Polycyclic Aromatic Hydrocarbons, Acenaphthene, Acenaphthylene, Anthracene, Benzo (g,h,i) Perylene, Fluoranthene, Fluorene, Naphthalene, Phenanthrene, Pyrene, Total Polychlorinated Biphenyls, Antimony, Arsenic, Cadmium, Chromium III, Chromium VI, Copper, Lead, Mercury, Nickel, Selenium, Silver, Zinc, and Iron

H. Aquifer Pump Testing and Well Development or Rehabilitation at Contaminated Sites

Ammonia, Ethanol, 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, 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 Polycyclic Aromatic Hydrocarbons, 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 Polycyclic Aromatic Hydrocarbons, Acenaphthene, Acenaphthylene, Anthracene, Benzo (g,h,i) Perylene, Fluoranthene, Fluorene, Naphthalene, Phenanthrene, Pyrene, Total Polychlorinated Biphenyls, Antimony, Arsenic, Cadmium, Chromium III, Chromium VI, Copper, Lead, Mercury, Nickel, Selenium, Silver, Zinc, and Iron

I. Hydrostatic Testing of Pipelines and Tanks

Ethanol, Total Suspended Solids, Total Residual Chlorine, Total Petroleum Hydrocarbons, Benzene, Total BTEX, Naphthalene, Ethylene dibromide, Methyl-t-Butyl Ether, tert-Butyl Alcohol, tert-Amyl Methyl Ether, Bis (2-Ethylhexyl) Phthalate, Total Group I Polycyclic Aromatic Hydrocarbons, Benzo (a) Anthracene, Benzo (a) Pyrene, Benzo (b) Fluoranthene, Benzo (k) Fluoranthene, Chrysene, Dibenzo (a,h) anthracene, Indeno (1,2,3-cd) Pyrene, Lead, Nickel, Chromium III, Chromium VI, Copper, Zinc, Iron

J. Contaminated Sumps and Dikes

Ammonia, Ethanol, 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, 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 Polycyclic Aromatic Hydrocarbons, 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 Polycyclic Aromatic Hydrocarbons, Acenaphthene, Acenaphthylene, Anthracene, Benzo (g,h,i) Perylene, Fluoranthene, Fluorene, Naphthalene, Phenanthrene, Pyrene, Total Polychlorinated Biphenyls, Antimony, Arsenic, Cadmium, Chromium III, Chromium VI, Copper, Lead, Mercury, Nickel, Selenium, Silver, Zinc, and Iron

For each of the ten (10) discharge categories established by this permit (Categories A thru J) final limits were established by comparing and selecting the most stringent limits applicable for each pollutant in each category from the RIPDES 2013 Remediation General Permit and the 2018 RI Water Quality Regulations assuming no background data is available and a dilution factor equal to 1 (i.e. Limit = 80% of water quality criteria). For each of the ten discharge categories (A-J), each category was divided up into three water quality classifications (Class AA, Non-Class AA, and Saltwater). For example, for discharge category A - Gasoline Remediation Sites, the RIPDES

RGP authorizes owners/operators to discharge treated effluent to Class AA freshwaters, Non-Class AA freshwaters, or Class SA and SB saltwaters. For any parameters limited with a specific category, the limits will vary from one discharge classification subcategory to the next depending on the water quality standards that were used in the limit development comparison. Typically, Class AA water quality standards are the most stringent, therefore for each major discharge category that would potentially discharge to Class AA waters, these discharges will have the most stringent limits applied due to the fact that Class AA water quality standards are the most protective. Water body classification information and permit categories will be provided by all applicants and evaluated by the DEM RIPDES Program upon submittal of a complete NOI.

Metals Limitations

The only exception to the limit development process discussed above is the method that the DEM RIPDES Program has selected in applying metals limitations under the RIPDES RGP. For discharges containing metals, dilution will be considered in setting the effluent limits in the permit for discharges to fresh waters. This stance is also consistent with the EPA RGP. Each applicant is required to provide a dilution factor for the point of discharge with supporting documentation as part of the NOI in order to receive metals limits based on a dilution factor greater than 1. The RIPDES RGP establishes six (6) tiers of dilution within which an applicant's discharge may operate. These tiers are listed in the RIPDES RGP as well as within Appendix A.4 of this Fact Sheet.

For the majority of situations, the treatment systems are expected to remove contaminants down to very low levels that should be capable of achieving water quality standards for zero dilution situations. However, for metals, DEM has decided to apply a dilution factor since a number of metals are naturally occurring or secondary to more concentrated and toxic compounds found in the discharge (e.g., hydrocarbons).

For example, for a mixed effluent of pollutants that includes petroleum hydrocarbons and/or industrial solvents (VOCs), there may also be low levels of one or more metals present in the groundwater. The primary concern during most remediation projects is removing the BTEX, PAHs, and VOCs using standard treatment such as carbon adsorption. The low levels of metals in the groundwater would be a secondary concern and to further reduce them at zero dilution could require significant additional expense and complexity of the treatment system without being necessary to protect water quality. If the receiving water has available dilution, simple changes could be made to the components of the standard treatment train, such as enhancing the filtration step for fine solids (assuming that the metals are bound to the fines), before the carbon treatment to remove enough metals to meet the metals limit with dilution.

Appendix A of this Fact Sheet includes a listing of each discharge category and a summary of the limit comparison that was conducted for each. Appendices A.1-3 include limit comparison tables for each of the three major water body classifications, Class AA freshwater, Non-Class AA freshwater, and Class SA and SB saltwater. Appendix A.4 includes a summary of the applicable metals limitations associated with each dilution tier established for dischargers of metals who propose to discharge to freshwaters. For each discharge category and for each potential water body classification a listing of proposed final limits are presented in bold.

New and Revised Chemical Effluent Limitations and Monitor-Only Requirements in the 2019 RIPDES RGP

The effluent limitations and/or monitor-only requirements proposed in the 2019 RIPDES RGP which are new or revised from the 2013 RIPDES RGP are listed in Tables 2 - 3, below. Revisions or new additions are shown in bold in the Effluent Limitation columns.

Table 2: Summary of Proposed Effluent Limitations and Monitor-Only Requirements for Class AA/Non-Class AA/Class SA and SB Receiving Waters

Class AA / Non-Class AA Freshwater Receiving Waters:

Parameter	Effluent Limitation	
	Monthly Average	Daily Maximum
Ammonia (N)	Monitor Only µg/L	Monitor Only µg/L
Ethanol (EtOH)	Monitor Only µg/L	Monitor Only µg/L
Total Suspended Solids	Monitor Only µg/L	30,000 µg/L
Acetone	Monitor Only µg/L	7,970 µg/L
1,4-Dioxane	Monitor Only µg/L	200 µg/L
Total Phthalates	3 µg/L	190 µg/L
Total Group I Polycyclic Aromatic Hydrocarbons	0.03 µg/L (AA) 0.14 µg/L Non-Class AA)	1.0 µg/L
Total Polychlorinated Biphenyls (PCBs)	0.000064 µg/L (Non-Class AA)	0.000064 µg/L
Antimony	See Table 3	See Table 3
Arsenic	See Table 3	See Table 3
Cadmium	See Table 3	See Table 3
Chromium III (trivalent)	See Table 3	See Table 3
Chromium VI (hexavalent)	See Table 3	See Table 3
Copper	See Table 3	See Table 3
Lead	See Table 3	See Table 3
Mercury	See Table 3	See Table 3
Nickel	See Table 3	See Table 3
Selenium	See Table 3	See Table 3
Silver	See Table 3	See Table 3
Zinc	See Table 3	See Table 3
Iron	See Table 3	See Table 3

Class SA / SB Saltwater Receiving Waters:

Parameter	Effluent Limitation	
	Monthly Average	Daily Maximum
Ammonia (N)	Monitor Only µg/L	Monitor Only µg/L
Ethanol (EtOH)	Monitor Only µg/L	Monitor Only µg/L
Total Suspended Solids	Monitor Only µg/L	30,000 µg/L
Acetone	Monitor Only µg/L	7,970 µg/L
1,4-Dioxane	Monitor Only µg/L	200 µg/L
Total Phthalates	3 µg/L	190 µg/L
Total Group I Polycyclic Aromatic Hydrocarbons	0.14 µg/L	1.0 µg/L
Cadmium	7.08 µg/L	10.2 µg/L
Chromium III (trivalent)	100 µg/L	323 µg/L
Chromium VI (hexavalent)	40.28 µg/L	323 µg/L
Lead	6.81 µg/L	160 µg/L

Table 3: Summary of Metals Proposed Effluent Limitations Class AA / Non-Class AA Receiving Waters

Class AA Freshwater Receiving Waters:

Parameter	Effluent Limitation			
	2013 Monthly Average	2019 Monthly Average	2013 Daily Maximum	2019 Daily Maximum
Dilution Range <5				
Antimony	4.48	4.48	360	206
Arsenic	0.14	0.14	272	104
Cadmium	0.08	0.08	0.42	0.42
Chromium III (trivalent)	22.15	22.15	463.46	323
Chromium VI (hexavalent)	9.15	9.15	13.03	13.03
Copper	2.28	2.28	3.03	3.03
Lead	0.44	0.44	11.18	11.18
Mercury	0.13	0.13	1.32	0.739
Nickel	12.92	12.92	116.17	116.17
Selenium	4	4	16	16
Silver	0.3	---	0.3	0.3
Zinc	29.61	29.61	29.61	29.61
Iron	240	240	---	5000
Dilution Range 5-10				
Antimony	22.4	22.4	1800	206
Arsenic	0.7	0.7	1360	104
Cadmium	0.4	0.4	2.1	2.1
Chromium III (trivalent)	110.75	110.75	2317.3	323
Chromium VI (hexavalent)	45.75	45.75	65.15	65.15
Copper	11.4	11.4	15.15	15.15
Lead	2.2	2.2	55.9	55.9
Mercury	0.65	0.65	6.6	0.739
Nickel	64.6	64.6	580.85	580.85
Selenium	20	20	80	80
Silver	1.5	---	1.5	1.5
Zinc	148.05	148.05	148.05	148.05
Iron	1200	1200	---	5000
Dilution Range 10-20				
Antimony	44.8	44.8	3600	206
Arsenic	1.4	1.4	2720	104
Cadmium	0.8	0.8	4.2	4.2
Chromium III (trivalent)	221.5	221.5	4634.6	323
Chromium VI (hexavalent)	91.5	91.5	130.3	130.3
Copper	22.8	22.8	30.3	30.3
Lead	4.4	4.4	111.8	111.8
Mercury	1.3	0.739	13.2	0.739
Nickel	129.2	129.2	1161.7	1161.7

Selenium	40	40	160	160
Silver	3	---	3	3
Zinc	296.1	296.1	296.1	296.1
Iron	2400	2400	---	5000
Dilution Range 20-40				
Antimony	89.6	89.6	7200	206
Arsenic	2.8	2.8	5440	104
Cadmium	1.6	1.6	8.4	8.4
Chromium III (trivalent)	443	323	9269.2	323
Chromium VI (hexavalent)	183	183	260.6	260.6
Copper	45.6	45.6	60.6	60.6
Lead	8.8	8.8	223.6	160
Mercury	2.6	0.739	26.4	0.739
Nickel	258.4	258.4	2323.4	1450
Selenium	80	80	320	235.8
Silver	6	---	6	6
Zinc	592.2	420	592.2	420
Iron	4800	4800	---	5000
Dilution Range 40-60				
Antimony	179.2	179.2	14400	206
Arsenic	5.6	5.6	10880	104
Cadmium	3.2	3.2	16.8	10.2
Chromium III (trivalent)	886	323	18538.4	323
Chromium VI (hexavalent)	366	323	521.2	323
Copper	91.2	91.2	121.2	121.2
Lead	17.6	17.6	447.2	160
Mercury	5.2	0.739	52.8	0.739
Nickel	516.8	516.8	4646.8	1450
Selenium	160	160	640	235.8
Silver	12	---	12	12
Zinc	1184.4	420	1184.4	420
Iron	9600	5000	---	5000
Dilution Range >=60				
Antimony	268.8	206	21600	206
Arsenic	8.4	8.4	16320	104
Cadmium	4.8	4.8	25.2	10.2
Chromium III (trivalent)	1329	323	27807.6	323
Chromium VI (hexavalent)	549	323	781.8	323
Copper	136.8	136.8	181.8	181.8
Lead	26.4	26.4	670.8	160
Mercury	7.8	0.739	79.2	0.739
Nickel	775.2	775.2	6970.2	1450
Selenium	240	235.8	960	235.8
Silver	18	---	18	18
Zinc	1776.6	420	1776.6	420

Iron	14400	5000	---	5000

Non-Class AA Freshwater Receiving Waters:

Parameter	Effluent Limitation			
	2013 Monthly Average	2019 Monthly Average	2013 Daily Maximum	2019 Daily Maximum
Dilution Range <5				
Antimony	8	8	360	206
Arsenic	1.12	1.12	272	104
Cadmium	0.08	0.08	0.42	0.42
Chromium III (trivalent)	22.15	22.15	463.46	323
Chromium VI (hexavalent)	9.15	9.15	13.03	13.03
Copper	2.28	2.28	3.03	3.03
Lead	0.44	0.44	11.18	11.18
Mercury	0.14	0.14	1.32	0.739
Nickel	12.92	12.92	116.17	116.17
Selenium	4	4	16	16
Silver	0.3	---	0.3	0.3
Zinc	29.61	29.61	29.61	29.61
Iron	800	800	---	5000
Dilution Range 5-10				
Antimony	40	40	1800	206
Arsenic	5.6	5.6	1360	104
Cadmium	0.4	0.4	2.1	2.1
Chromium III (trivalent)	110.75	110.75	2317.3	323
Chromium VI (hexavalent)	45.75	45.75	65.15	65.15
Copper	11.4	11.4	15.15	15.15
Lead	2.2	2.2	55.9	55.9
Mercury	0.7	0.7	6.6	0.739
Nickel	64.6	64.6	580.85	580.85
Selenium	20	20	80	80
Silver	1.5	---	1.5	1.5
Zinc	148.05	148.05	148.05	148.05
Iron	4000	4000	---	5000
Dilution Range 10-20				
Antimony	80	80	3600	206
Arsenic	11.2	11.2	2720	104
Cadmium	0.8	0.8	4.2	4.2
Chromium III (trivalent)	221.5	221.5	4634.6	323
Chromium VI (hexavalent)	91.5	91.5	130.3	130.3
Copper	22.8	22.8	30.3	30.3
Lead	4.4	4.4	111.8	111.8
Mercury	1.4	0.739	13.2	0.739

Nickel	129.2	129.2	1161.7	1161.7
Selenium	40	40	160	160
Silver	3	---	3	3
Zinc	296.1	296.1	296.1	296.1
Iron	8000	5000	---	5000
Dilution Range 20-40				
Antimony	160	160	7200	206
Arsenic	22.4	22.4	5440	104
Cadmium	1.6	1.6	8.4	8.4
Chromium III (trivalent)	443	323	9269.2	323
Chromium VI (hexavalent)	183	183	260.6	260.6
Copper	45.6	45.6	60.6	60.6
Lead	8.8	8.8	223.6	160
Mercury	2.8	0.739	26.4	0.739
Nickel	258.4	258.4	2323.4	1450
Selenium	80	80	320	235.8
Silver	6	---	6	6
Zinc	592.2	420	592.2	420
Iron	16000	5000	---	5000
Dilution Range 40-60				
Antimony	320	206	14400	206
Arsenic	44.8	44.8	10880	104
Cadmium	3.2	3.2	16.8	10.2
Chromium III (trivalent)	886	323	18538.4	323
Chromium VI (hexavalent)	366	323	521.2	323
Copper	91.2	91.2	121.2	121.2
Lead	17.6	17.6	447.2	160
Mercury	5.6	0.739	52.8	0.739
Nickel	516.8	516.8	4646.8	1450
Selenium	160	160	640	235.8
Silver	12	---	12	12
Zinc	1184.4	420	1184.4	420
Iron	32000	5000	---	5000
Dilution Range >=60				
Antimony	480	206	21600	206
Arsenic	67.2	67.2	16320	104
Cadmium	4.8	4.8	25.2	10.2
Chromium III (trivalent)	1329	323	27807.6	323
Chromium VI (hexavalent)	549	323	781.8	323
Copper	136.8	136.8	181.8	181.8
Lead	26.4	26.4	670.8	160
Mercury	8.4	0.739	79.2	0.739
Nickel	775.2	775.2	6970.2	1450
Selenium	240	235.8	960	235.8
Silver	18	---	18	18

Zinc	1776.6	420	1776.6	420
Iron	48000	5000	---	5000

* All values are in ug/l.

** All values are based on no background data, hardness = 25, and the more stringent of either the RI WQ Standards or EPA TBELs.

--- = monitor only, no limits

Ammonia

The proposed requirement for this indicator parameter in the 2019 RIPDES RGP is monitor-only.

The 2008 and 2013 RIPDES RGPs did not require monitoring for ammonia. EPA Region 1 nor DEM has information regarding the concentrations of this pollutants in the effluent from the types of discharges covered by this general permit. The 2019 RIPDES RGP imposes monitoring requirements for ammonia to ensure ammonia is not present in remediation and/or dewatering activity discharges at levels that would cause or have reasonable potential to cause or contribute to an excursion above applicable RI Water Quality Criteria.

Sources of ammonia in remediation and dewatering discharges at contaminated or formerly contaminated sites may be the result of contamination or use of materials that contain nitrogen. Ammonia can also occur at sites as a result of environmental processes, including the fixation of atmospheric nitrogen and hydrogen by microbes (e.g., diazotrophic bacteria) and the decomposition of manure, dead plants and animals by bacteria (e.g., via ammonification).

TSS

The proposed TBEL for this indicator parameter in the 2017 EPA RGP is 30 mg/L. In the 2013 RIPDES RGP this limit was applied as a monthly average effluent limit for all Categories covered by the general permit with monitor only requirements for Daily Maximum. Since DEM has compared EPA developed TBEL's to DEM's Daily Maximum limits in the development of the above proposed effluent limits, this TBEL is being proposed as a Daily Maximum limit instead of a Monthly Average limit in the 2019 RIPDES RGP using BPJ as authorized by §402(a)(1) of the CWA.

Similar to what was done in the 2017 EPA RGP, DEM has selected the 30 mg/L limits to be consistent with ELGs at 40 CFR §423.12 for the Steam Electric Power Point Source Category.

Antimony

The BPT limitations for the Centralized Waste Treatment Point Source Category are appropriate for discharges eligible for coverage under the RGP. First, discharges consist of contaminated remediation or dewatering effluent from contaminated or formerly contaminated sites similar to centralized waste treatment wastewaters, including contaminated storm water. Second, discharges from contaminated or formerly contaminated sites may consist of multiple wastestreams, including metal-bearing wastes potentially mixed with oily and/or organic wastes. Third, the pollution control technologies used at centralized waste treatment facilities to meet the BPT limitations include technologies sites eligible under this general permit are required to use when necessary to meet effluent limitations, including: BMPs, equalization, neutralization, flocculation, emulsion breaking, separation, chemical precipitation, carbon adsorption, filtration, ion exchange, reverse osmosis, and biological treatment. Therefore, DEM is proposing a TBEL of 206 µg/L for total recoverable antimony in the 2019 RIPDES RGP based on the maximum monthly average BPT limitation for the Centralized Waste Treatment Point Source Category, Subpart D – Multiple Wastestreams in 40 CFR §437.42. DEM selected this TBEL using BPJ as authorized by §402(a)(1) of the CWA.

Arsenic

Given the variety of sites expected to be covered under this general permit, and the availability of promulgated ELGs with greater similarity, and which provide more stringent technology limitations, DEM is proposing a TBEL

of 104 µg/L for arsenic in the 2019 RIPDES RGP, based on the monthly average BPT limitation for the Centralized Waste Treatment Point Source Category, Subpart D – Multiple Wastestreams in 40 CFR §437.42. DEM selected this TBEL using BPJ as authorized by §402(a)(1) of the CWA.

Cadmium

DEM has determined that the BPT limitations for centralized waste treatment facilities providing treatment for wastewater composed of metal-bearing wastes potentially mixed with oily and/or organic wastes are appropriate for discharges eligible for coverage under the RGP.

Therefore, for similar reasons as described for antimony, above, DEM is proposing a TBEL of 10.2 µg/L for total recoverable cadmium in the 2019 RIPDES RGP, based on the maximum monthly average BPT limitation for the Centralized Waste Treatment Point Source Category, Subpart D – Multiple Wastestreams in 40 CFR §437.42. DEM selected this TBEL using BPJ as authorized by §402(a)(1) of the CWA.

Chromium III

For similar reasons as described for cadmium, above, DEM is proposing a TBEL of 323 µg/L for total recoverable chromium in the 2019 RIPDES RGP, based on the maximum monthly average BPT limitation for the Centralized Waste Treatment Point Source Category, Subpart D – Multiple Wastestreams in 40 CFR §437.42. DEM selected this TBEL using BPJ as authorized by §402(a)(1) of the CWA. While this technology limitation applies to total chromium, DEM continues to assume that hexavalent chromium is reduced to trivalent chromium in treatment. Therefore, the proposed TBEL applies to both chromium III and chromium VI.

Chromium VI

See the basis for Chromium III, in this section, above.

Copper

For similar reasons as described for cadmium, above, DEM is proposing a TBEL of 242 µg/L for total recoverable copper in the 2019 RIPDES RGP, based on the maximum monthly average BPT limitation for the Centralized Waste Treatment Point Source Category, Subpart D – Multiple Wastestreams in 40 CFR §437.42. DEM selected this TBEL using BPJ as authorized by §402(a)(1) of the CWA.

Iron

The proposed TBEL for this indicator parameter in the 2017 EPA RGP is 5,000 µg/L for freshwater receiving waters. Similar to the 2017 EPA RGP, DEM is proposing a TBEL of 5,000 µg/L for total recoverable iron in the 2019 RIPDES RGP using BPJ as authorized by §402(a)(1) of the CWA.

Lead

For similar reasons as described for cadmium, above, DEM is proposing a TBEL of 160 µg/L for total recoverable lead in the 2019 RIPDES RGP, based on the maximum monthly average BPT limitation for the Centralized Waste Treatment Point Source Category, Subpart D – Multiple Wastestreams in 40 CFR §437.42. DEM selected this TBEL using BPJ as authorized by §402(a)(1) of the CWA.

Mercury

For similar reasons as described for cadmium, above, DEM is proposing a TBEL of 0.739 µg/L for total recoverable mercury in the 2019 RIPDES RGP, based on the maximum monthly average BPT limitation for the Centralized Waste Treatment Point Source Category, Subpart D – Multiple Wastestreams in 40 CFR §437.42. DEM selected this TBEL using BPJ as authorized by §402(a)(1) of the CWA.

Nickel

For similar reasons as described for cadmium, above, DEM is proposing a TBEL of 1,450 µg/L for total recoverable nickel in the 2019 RIPDES RGP, based on the maximum monthly average BPT limitation for the Centralized Waste Treatment Point Source Category, Subpart D – Multiple Wastestreams in 40 CFR §437.42. DEM selected this TBEL using BPJ as authorized by §402(a)(1) of the CWA.

Silver

For similar reasons as described for cadmium, above, DEM is proposing a TBEL of 35.1 µg/L for total recoverable silver in the 2019 RIPDES RGP, based on the maximum monthly average BPT limitation for the Centralized Waste Treatment Point Source Category, Subpart D – Multiple Wastestreams in 40 CFR §437.42. DEM selected this TBEL using BPJ as authorized by §402(a)(1) of the CWA.

Zinc

For similar reasons as described for cadmium, above, DEM is proposing a TBEL of 420 µg/L for total recoverable zinc in the 2019 RIPDES RGP, based on the maximum monthly average BPT limitation for the Centralized Waste Treatment Point Source Category, Subpart D – Multiple Wastestreams in 40 CFR §437.42. DEM selected this TBEL using BPJ as authorized by §402(a)(1) of the CWA.

1,4 Dioxane

The proposed TBEL for this indicator parameter in the 2017 EPA RGP is 200 µg/L. The 2013 RIPDES RGP had monitor only requirements for this parameter. Therefore, the DEM has adopted a Daily Maximum limit of 200 µg/L using BPJ as authorized by §402(a)(1) of the CWA.

ELGs for similar point source categories do not contain technology limitations for this compound. However, Federal and State advisories and/or guidelines are available. Therefore, this monthly average effluent limitation is based on available information regarding the effluent concentrations feasible using available treatment technologies and is consistent with EPA's lifetime health advisory for this compound.

Acetone

Acetone is frequently present in discharges from contaminated or formerly contaminated sites. Acetone is most common at sites with non-halogenated or halogenated VOC contamination, but has been noted to occur at elevated concentrations when other VOCs have not been detected or are present at very low levels. DEM has adopted a TBEL of 7.97 mg/L for Acetone in the 2019 RIPDES RGP, based on the BPT limitation for the Centralized Waste Treatment Point Source Category, Subpart C – Organics Treatment and Recovery in 40 CFR §437.31 and Subpart D – Multiple Wastestreams in 40 CFR §437.42.

Total Phthalates

DEM has adopted a TBEL of 190 µg/L for total phthalates in the 2019 RIPDES RGP, based on the approximate sum of the maximum monthly average BPT limitations for phthalate parameters for the Centralized Waste Treatment Point Source Category, Subpart B – Oils Treatment and Recovery in 40 CFR §437.21 and Subpart D – Multiple Wastestreams in 40 CFR §437.42.

Total Group I Polycyclic Aromatic Hydrocarbons (PAHs)

Total Group I PAHs is the sum of: benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenzo(a,h)anthracene, and indeno(1,2,3-cd)pyrene. The 2013 RIPDES RGP had a Daily Maximum limit of 100 µg/L and a Monthly Average limit of 0.03 (Class AA freshwater)/0.14 (Non-Class AA freshwater and saltwater) µg/L for this parameter. The 2017 EPA RGP requires that analysis of Group I PAH compounds achieve a ML of 0.1 µg/L or less. Therefore, the sum of Group I PAH compound MLs in compliance with this requirement is 0.7 µg/L. The proposed TBEL reflects the sum of the compliance levels for individual PAH compounds, adjusted upward to 1.0 µg/L to account for variation in analytical MLs expected to be achieved. If a discharge meets both the compliance level for each individual Group I PAH compound, 0.1 µg/L, and uses a 40 CFR Part 136 test method as required, with selected ion monitoring, that discharge will also meet the proposed total Group I PAH TBEL. The DEM expects that the pollution control technologies used by sites covered under the 2019 RIPDES RGP will remove these compounds to levels below compliance levels.

Ethanol

The proposed requirement for this indicator parameter in the 2017 EPA RGP is monitor-only. The 2013 RIPDES RGP did not require monitoring for this parameter. Therefore, the DEM has adopted monitor-only requirements

for ethanol using BPJ as authorized by §402(a)(1) of the CWA.

Given the limited information available regarding the levels of EtOH present in discharges from sites eligible for coverage under this general permit and a lack of practical technologies to remove EtOH from groundwater, the 2019 RIPDES RGP imposes monitoring requirements for ethanol. DEM will use this information to derive effluent limitations for EtOH in the future, if necessary to ensure EtOH is not discharged at levels that cause or have the reasonable potential to cause or contribute to an excursion above WQC, including DEM narrative criteria.

Parameters Not Included in the 2019 RIPDES RGP

During the development of the RGPs, DEM considered a number of additional contaminants of concern for potential inclusion in the RGP which were not selected as indicator parameters for a number of reasons, including, but not limited to: 1) parameter is not relevant to the discharge types covered by this general permit; 2) parameter is rarely identified in discharges from contaminated or formerly contaminated sites; 3) parameter is better controlled through an individual permit; 4) parameter is potentially present at contaminated or formerly contaminated sites, but is removed in association with removal of one or more indicator parameters; 5) parameter is not a practical or appropriate indicator parameter; or 6) other unique factors. If any discharge otherwise eligible for coverage under the RIPDES RGP contains any contaminants, including the parameters discussed below, that is not included in the 2019 RIPDES RGP, the contaminant(s) and the concentration(s) present must be disclosed in the NOI submitted to DEM as noted in Part II.A.6.b of the RIPDES RGP. Such discharges may be considered on a case-by-case basis for eligibility. However, alternate RIPDES permit coverage (e.g., individual RIPDES permit) may be necessary.

The additional parameters are primarily those listed as priority pollutants in Appendix A to 40 CFR Part 423, for which EPA establishes *National Recommended Water Quality Criteria*. DEM also considered chemicals listed on the Priority List of Hazardous Substances for the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) §104(i), as amended by the Superfund Amendments and Reauthorization Act (SARA). This is a prioritized list, ranking chemicals commonly found at sites listed on the National Priorities list (NPL); there are currently 275 substances on this list. The priority of concern is determined by considering the frequency of occurrence at NPL sites, the potential hazard to human health, and the potential for human exposure.¹

The additional parameters evaluated, but excluded, generally include the following:²

- Pesticides
- Radionuclides/Isotopes
- Dioxins/Furans
- Chloroform
- Bacteria
- Other metals
- Oil and Grease
- Formaldehyde
- Asbestos
- Perfluorooctanoic Acid (PFOA)/Perfluorooctane Sulfonate (PFOS)

If a discharge may contain any of the contaminants listed above, or any pollutants not included in the 2019 RIPDES RGP, an applicant must disclose the contaminant and the maximum concentration present at a site in the NOI submitted to DEM for that site.

¹ See 2015 Priority List of Hazardous Substances can be accessed at: <http://www.atsdr.cdc.gov/spl/>.

² For additional parameter-specific information, see Agency for Toxic Substances and Disease Registry Toxic Substances Portal available at: <http://www.atsdr.cdc.gov/substances/index.asp>.

Discharges of Chemicals and Additives

The permit does not authorize the discharge of any chemical or additive, including, but not limited to: algaecides/biocides, antifoams, coagulants, corrosion/scale inhibitors/coatings, disinfectants, flocculants, neutralizing agents, oxidants, oxygen scavengers, pH conditioners, surfactants and bioremedial agents, including microbes, which was not reported in the NOI submitted to DEM for a site. To request authorization to discharge chemicals and/or additives, the NOI submitted to DEM must include the an explanation which demonstrates that the addition of such chemicals: 1. Will not add any pollutants in concentrations which exceed permit effluent limitations; 2. Will not exceed any applicable water quality standard; and 3. Will not add any pollutants that would justify the application of permit conditions that are different from or absent in this permit; or 4. The permittee must disclose any pollutants different from or absent in this permit that may be present in discharges with the addition of the chemicals and/or additives. The DEM may request additional monitoring or information to provide authorization to discharge chemicals and/or additives, including but not limited to: Whole Effluent Toxicity testing.

Upon authorization to discharge, chemicals and/or additives which have been disclosed to the DEM may be discharged up to the frequency and level disclosed in the NOI, provided that such discharge does not violate any permit conditions or Rhode Island water quality standards.

Antibacksliding and Antidegradation

A RIPDES permit may not be renewed, reissued or modified with less stringent limitations or conditions than those contained in a previous RIPDES permit unless in compliance with the anti- backsliding requirements of the Clean Water Act (CWA) §402(o) and §303(d)(4) and 40 CFR §122.44(1)(1 and 2). Effluent limitations based on BPJ (i.e., TBELs), water quality (i.e., WQBELs), and CWA §401 certification requirements must also meet the anti-backsliding provisions found at §402(o) and §303(d)(4) of the CWA. There are a limited number of defined exceptions to this prohibition under CWA §402(o)(2). Certain less stringent effluent limitations may also be independently allowed, if the relaxation is consistent with the provisions of CWA §303(d)(4).

All effluent limitations included in the 2019 RIPDES RGP: 1) are at least as stringent as limitations included in the 2013 RIPDES RGP; or 2) meet the applicable anti-backsliding statutory and regulatory provisions for a less stringent effluent limitation. Therefore, the 2019 DEM RGP complies with the anti-backsliding requirements of the CWA. Where the effluent limitation for a pollutant included in the 2019 RIPDES RGP is less stringent than the effluent limitation for that pollutant as included in the 2013 RIPDES RGP, the necessary justification under §402(o)(2) and/or §303(d)(4) of the CWA is noted in the basis for the effluent limitation for that pollutant as noted above in the 'New and Revised Effluent Limitations' section of this fact sheet.

Antidegradation is intended to protect current water quality by preventing increases in the discharge of pollutants to surface waters. This general permit will not apply to any new or increased discharge unless it can be determined that such discharges will not result in significant effects to the receiving waters. This determination shall be made in accordance with the Rhode Island Antidegradation Policy prior to issuing a general permit.

Record-Keeping Requirements

The DEM is required by 40 CFR §122.41(j) to include in the general permit the requirement to retain records. Monitoring and record-keeping requirements are included in the draft RGP in Part III.O (Monitoring and Records). The 2019 RIPDES RGP also identifies certain specific records (hard copy or electronic) that must be retained by the permittee for a period of at least five (5) years from the date of the sample, measurement, report or application. These include:

- 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.

- Sample collection information, including the date, exact location, and time of sampling or measurements, the names of the individual(s) who performed the sampling or measurements, and the sample chain of custody for each sample;
- The analytical laboratory report, including the results, the date(s) analyses were performed, the names of the laboratory and/or individual(s) who performed the analyses, and the analytical techniques or methods used for each analysis;
- Discharge monitoring data summarized in accordance with Part II.B.4 of the general permit;
- All records of system operation and maintenance; and
- All records of treatment system inspections.

The 2019 RIPDES RGP also specifies which records must be maintained on-site (hard copy or electronic) or with the operator per Part II.B.3 of the general permit. These include:

- A complete copy of this general permit;
- A copy of DEM's authorization to discharge and any subsequent modifications, if applicable;
- Copies of any information submitted to DEM, including DMRs;
- Copies of any correspondence received from DEM regarding permit coverage; and
- Any records of monitoring instrumentation, field monitoring, and visual observations (e.g. portable organic vapor monitoring, turbidity meter, visible sheen observations);
- All records of system operation and maintenance;
- All records of treatment system inspections.

DEM believes this uniform requirement enables a DEM inspector to obtain and review the information relevant to this general permit upon request and/or site inspection, in a consistent and comparable manner.

Monitoring and Reporting

The enclosed RIPDES RGP contains specific conditions that must be met with regard to the frequency of sampling and inspections. The initial sampling frequency for discharges covered under this general permit is three times during the first week of discharge. If the first week's samples comply with the applicable limits, sampling for the remainder of the first month shall be once/week. If these samples all demonstrate compliance with the permit's limits, monitoring shall be twice per month. The permittee is required to monitor the effluent for each and every pollutant listed in the permit under the applicable sub-category listed in the permit, except for any pollutant for which the permittee certified in the NOI that the pollutant was "believed absent". A pollutant is "believed absent" if it was sampled in the influent and measured as non-detect relative to the detection limits in Part II.G. A pollutant may also be "believed absent" if the pollutant has not been sampled but, there are no known sources of the pollutant in the influent wastewater and the pollutant will not be added or generated prior to discharge. 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". Certifications in the NOI that any chemicals were "believed absent", must be based on historical sampling data demonstrating that the untreated influent concentration was below the minimum level specified in the RIPDES RGP. Regardless of certification of chemicals as "believed absent", or not being listed in the monitoring requirements for Categories A through J as noted in Table 1 above, the DEM may provide written notice to any operator, requiring monitoring of specific parameters on a case-by-case basis. Any such notice will briefly state the reasons for the monitoring, the parameters to be monitored, frequency and period of monitoring, sample types, and reporting requirements. If the treatment system is shut down for (120) days or greater, the sampling frequency shall revert back to the initial frequency (i.e., (3) times during the first week, followed by once/week for the remainder of the first month, and then twice/month).

All samples shall be tested using the analytical methods approved under 40 CFR 136. All analyses of parameters under this general permit must comply with the *National Pollutant Discharge Elimination System (NPDES): Use of Sufficiently Sensitive Test Methods for Permit Applications and Reporting* rule. Only sufficiently sensitive test

methods may be used for analyses of parameters under this general permit.

Sampling data must be reported and summarized on discharge monitoring reports (DMRs), which are to be submitted once per quarter. For discharges lasting twelve (12) months or more, monitoring results obtained during the previous three (3) months shall be summarized and reported to DEM in discharge monitoring reports (DMRs) submitted electronically using the NetDMR reporting tool (<https://netdmr.epa.gov>). When the permittee submits DMRs using NetDMR, it is not required to submit hard copies of DMRs to DEM. For discharges lasting less than twelve (12) months, monitoring results obtained during the previous three (3) months shall be summarized and reported on a hard copy Discharge Monitoring Report Form postmarked no later than the 15th day of the month following the completed reporting quarter unless the permittee opts to submit an electronic DMR. If the permittee opts to submit DMRs electronically using NetDMR, it is not required to submit hard copies to DEM. More information and links regarding electronic reporting can be found from the Rhode Island DEM, RIPDES web page, under the section entitled "ELECTRONIC REPORTING" found at: <http://www.dem.ri.gov/programs/water/permits/ripdes/reporting.php> In addition, the permit requires that all treatment systems be inspected at a minimum of twice per month to assure the system is operating efficiently. Records of these inspections must be maintained and made available to DEM upon request.

To apply for coverage under this general permit, owners and operators of discharges from groundwater treatment systems associated with the remediation waste waters must submit a Notice of Intent (NOI). An NOI cannot be submitted until after the effective date of this permit. All NOIs must be submitted to the Director by hard copy unless an electronic reporting tool becomes available during the period covered under this permit that DEM implements (See 40 CFR 127.26(h)) according to DEM's NPDES Electronic Reporting Rule Phase 2 Implementation Plan. The NOI, which is a standardized form, must be submitted to:

RIPDES Program
Office of Water Resources
Rhode Island Department of Environmental Management
235 Promenade Street
Providence, Rhode Island 02908
Telephone: (401) 222-4700

Authorization

Authorization to discharge under the RIPDES RGP shall only be effective upon the applicant's receipt of an authorization page signed and certified by the Director or the Director's designee.

Selection of Final Permit Limits

The effluent monitoring requirements have been specified in accordance with RIPDES regulations as well as 40 CFR 122.41(j), 122.44(l), and 122.48 to yield data representative of the discharge. The Office has determined that all permit limitations are consistent with the Rhode Island Antidegradation Policy.

The remaining general and specific conditions of the permit are based on the RIPDES regulations as well as 40 CFR Parts 122 through 125 and consisting primarily of management requirements common to all permits.

Comment Period, Hearing Requests, and Procedures for Final Decisions

All persons, including applicants, who believe any condition of the draft permit is inappropriate must raise all issues and submit all available arguments and all supporting material for their arguments in full by the close of the public comment period, to the Rhode Island Department of Environmental Management, Office of Water Resources, 235 Promenade Street, Providence, Rhode Island, 02908-5767. Any person, prior to such date, may submit a request in writing for a public hearing to consider the draft permit to the Rhode Island Department of Environmental Management. Such requests shall state the nature of the issues proposed to be raised in the hearing.

A public hearing may be held after at least thirty (30) days public notice whenever the Director finds that response to this notice indicates significant public interest. In reaching a final decision on the draft permit the Director will respond to all significant comments and make these responses available to the public at DEM's Providence Office.

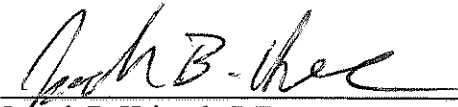
Following the close of the comment period, and after a public hearing, if such hearing is held, the Director will issue a final permit decision and forward a copy of the final decision to the applicant and each person who has submitted written comments or requested notice. Within thirty (30) days following the notice of the final permit decision any interested person may submit a request for a formal hearing to reconsider or contest the final decision. Requests for formal hearings must satisfy the requirements of §1.50 of the Regulations for the Rhode Island Pollutant Discharge Elimination System (RI Code of Regulations; 250-RICR-150-10-1.50).

DEM Contact

Additional information concerning the permit may be obtained between the hours of 8:30 a.m. and 4:00 p.m., Monday through Friday, excluding holidays from:

Aaron Mello
Department of Environmental Management
RIPDES Program
235 Promenade Street
Providence, Rhode Island 02908
Telephone: (401) 222-4700, ext: 7405
Email: aaron.mello@dem.ri.gov

4/23/19
Date


Joseph B. Haberek, P.E.
Supervising Sanitary Engineer
Department of Environmental Management

Appendix A

RIDEM RIPDES Remediation General Permit Limit Development Summary Tables

2018 RI RGP Limits For Class AA Freshwaters

Pollutant	Chronic (ug/l)	Limit Source	Acute (ug/l)	Limit Source
1. Petroleum Related Site Remediation				
A. Gasoline Remediation Sites				
Ethanol	Monitor Only	EPA 2017 RGP TBEL	Monitor Only	EPA 2017 RGP TBEL
Benzene	4.72	RI WQ	5	2013 RGP
Toluene	11.2	RI WQ	508	RI WQ
Ethylbenzene	28.8	RI WQ	1280	RI WQ
(m,p,o) Xylenes	2.4	RI WQ	106.4	RI WQ
Total BTEX	Monitor Only	2013 RGP	100	2013 RGP
Naphthalene	2.08	RI WQ	20	2013 RGP
Ethylene dibromide	Monitor Only	2013 RGP	0.05	2013 RGP
Methyl-t-Butyl Ether (MTBE)	Monitor Only	2013 RGP	70	2013 RGP
tert-Butyl Alcohol	Monitor Only	2013 RGP	Monitor Only	2013 RGP
tert-Amyl Methyl Ether	Monitor Only	2013 RGP	Monitor Only	2013 RGP
Total Suspended Solids	Monitor Only	EPA 2017 RGP TBEL	30000	EPA 2017 RGP TBEL
Total Petroleum Hydrocarbons	Monitor Only	2013 RGP	1000	2013 RGP
Lead (Total Recoverable)	See Metals WS	See Metals WS	See Metals WS	See Metals WS
Iron (Total Recoverable)	See Metals WS	See Metals WS	See Metals WS	See Metals WS
B. Fuel Oils (and Other Oils) Sites				
Acetone	Monitor Only	2013 RGP	7970	EPA 2017 RGP TBEL
Total Suspended Solids	Monitor Only	EPA 2017 RGP TBEL	30000	EPA 2017 RGP TBEL
Total Petroleum Hydrocarbons	Monitor Only	2013 RGP	1000	2013 RGP
Naphthalene	2.08	RI WQ	20	2013 RGP
Total Group I Polycyclic Aromatic Hydrocarbons	0.03	RI WQ	1	EPA 2017 RGP TBEL
Benzo (a) Anthracene	Monitor Only	2013 RGP	0.0038	2013 RGP
Benzo (a) Pyrene	Monitor Only	2013 RGP	0.0038	2013 RGP
Benzo (b) Fluoranthene	Monitor Only	2013 RGP	0.0038	2013 RGP
Benzo (k) Fluoranthene	Monitor Only	2013 RGP	0.0038	2013 RGP
Chrysene	Monitor Only	2013 RGP	0.0038	2013 RGP
Dibenzo (a,h) anthracene	Monitor Only	2013 RGP	0.0038	2013 RGP
Indeno (1,2,3-cd) Pyrene	Monitor Only	2013 RGP	0.0038	2013 RGP
Total Group II Polycyclic Aromatic Hydrocarbons (PAH)	0.03	RI WQ	100	2013 RGP
Acenaphthene	1.52	RI WQ	1.9	2013 RGP
Acenaphthylene	Monitor Only	2013 RGP	Monitor Only	2013 RGP
Anthracene	6640	RI WQ	Monitor Only	2013 RGP
Benzo (ghi) Perylene	Monitor Only	2013 RGP	Monitor Only	2013 RGP
Fluoranthene	3.52	RI WQ	159.2	RI WQ
Fluorene	880	RI WQ	Monitor Only	2013 RGP
Phenanthrene	Monitor Only	2013 RGP	Monitor Only	2013 RGP
Pyrene	664	2013 RGP	Monitor Only	2013 RGP
Benzene	4.72	RI WQ	5	2013 RGP
Toluene	11.2	RI WQ	508	RI WQ
Ethylbenzene	28.8	RI WQ	1280	RI WQ
(m,p,o) Xylenes	2.4	RI WQ	106.4	RI WQ
Methyl-t-Butyl Ether (MTBE)	Monitor Only	2013 RGP	70	2013 RGP
Total BTEX	Monitor Only	2013 RGP	100	2013 RGP
Nickel (total recoverable)	See Metals WS	See Metals WS	See Metals WS	See Metals WS
Chromium III (trivalent, total recoverable)	See Metals WS	See Metals WS	See Metals WS	See Metals WS
Chromium VI (hexavalent, total recoverable)	See Metals WS	See Metals WS	See Metals WS	See Metals WS
Zinc (total recoverable)	See Metals WS	See Metals WS	See Metals WS	See Metals WS
Iron (Total Recoverable)	See Metals WS	See Metals WS	See Metals WS	See Metals WS
C. Petroleum Sites Containing Other Pollutants				
Ammonia	Monitor Only	EPA 2017 RGP TBEL	Monitor Only	EPA 2017 RGP TBEL
Ethanol	Monitor Only	EPA 2017 RGP TBEL	Monitor Only	EPA 2017 RGP TBEL
Total Suspended Solids	Monitor Only	EPA 2017 RGP TBEL	30000	EPA 2017 RGP TBEL
Total Residual Chlorine	11	RI WQ	19	RI WQ
Total Petroleum Hydrocarbons	Monitor Only	2013 RGP	1000	2013 RGP
Cyanide	4.16	RI WQ	17.6	RI WQ
Benzene	4.72	RI WQ	5	2013 RGP
Toluene	11.2	RI WQ	508	RI WQ
Ethylbenzene	28.8	RI WQ	1280	RI WQ
(m,p,o) Xylenes	2.4	RI WQ	106.4	RI WQ
Total BTEX	Monitor Only	2013 RGP	100	2013 RGP
Ethylene dibromide	Monitor Only	2013 RGP	0.05	2013 RGP
Methyl-t-Butyl Ether (MTBE)	Monitor Only	2013 RGP	70	2013 RGP

2018 RI RGP Limits For Class AA Freshwaters

Pollutant	Chronic (ug/l)	Limit Source	Acute (ug/l)	Limit Source
<i>tert</i> -Amyl Methyl Ether	Monitor Only	2013 RGP	Monitor Only	2013 RGP
Carbon Tetrachloride	1.84	RI WQ	4.4	2013 RGP
1,4 Dichlorobenzene	0.96	RI WQ	5	2013 RGP
1,2 Dichlorobenzene	1.44	RI WQ	63.2	RI WQ
1,3 Dichlorobenzene	6.96	RI WQ	312	RI WQ
Total Dichlorobenzene	Monitor Only	2013 RGP	763	2013 RGP
1,1 Dichloroethane	Monitor Only	2013 RGP	70	2013 RGP
1,2 Dichloroethane	3.04	RI WQ	5	2013 RGP
1,1 Dichloroethylene	3.2	2013 RGP	3.2	2013 RGP
<i>cis</i> -1,2 Dichloroethylene	Monitor Only	2013 RGP	70	2013 RGP
Dichloromethane	Monitor Only	2013 RGP	4.6	2013 RGP
Tetrachloroethylene	4.24	RI WQ	5	2013 RGP
1,1,1 Trichloroethane	Monitor Only	2013 RGP	200	2013 RGP
1,1,2 Trichloroethane	4.72	RI WQ	5	2013 RGP
Trichloroethylene	5	2013 RGP	5	2013 RGP
Vinyl Chloride	0.02	RI WQ	2	2013 RGP
Acetone	Monitor Only	2013 RGP	7970	EPA 2017 RGP TBEL
1,4 Dioxane	Monitor Only	2013 RGP	200	EPA 2017 RGP TBEL
Total Phenols	4.48	RI WQ	200.8	RI WQ
Pentachlorophenol (PCP)	0.04	RI WQ	0.05	RI WQ
Total Phthalates	3	2013 RGP	190	EPA 2017 RGP TBEL
Bis (2-Ethylhexyl) Phthalate	6	2013 RGP	6	2013 RGP
Total Group I Polycyclic Aromatic Hydrocarbons (PAH)	0.03	RI WQ	1	EPA 2017 RGP TBEL
Benzo (a) Anthracene	Monitor Only	2013 RGP	0.0038	2013 RGP
Benzo (a) Pyrene	Monitor Only	2013 RGP	0.0038	2013 RGP
Benzo (b) Fluoranthene	Monitor Only	2013 RGP	0.0038	2013 RGP
Benzo (k) Fluoranthene	Monitor Only	2013 RGP	0.0038	2013 RGP
Chrysene	Monitor Only	2013 RGP	0.0038	2013 RGP
Dibenzo (a,h) anthracene	Monitor Only	2013 RGP	0.0038	2013 RGP
Indeno (1,2,3-cd) Pyrene	Monitor Only	2013 RGP	0.0038	2013 RGP
Total Group II Polycyclic Aromatic Hydrocarbons (PAH)	0.03	RI WQ	100	2013 RGP
Acenaphthene	1.52	RI WQ	1.9	2013 RGP
Acenaphthylene	Monitor Only	2013 RGP	Monitor Only	2013 RGP
Anthracene	6640	RI WQ	Monitor Only	2013 RGP
Benzo (ghi) Perylene	Monitor Only	2013 RGP	Monitor Only	2013 RGP
Fluoranthene	3.52	RI WQ	159.2	RI WQ
Fluorene	880	RI WQ	Monitor Only	2013 RGP
Naphthalene	2.08	RI WQ	20	2013 RGP
Phenanthrene	Monitor Only	2013 RGP	Monitor Only	2013 RGP
Pyrene	664	2013 RGP	Monitor Only	2013 RGP
Total Polychlorinated Biphenyls (PCBs)	0.000064	2013 RGP	0.000064	2013 RGP
Antimony	See Metals WS	See Metals WS	See Metals WS	See Metals WS
Arsenic	See Metals WS	See Metals WS	See Metals WS	See Metals WS
Cadmium	See Metals WS	See Metals WS	See Metals WS	See Metals WS
Chromium III (trivalent, total recoverable)	See Metals WS	See Metals WS	See Metals WS	See Metals WS
Chromium VI (hexavalent, total recoverable)	See Metals WS	See Metals WS	See Metals WS	See Metals WS
Copper	See Metals WS	See Metals WS	See Metals WS	See Metals WS
Lead (Total Recoverable)	See Metals WS	See Metals WS	See Metals WS	See Metals WS
Mercury	See Metals WS	See Metals WS	See Metals WS	See Metals WS
Nickel (total recoverable)	See Metals WS	See Metals WS	See Metals WS	See Metals WS
Selenium	See Metals WS	See Metals WS	See Metals WS	See Metals WS
Silver	See Metals WS	See Metals WS	See Metals WS	See Metals WS
Zinc (total recoverable)	See Metals WS	See Metals WS	See Metals WS	See Metals WS
Iron (Total Recoverable)	See Metals WS	See Metals WS	See Metals WS	See Metals WS
2. Non-Petroleum (Not Gas and Oil) Site Remediation				
D. VOC Only Sites				
Carbon Tetrachloride	1.84	RI WQ	4.4	2013 RGP
1,2 (or o) -Dichlorobenzene (DCB)	1.44	RI WQ	63.2	RI WQ
1,3 (or m) - Dichlorobenzene	6.96	RI WQ	312	RI WQ
1,4 (or p) - Dichlorobenzene	0.96	RI WQ	5	2013 RGP
Total Dichlorobenzene	Monitor Only	2013 RGP	763	2013 RGP
1,1-Dichloroethane (DCA)	Monitor Only	2013 RGP	70	2013 RGP
1,2-Dichloroethane	3.04	RI WQ	5	2013 RGP
1,1 - Dichloroethylene (DCE)	3.2	2013 RGP	3.2	2013 RGP

2018 RI RGP Limits For Class AA Freshwaters

Pollutant	Chronic (ug/l)	Limit Source	Acute (ug/l)	Limit Source
<i>cis</i> -1,2 Dichloroethylene	Monitor Only	2013 RGP	70	2013 RGP
Methylene Chloride	4.6	EPA RGP	4.6	EPA RGP
Tetrachloroethylene	4.24	RI WQ	5	2013 RGP
1,1,1 Trichloroethane	Monitor Only	2013 RGP	200	2013 RGP
1,1,2 Trichloroethane	4.72	RI WQ	5	2013 RGP
Trichloroethylene	5	2013 RGP	5	2013 RGP
Vinyl Chloride	0.02	RI WQ	2	2013 RGP
Total Petroleum Hydrocarbons	Monitor Only	2013 RGP	1000	2013 RGP
Total Phenols	4.48	RI WQ	200.8	RI WQ
Pentachlorophenol (PCP)	0.04	RI WQ	0.05	RI WQ
Total Phthalates	3	2013 RGP	190	EPA 2017 RGP TBEL
Bis (2-Ethylhexyl) Phthalate	6	2013 RGP	6	2013 RGP
Total Polychlorinated Biphenyls (PCBs)	0.000064	2013 RGP	0.000064	2013 RGP
Acetone	Monitor Only	2013 RGP	7970	EPA 2017 RGP TBEL
Total Suspended Solids	Monitor Only	EPA 2017 RGP TBEL	30000	EPA 2017 RGP TBEL
1,4 Dioxane	Monitor Only	2013 RGP	200	EPA 2017 RGP TBEL
Total BTEX	Monitor Only	2013 RGP	100	2013 RGP
Iron (Total Recoverable)	See Metals WS	See Metals WS	See Metals WS	See Metals WS
E. VOC Sites Containing Other Contaminants				
Ammonia	Monitor Only	EPA 2017 RGP TBEL	Monitor Only	EPA 2017 RGP TBEL
Ethanol	Monitor Only	EPA 2017 RGP TBEL	Monitor Only	EPA 2017 RGP TBEL
Total Suspended Solids	Monitor Only	EPA 2017 RGP TBEL	30000	EPA 2017 RGP TBEL
Total Residual Chlorine	11	RI WQ	19	RI WQ
Total Petroleum Hydrocarbons	Monitor Only	2013 RGP	1000	2013 RGP
Cyanide	4.16	RI WQ	17.6	RI WQ
Benzene	4.72	RI WQ	5	2013 RGP
Toluene	11.2	RI WQ	508	RI WQ
Ethylbenzene	28.8	RI WQ	1280	RI WQ
(<i>m,p,o</i>) Xylenes	2.4	RI WQ	106.4	RI WQ
Total BTEX	Monitor Only	2013 RGP	100	2013 RGP
Ethylene dibromide	Monitor Only	2013 RGP	0.05	2013 RGP
Methyl-t-Butyl Ether (MTBE)	Monitor Only	2013 RGP	70	2013 RGP
tert-Amyl Methyl Ether	Monitor Only	2013 RGP	Monitor Only	2013 RGP
Carbon Tetrachloride	1.84	RI WQ	4.4	2013 RGP
1,4 Dichlorobenzene	0.96	RI WQ	5	2013 RGP
1,2 Dichlorobenzene	1.44	RI WQ	63.2	RI WQ
1,3 Dichlorobenzene	6.96	RI WQ	312	RI WQ
Total Dichlorobenzene	Monitor Only	2013 RGP	763	2013 RGP
1,1 Dichloroethane	Monitor Only	2013 RGP	70	2013 RGP
1,2 Dichloroethane	3.04	RI WQ	5	2013 RGP
1,1 Dichloroethylene	3.2	2013 RGP	3.2	2013 RGP
<i>cis</i> -1,2 Dichloroethylene	Monitor Only	2013 RGP	70	2013 RGP
Dichloromethane	Monitor Only	2013 RGP	4.6	2013 RGP
Tetrachloroethylene	4.24	RI WQ	5	2013 RGP
1,1,1 Trichloroethane	Monitor Only	2013 RGP	200	2013 RGP
1,1,2 Trichloroethane	4.72	RI WQ	5	2013 RGP
Trichloroethylene	5	2013 RGP	5	2013 RGP
Vinyl Chloride	0.02	RI WQ	2	2013 RGP
Acetone	Monitor Only	2013 RGP	7970	EPA 2017 RGP TBEL
1,4 Dioxane	Monitor Only	2013 RGP	200	EPA 2017 RGP TBEL
Total Phenols	4.48	RI WQ	200.8	RI WQ
Pentachlorophenol (PCP)	0.04	RI WQ	0.05	RI WQ
Total Phthalates	3	2013 RGP	190	EPA 2017 RGP TBEL
Bis (2-Ethylhexyl) Phthalate	6	2013 RGP	6	2013 RGP
Total Group I Polycyclic Aromatic Hydrocarbons	0.03	RI WQ	1	EPA 2017 RGP TBEL
Benzo (a) Anthracene	Monitor Only	2013 RGP	0.0038	2013 RGP
Benzo (a) Pyrene	Monitor Only	2013 RGP	0.0038	2013 RGP
Benzo (b) Fluoranthene	Monitor Only	2013 RGP	0.0038	2013 RGP
Benzo (k) Fluoranthene	Monitor Only	2013 RGP	0.0038	2013 RGP
Chrysene	Monitor Only	2013 RGP	0.0038	2013 RGP
Dibenzo (a,h) anthracene	Monitor Only	2013 RGP	0.0038	2013 RGP
Indeno (1,2,3-cd) Pyrene	Monitor Only	2013 RGP	0.0038	2013 RGP
Total Group II Polycyclic Aromatic Hydrocarbons (PAH)	0.03	RI WQ	100	2013 RGP
Acenaphthene	1.52	RI WQ	1.9	2013 RGP

2018 RI RGP Limits For Class AA Freshwaters

Pollutant	Chronic (ug/l)	Limit Source	Acute (ug/l)	Limit Source
Acenaphthylene	Monitor Only	2013 RGP	Monitor Only	2013 RGP
Anthracene	6640	RI WQ	Monitor Only	2013 RGP
Benzo (ghi) Perylene	Monitor Only	2013 RGP	Monitor Only	2013 RGP
Fluoranthene	3.52	RI WQ	159.2	RI WQ
Fluorene	880	RI WQ	Monitor Only	2013 RGP
Naphthalene	2.08	RI WQ	20	2013 RGP
Phenanthrene	Monitor Only	2013 RGP	Monitor Only	2013 RGP
Pyrene	664	2013 RGP	Monitor Only	2013 RGP
Total Polychlorinated Biphenyls (PCBs)	0.000064	2013 RGP	0.000064	2013 RGP
Antimony	See Metals WS	See Metals WS	See Metals WS	See Metals WS
Arsenic	See Metals WS	See Metals WS	See Metals WS	See Metals WS
Cadmium	See Metals WS	See Metals WS	See Metals WS	See Metals WS
Chromium III (trivalent, total recoverable)	See Metals WS	See Metals WS	See Metals WS	See Metals WS
Chromium VI (hexavalent, total recoverable)	See Metals WS	See Metals WS	See Metals WS	See Metals WS
Copper	See Metals WS	See Metals WS	See Metals WS	See Metals WS
Lead (Total Recoverable)	See Metals WS	See Metals WS	See Metals WS	See Metals WS
Mercury	See Metals WS	See Metals WS	See Metals WS	See Metals WS
Nickel (total recoverable)	See Metals WS	See Metals WS	See Metals WS	See Metals WS
Selenium	See Metals WS	See Metals WS	See Metals WS	See Metals WS
Silver	See Metals WS	See Metals WS	See Metals WS	See Metals WS
Zinc (total recoverable)	See Metals WS	See Metals WS	See Metals WS	See Metals WS
Iron (Total Recoverable)	See Metals WS	See Metals WS	See Metals WS	See Metals WS
F. Sites Containing Primarily Metals				
Antimony	See Metals WS	See Metals WS	See Metals WS	See Metals WS
Arsenic	See Metals WS	See Metals WS	See Metals WS	See Metals WS
Cadmium	See Metals WS	See Metals WS	See Metals WS	See Metals WS
Chromium III (trivalent, total recoverable)	See Metals WS	See Metals WS	See Metals WS	See Metals WS
Chromium VI (hexavalent, total recoverable)	See Metals WS	See Metals WS	See Metals WS	See Metals WS
Copper	See Metals WS	See Metals WS	See Metals WS	See Metals WS
Lead (Total Recoverable)	See Metals WS	See Metals WS	See Metals WS	See Metals WS
Mercury	See Metals WS	See Metals WS	See Metals WS	See Metals WS
Nickel (total recoverable)	See Metals WS	See Metals WS	See Metals WS	See Metals WS
Selenium	See Metals WS	See Metals WS	See Metals WS	See Metals WS
Silver	See Metals WS	See Metals WS	See Metals WS	See Metals WS
Zinc (total recoverable)	See Metals WS	See Metals WS	See Metals WS	See Metals WS
Iron (Total Recoverable)	See Metals WS	See Metals WS	See Metals WS	See Metals WS
Cyanide	4.16	RI WQ	17.6	RI WQ
Carbon Tetrachloride	1.84	RI WQ	4.4	2013 RGP
1,2 (or o) -Dichlorobenzene (DCB)	1.44	RI WQ	63.2	RI WQ
1,3 (or m) - Dichlorobenzene	6.96	RI WQ	312	RI WQ
1,4 (or p) - Dichlorobenzene	0.96	RI WQ	5	2013 RGP
Total Dichlorobenzene	Monitor Only	2013 RGP	763	2013 RGP
1,1 Dichloroethane	Monitor Only	2013 RGP	70	2013 RGP
1,2 Dichloroethane	3.04	RI WQ	5	2013 RGP
1,1 Dichloroethylene	3.2	2013 RGP	3.2	2013 RGP
cis-1,2 Dichloroethylene	Monitor Only	2013 RGP	70	2013 RGP
Methylene Chloride	4.6	EPA RGP	4.6	EPA RGP
Tetrachloroethylene	4.24	RI WQ	5	2013 RGP
1,1,1 Trichloroethane	Monitor Only	2013 RGP	200	2013 RGP
1,1,2 Trichloroethane	4.72	RI WQ	5	2013 RGP
Trichloroethylene	5	2013 RGP	5	2013 RGP
Vinyl Chloride	0.02	RI WQ	2	2013 RGP
Total Suspended Solids	Monitor Only	EPA 2017 RGP TBEL	30000	EPA 2017 RGP TBEL
3.G. Contaminated Construction Dewatering				
Ammonia	Monitor Only	EPA 2017 RGP TBEL	Monitor Only	EPA 2017 RGP TBEL
Ethanol	Monitor Only	EPA 2017 RGP TBEL	Monitor Only	EPA 2017 RGP TBEL
Total Suspended Solids	Monitor Only	EPA 2017 RGP TBEL	30000	EPA 2017 RGP TBEL
Total Residual Chlorine	11	RI WQ	19	RI WQ
Total Petroleum Hydrocarbons	Monitor Only	2013 RGP	1000	2013 RGP
Cyanide	4.16	RI WQ	17.6	RI WQ
Benzene	4.72	RI WQ	5	2013 RGP
Toluene	11.2	RI WQ	508	RI WQ
Ethylbenzene	28.8	RI WQ	1280	RI WQ
(m,p,o) Xylenes	2.4	RI WQ	106.4	RI WQ

2018 RI RGP Limits For Class AA Freshwaters

Pollutant	Chronic (ug/l)	Limit Source	Acute (ug/l)	Limit Source
Total BTEX	Monitor Only	2013 RGP	100	2013 RGP
Ethylene dibromide	Monitor Only	2013 RGP	0.05	2013 RGP
Methyl-t-Butyl Ether (MTBE)	Monitor Only	2013 RGP	70	2013 RGP
tert-Amyl Methyl Ether	Monitor Only	2013 RGP	Monitor Only	2013 RGP
Carbon Tetrachloride	1.84	RI WQ	4.4	2013 RGP
1,4 Dichlorobenzene	0.96	RI WQ	5	2013 RGP
1,2 Dichlorobenzene	1.44	RI WQ	63.2	RI WQ
1,3 Dichlorobenzene	6.96	RI WQ	312	RI WQ
Total Dichlorobenzene	Monitor Only	2013 RGP	763	2013 RGP
1,1 Dichloroethane	Monitor Only	2013 RGP	70	2013 RGP
1,2 Dichloroethane	3.04	RI WQ	5	2013 RGP
1,1 Dichloroethylene	3.2	2013 RGP	3.2	2013 RGP
cis-1,2 Dichloroethylene	Monitor Only	2013 RGP	70	2013 RGP
Dichloromethane	Monitor Only	2013 RGP	4.6	2013 RGP
Tetrachloroethylene	4.24	RI WQ	5	2013 RGP
1,1,1 Trichloroethane	Monitor Only	2013 RGP	200	2013 RGP
1,1,2 Trichloroethane	4.72	RI WQ	5	2013 RGP
Trichloroethylene	5	2013 RGP	5	2013 RGP
Vinyl Chloride	0.02	RI WQ	2	2013 RGP
Acetone	Monitor Only	2013 RGP	7970	EPA 2017 RGP TBEL
1,4 Dioxane	Monitor Only	2013 RGP	200	EPA 2017 RGP TBEL
Total Phenols	4.48	RI WQ	200.8	RI WQ
Pentachlorophenol (PCP)	0.04	RI WQ	0.05	RI WQ
Total Phthalates	3	2013 RGP	190	EPA 2017 RGP TBEL
Bis (2-Ethylhexyl) Phthalate	6	2013 RGP	6	2013 RGP
Total Group I Polycyclic Aromatic Hydrocarbons	0.03	RI WQ	1	EPA 2017 RGP TBEL
Benzo (a) Anthracene	Monitor Only	2013 RGP	0.0038	2013 RGP
Benzo (a) Pyrene	Monitor Only	2013 RGP	0.0038	2013 RGP
Benzo (b) Fluoranthene	Monitor Only	2013 RGP	0.0038	2013 RGP
Benzo (k) Fluoranthene	Monitor Only	2013 RGP	0.0038	2013 RGP
Chrysene	Monitor Only	2013 RGP	0.0038	2013 RGP
Dibenzo (a,h) anthracene	Monitor Only	2013 RGP	0.0038	2013 RGP
Indeno (1,2,3-cd) Pyrene	Monitor Only	2013 RGP	0.0038	2013 RGP
Total Group II Polycyclic Aromatic Hydrocarbons (PAH)	0.03	RI WQ	100	2013 RGP
Acenaphthene	1.52	RI WQ	1.9	2013 RGP
Acenaphthylene	Monitor Only	2013 RGP	Monitor Only	2013 RGP
Anthracene	6640	RI WQ	Monitor Only	2013 RGP
Benzo (ghi) Perylene	Monitor Only	2013 RGP	Monitor Only	2013 RGP
Fluoranthene	3.52	RI WQ	159.2	RI WQ
Fluorene	880	RI WQ	Monitor Only	2013 RGP
Napthalene	2.08	RI WQ	20	2013 RGP
Phenanthrene	Monitor Only	2013 RGP	Monitor Only	2013 RGP
Pyrene	664	2013 RGP	Monitor Only	2013 RGP
Total Polychlorinated Biphenyls (PCBs)	0.000064	2013 RGP	0.000064	2013 RGP
Antimony	See Metals WS	See Metals WS	See Metals WS	See Metals WS
Arsenic	See Metals WS	See Metals WS	See Metals WS	See Metals WS
Cadmium	See Metals WS	See Metals WS	See Metals WS	See Metals WS
Chromium III (trivalent, total recoverable)	See Metals WS	See Metals WS	See Metals WS	See Metals WS
Chromium VI (hexavalent, total recoverable)	See Metals WS	See Metals WS	See Metals WS	See Metals WS
Copper	See Metals WS	See Metals WS	See Metals WS	See Metals WS
Lead (Total Recoverable)	See Metals WS	See Metals WS	See Metals WS	See Metals WS
Mercury	See Metals WS	See Metals WS	See Metals WS	See Metals WS
Nickel (total recoverable)	See Metals WS	See Metals WS	See Metals WS	See Metals WS
Selenium	See Metals WS	See Metals WS	See Metals WS	See Metals WS
Silver	See Metals WS	See Metals WS	See Metals WS	See Metals WS
Zinc (total recoverable)	See Metals WS	See Metals WS	See Metals WS	See Metals WS
Iron (Total Recoverable)	See Metals WS	See Metals WS	See Metals WS	See Metals WS
4. Miscellaneous Discharges				
H. Pump Testing, Well Development or Rehabilitation				
Ammonia	Monitor Only	EPA 2017 RGP TBEL	Monitor Only	EPA 2017 RGP TBEL
Ethanol	Monitor Only	EPA 2017 RGP TBEL	Monitor Only	EPA 2017 RGP TBEL
Total Suspended Solids	Monitor Only	EPA 2017 RGP TBEL	30000	EPA 2017 RGP TBEL
Total Residual Chlorine	11	RI WQ	19	RI WQ
Total Petroleum Hydrocarbons	Monitor Only	2013 RGP	1000	2013 RGP

2018 RI RGP Limits For Class AA Freshwaters

Pollutant	Chronic (ug/l)	Limit Source	Acute (ug/l)	Limit Source
Cyanide	4.16	RI WQ	17.6	RI WQ
Benzene	4.72	RI WQ	5	2013 RGP
Toluene	11.2	RI WQ	508	RI WQ
Ethylbenzene	28.8	RI WQ	1280	RI WQ
(m,p,o) Xylenes	2.4	RI WQ	106.4	RI WQ
Total BTEX	Monitor Only	2013 RGP	100	2013 RGP
Ethylene dibromide	Monitor Only	2013 RGP	0.05	2013 RGP
Methyl-t-Butyl Ether (MTBE)	Monitor Only	2013 RGP	70	2013 RGP
tert-Amyl Methyl Ether	Monitor Only	2013 RGP	Monitor Only	2013 RGP
Carbon Tetrachloride	1.84	RI WQ	4.4	2013 RGP
1,4 Dichlorobenzene	0.96	RI WQ	5	2013 RGP
1,2 Dichlorobenzene	1.44	RI WQ	63.2	RI WQ
1,3 Dichlorobenzene	6.96	RI WQ	312	RI WQ
Total Dichlorobenzene	Monitor Only	2013 RGP	763	2013 RGP
1,1 Dichloroethane	Monitor Only	2013 RGP	70	2013 RGP
1,2 Dichloroethane	3.04	RI WQ	5	2013 RGP
1,1 Dichloroethylene	3.2	2013 RGP	3.2	2013 RGP
cis-1,2 Dichloroethylene	Monitor Only	2013 RGP	70	2013 RGP
Dichloromethane	Monitor Only	2013 RGP	4.6	2013 RGP
Tetrachloroethylene	4.24	RI WQ	5	2013 RGP
1,1,1 Trichloroethane	Monitor Only	2013 RGP	200	2013 RGP
1,1,2 Trichloroethane	4.72	RI WQ	5	2013 RGP
Trichloroethylene	5	2013 RGP	5	2013 RGP
Vinyl Chloride	0.02	RI WQ	2	2013 RGP
Acetone	Monitor Only	2013 RGP	7970	EPA 2017 RGP TBEL
1,4 Dioxane	Monitor Only	2013 RGP	200	EPA 2017 RGP TBEL
Total Phenols	4.48	RI WQ	200.8	RI WQ
Pentachlorophenol (PCP)	0.04	RI WQ	0.05	RI WQ
Total Phthalates	3	2013 RGP	190	EPA 2017 RGP TBEL
Bis (2-Ethylhexyl) Phthalate	6	2013 RGP	6	2013 RGP
Total Group I Polycyclic Aromatic Hydrocarbons	0.03	RI WQ	1	EPA 2017 RGP TBEL
Benzo (a) Anthracene	Monitor Only	2013 RGP	0.0038	2013 RGP
Benzo (a) Pyrene	Monitor Only	2013 RGP	0.0038	2013 RGP
Benzo (b) Fluoranthene	Monitor Only	2013 RGP	0.0038	2013 RGP
Benzo (k) Fluoranthene	Monitor Only	2013 RGP	0.0038	2013 RGP
Chrysene	Monitor Only	2013 RGP	0.0038	2013 RGP
Dibenzo (a,h) anthracene	Monitor Only	2013 RGP	0.0038	2013 RGP
Indeno (1,2,3-cd) Pyrene	Monitor Only	2013 RGP	0.0038	2013 RGP
Total Group II Polycyclic Aromatic Hydrocarbons (PAH)	0.03	RI WQ	100	2013 RGP
Acenaphthene	1.52	RI WQ	1.9	2013 RGP
Acenaphthylene	Monitor Only	2013 RGP	Monitor Only	2013 RGP
Anthracene	6640	RI WQ	Monitor Only	2013 RGP
Benzo (ghi) Perylene	Monitor Only	2013 RGP	Monitor Only	2013 RGP
Fluoranthene	3.52	RI WQ	159.2	RI WQ
Fluorene	880	RI WQ	Monitor Only	2013 RGP
Napthalene	2.08	RI WQ	20	2013 RGP
Phenanthrene	Monitor Only	2013 RGP	Monitor Only	2013 RGP
Pyrene	664	2013 RGP	Monitor Only	2013 RGP
Total Polychlorinated Biphenyls (PCBs)	0.000064	2013 RGP	0.000064	2013 RGP
Antimony	See Metals WS	See Metals WS	See Metals WS	See Metals WS
Arsenic	See Metals WS	See Metals WS	See Metals WS	See Metals WS
Cadmium	See Metals WS	See Metals WS	See Metals WS	See Metals WS
Chromium III (trivalent, total recoverable)	See Metals WS	See Metals WS	See Metals WS	See Metals WS
Chromium VI (hexavalent, total recoverable)	See Metals WS	See Metals WS	See Metals WS	See Metals WS
Copper	See Metals WS	See Metals WS	See Metals WS	See Metals WS
Lead (Total Recoverable)	See Metals WS	See Metals WS	See Metals WS	See Metals WS
Mercury	See Metals WS	See Metals WS	See Metals WS	See Metals WS
Nickel (total recoverable)	See Metals WS	See Metals WS	See Metals WS	See Metals WS
Selenium	See Metals WS	See Metals WS	See Metals WS	See Metals WS
Silver	See Metals WS	See Metals WS	See Metals WS	See Metals WS
Zinc (total recoverable)	See Metals WS	See Metals WS	See Metals WS	See Metals WS
Iron (Total Recoverable)	See Metals WS	See Metals WS	See Metals WS	See Metals WS
I. Hydrostatic Testing of Pipelines and Tanks				
Ethanol	Monitor Only	EPA 2017 RGP TBEL	Monitor Only	EPA 2017 RGP TBEL

2018 RI RGP Limits For Class AA Freshwaters

Pollutant	Chronic (ug/l)	Limit Source	Acute (ug/l)	Limit Source
Total Suspended Solids	Monitor Only	EPA 2017 RGP TBEL	30000	EPA 2017 RGP TBEL
Total Residual Chlorine	11	RI WQ	19	RI WQ
Total Petroleum Hydrocarbons	Monitor Only	2013 RGP	1000	2013 RGP
Benzene	4.72	RI WQ	5	2013 RGP
Total BTEX	Monitor Only	2013 RGP	100	2013 RGP
Naphthalene	2.08	RI WQ	20	2013 RGP
Ethylene dibromide	Monitor Only	2013 RGP	0.05	2013 RGP
Methyl-t-Butyl Ether (MTBE)	Monitor Only	2013 RGP	70	2013 RGP
tert-Butyl Alcohol	Monitor Only	2013 RGP	Monitor Only	2013 RGP
tert-Amyl Methyl Ether	Monitor Only	2013 RGP	Monitor Only	2013 RGP
Total Group I Polycyclic Aromatic Hydrocarbons (PAH)	0.03	RI WQ	1	EPA 2017 RGP TBEL
Bis (2-Ethylhexyl) Phthalate	6	2013 RGP	6	2013 RGP
Benzo (a) Anthracene	Monitor Only	2013 RGP	0.0038	2013 RGP
Benzo (a) Pyrene	Monitor Only	2013 RGP	0.0038	2013 RGP
Benzo (b) Fluoranthene	Monitor Only	2013 RGP	0.0038	2013 RGP
Benzo (k) Fluoranthene	Monitor Only	2013 RGP	0.0038	2013 RGP
Chrysene	Monitor Only	2013 RGP	0.0038	2013 RGP
Dibenzo (a,h) anthracene	Monitor Only	2013 RGP	0.0038	2013 RGP
Indeno (1,2,3-cd) Pyrene	Monitor Only	2013 RGP	0.0038	2013 RGP
Copper	See Metals WS	See Metals WS	See Metals WS	See Metals WS
Lead (Total Recoverable)	See Metals WS	See Metals WS	See Metals WS	See Metals WS
Nickel (total recoverable)	See Metals WS	See Metals WS	See Metals WS	See Metals WS
Chromium III (trivalent, total recoverable)	See Metals WS	See Metals WS	See Metals WS	See Metals WS
Chromium VI (hexavalent, total recoverable)	See Metals WS	See Metals WS	See Metals WS	See Metals WS
Zinc (total recoverable)	See Metals WS	See Metals WS	See Metals WS	See Metals WS
Iron (Total Recoverable)	See Metals WS	See Metals WS	See Metals WS	See Metals WS
J. Contaminated Sumps				
Ammonia	Monitor Only	EPA 2017 RGP TBEL	Monitor Only	EPA 2017 RGP TBEL
Ethanol	Monitor Only	EPA 2017 RGP TBEL	Monitor Only	EPA 2017 RGP TBEL
Total Suspended Solids	Monitor Only	EPA 2017 RGP TBEL	30000	EPA 2017 RGP TBEL
Total Residual Chlorine	11	RI WQ	19	RI WQ
Total Petroleum Hydrocarbons	Monitor Only	2013 RGP	1000	2013 RGP
Cyanide	4.16	RI WQ	17.6	RI WQ
Benzene	4.72	RI WQ	5	2013 RGP
Toluene	11.2	RI WQ	508	RI WQ
Ethylbenzene	28.8	RI WQ	1280	RI WQ
(m,p,o) Xylenes	2.4	RI WQ	106.4	RI WQ
Total BTEX	Monitor Only	2013 RGP	100	2013 RGP
Ethylene dibromide	Monitor Only	2013 RGP	0.05	2013 RGP
Methyl-t-Butyl Ether (MTBE)	Monitor Only	2013 RGP	70	2013 RGP
tert-Amyl Methyl Ether	Monitor Only	2013 RGP	Monitor Only	2013 RGP
Carbon Tetrachloride	1.84	RI WQ	4.4	2013 RGP
1,4 Dichlorobenzene	0.96	RI WQ	5	2013 RGP
1,2 Dichlorobenzene	1.44	RI WQ	63.2	RI WQ
1,3 Dichlorobenzene	6.96	RI WQ	312	RI WQ
Total Dichlorobenzene	Monitor Only	2013 RGP	763	2013 RGP
1,1 Dichloroethane	Monitor Only	2013 RGP	70	2013 RGP
1,2 Dichloroethane	3.04	RI WQ	5	2013 RGP
1,1 Dichloroethylene	3.2	2013 RGP	3.2	2013 RGP
cis-1,2 Dichloroethylene	Monitor Only	2013 RGP	70	2013 RGP
Dichloromethane	Monitor Only	2013 RGP	4.6	2013 RGP
Tetrachloroethylene	4.24	RI WQ	5	2013 RGP
1,1,1 Trichloroethane	Monitor Only	2013 RGP	200	2013 RGP
1,1,2 Trichloroethane	4.72	RI WQ	5	2013 RGP
Trichloroethylene	5	2013 RGP	5	2013 RGP
Vinyl Chloride	0.02	RI WQ	2	2013 RGP
Acetone	Monitor Only	2013 RGP	7970	EPA 2017 RGP TBEL
1,4 Dioxane	Monitor Only	2013 RGP	200	EPA 2017 RGP TBEL
Total Phenols	4.48	RI WQ	200.8	RI WQ
Pentachlorophenol (PCP)	0.04	RI WQ	0.05	RI WQ
Total Phthalates	3	2013 RGP	190	EPA 2017 RGP TBEL
Bis (2-Ethylhexyl) Phthalate	6	2013 RGP	6	2013 RGP
Polycyclic Aromatic Hydrocarbons (PAH)	0.03	RI WQ	1	EPA 2017 RGP TBEL
Benzo (a) Anthracene	Monitor Only	2013 RGP	0.0038	2013 RGP

2018 RI RGP Limits For Class AA Freshwaters

Pollutant	Chronic (ug/l)	Limit Source	Acute (ug/l)	Limit Source
<i>Benzo (a) Pyrene</i>	Monitor Only	2013 RGP	0.0038	2013 RGP
<i>Benzo (b) Fluoranthene</i>	Monitor Only	2013 RGP	0.0038	2013 RGP
<i>Benzo (k) Fluoranthene</i>	Monitor Only	2013 RGP	0.0038	2013 RGP
<i>Chrysene</i>	Monitor Only	2013 RGP	0.0038	2013 RGP
<i>Dibenzo (a,h) anthracene</i>	Monitor Only	2013 RGP	0.0038	2013 RGP
<i>Indeno (1,2,3-cd) Pyrene</i>	Monitor Only	2013 RGP	0.0038	2013 RGP
<i>Polycyclic Aromatic Hydrocarbons (PAH)</i>	0.03	RI WQ	100	2013 RGP
<i>Acenaphthene</i>	1.52	RI WQ	1.9	2013 RGP
<i>Acenaphthylene</i>	Monitor Only	2013 RGP	Monitor Only	2013 RGP
<i>Anthracene</i>	6640	RI WQ	Monitor Only	2013 RGP
<i>Benzo (ghi) Perylene</i>	Monitor Only	2013 RGP	Monitor Only	2013 RGP
<i>Fluoranthene</i>	3.52	RI WQ	159.2	RI WQ
<i>Fluorene</i>	880	RI WQ	Monitor Only	2013 RGP
<i>Naphthalene</i>	2.08	RI WQ	20	2013 RGP
<i>Phenanthrene</i>	Monitor Only	2013 RGP	Monitor Only	2013 RGP
<i>Pyrene</i>	664	2013 RGP	Monitor Only	2013 RGP
<i>Total Polychlorinated Biphenyls (PCBs)</i>	0.000064	2013 RGP	0.000064	2013 RGP
<i>Antimony</i>	See Metals WS	See Metals WS	See Metals WS	See Metals WS
<i>Arsenic</i>	See Metals WS	See Metals WS	See Metals WS	See Metals WS
<i>Cadmium</i>	See Metals WS	See Metals WS	See Metals WS	See Metals WS
<i>Chromium III (trivalent, total recoverable)</i>	See Metals WS	See Metals WS	See Metals WS	See Metals WS
<i>Chromium VI (hexavalent, total recoverable)</i>	See Metals WS	See Metals WS	See Metals WS	See Metals WS
<i>Copper</i>	See Metals WS	See Metals WS	See Metals WS	See Metals WS
<i>Lead (Total Recoverable)</i>	See Metals WS	See Metals WS	See Metals WS	See Metals WS
<i>Mercury</i>	See Metals WS	See Metals WS	See Metals WS	See Metals WS
<i>Nickel (total recoverable)</i>	See Metals WS	See Metals WS	See Metals WS	See Metals WS
<i>Selenium</i>	See Metals WS	See Metals WS	See Metals WS	See Metals WS
<i>Silver</i>	See Metals WS	See Metals WS	See Metals WS	See Metals WS
<i>Zinc (total recoverable)</i>	See Metals WS	See Metals WS	See Metals WS	See Metals WS
<i>Iron (Total Recoverable)</i>	See Metals WS	See Metals WS	See Metals WS	See Metals WS

2018 RI RGP Limits for Non Class AA Freshwaters

Pollutant	Chronic (ug/l)	Limit Source	Acute (ug/l)	Limit Source
I. Petroleum Related Site Remediation				
A. Gasoline Remediation Sites				
Ethanol	Monitor Only	EPA 2017 RGP TBEL	Monitor Only	EPA 2017 RGP TBEL
Benzene	4.72	RI WQ	5	2013 RGP
Toluene	11.2	RI WQ	508	RI WQ
Ethylbenzene	28.8	RI WQ	1280	RI WQ
(m,p,o) Xylenes	2.4	RI WQ	106.4	RI WQ
Total BTEX	Monitor Only	2013 RGP	100	2013 RGP
Naphthalene	2.08	RI WQ	20	2013 RGP
Ethylene dibromide	Monitor Only	2013 RGP	0.05	2013 RGP
Methyl-t-Butyl Ether (MTBE)	Monitor Only	2013 RGP	70	2013 RGP
tert-Butyl Alcohol	Monitor Only	2013 RGP	Monitor Only	2013 RGP
tert-Amyl Methyl Ether	Monitor Only	2013 RGP	Monitor Only	2013 RGP
Total Suspended Solids	Monitor Only	EPA 2017 RGP TBEL	30000	EPA 2017 RGP TBEL
Total Petroleum Hydrocarbons	Monitor Only	2013 RGP	1000	2013 RGP
Lead (Total Recoverable)	See Metals Worksheet	See Metals WS	See Metals Worksheet	See Metals WS
Iron (Total Recoverable)	See Metals Worksheet	See Metals WS	See Metals Worksheet	See Metals WS
B. Fuel Oils (and Other Oils) Sites				
Acetone	Monitor Only	2013 RGP	7970	EPA 2017 RGP TBEL
Total Suspended Solids	Monitor Only	EPA 2017 RGP TBEL	30000	EPA 2017 RGP TBEL
Total Petroleum Hydrocarbons	Monitor Only	2013 RGP	1000	2013 RGP
Naphthalene	2.08	RI WQ	20	2013 RGP
Total Group I Polycyclic Aromatic Hydrocarbons	0.14	RI WQ	1	EPA 2017 RGP TBEL
Benzo (a) Anthracene	Monitor Only	2013 RGP	0.0038	2013 RGP
Benzo (a) Pyrene	Monitor Only	2013 RGP	0.0038	2013 RGP
Benzo (b) Fluoranthene	Monitor Only	2013 RGP	0.0038	2013 RGP
Benzo (k) Fluoranthene	Monitor Only	2013 RGP	0.0038	2013 RGP
Chrysene	Monitor Only	2013 RGP	0.0038	2013 RGP
Dibenzo (a,h) anthracene	Monitor Only	2013 RGP	0.0038	2013 RGP
Indeno (1,2,3-cd) Pyrene	Monitor Only	2013 RGP	0.0038	2013 RGP
Total Group II Polycyclic Aromatic Hydrocarbons (PAH)	0.14	RI WQ	100	2013 RGP
Acenaphthene	1.52	RI WQ	1.9	2013 RGP
Acenaphthylene	Monitor Only	2013 RGP	Monitor Only	2013 RGP
Anthracene	32000	RI WQ	Monitor Only	2013 RGP
Benzo (ghi) Perylene	Monitor Only	2013 RGP	Monitor Only	2013 RGP
Fluoranthene	3.52	RI WQ	159.2	RI WQ
Fluorene	4240	RI WQ	Monitor Only	2013 RGP
Phenanthrene	Monitor Only	2013 RGP	Monitor Only	2013 RGP
Pyrene	3200	RI WQ	Monitor Only	2013 RGP
Benzene	4.72	RI WQ	5	2013 RGP
Toluene	11.2	RI WQ	508	RI WQ
Ethylbenzene	28.8	RI WQ	1280	RI WQ
(m,p,o) Xylenes	2.4	RI WQ	106.4	RI WQ
Total BTEX	Monitor Only	2013 RGP	100	2013 RGP
Methyl-t-Butyl Ether (MTBE)	Monitor Only	2013 RGP	70	2013 RGP
Nickel (total recoverable)	See Metals Worksheet	See Metals WS	See Metals Worksheet	See Metals WS
Chromium III (trivalent, total recoverable)	See Metals Worksheet	See Metals WS	See Metals Worksheet	See Metals WS
Chromium VI (hexavalent, total recoverable)	See Metals Worksheet	See Metals WS	See Metals Worksheet	See Metals WS
Zinc (total recoverable)	See Metals Worksheet	See Metals WS	See Metals Worksheet	See Metals WS
Iron (Total Recoverable)	See Metals Worksheet	See Metals WS	See Metals Worksheet	See Metals WS
C. Petroleum Sites Containing Other Pollutants				
Ammonia	Monitor Only	EPA 2017 RGP TBEL	Monitor Only	EPA 2017 RGP TBEL
Ethanol	Monitor Only	EPA 2017 RGP TBEL	Monitor Only	EPA 2017 RGP TBEL
Total Suspended Solids	Monitor Only	EPA 2017 RGP TBEL	30000	EPA 2017 RGP TBEL
Total Residual Chlorine	11	RI WQ	19	RI WQ
Total Petroleum Hydrocarbons	Monitor Only	2013 RGP	1000	2013 RGP
Cyanide	4.16	RI WQ	17.6	RI WQ
Benzene	4.72	RI WQ	5	2013 RGP
Toluene	11.2	RI WQ	508	RI WQ
Ethylbenzene	28.8	RI WQ	1280	RI WQ
(m,p,o) Xylenes	2.4	RI WQ	106.4	RI WQ
Total BTEX	Monitor Only	2013 RGP	100	2013 RGP
Ethylene dibromide	Monitor Only	2013 RGP	0.05	2013 RGP
Methyl-t-Butyl Ether (MTBE)	Monitor Only	2013 RGP	70	2013 RGP
tert-Amyl Methyl Ether	Monitor Only	2013 RGP	Monitor Only	2013 RGP
Carbon Tetrachloride	4.4	2013 RGP	4.4	2013 RGP
1,4 Dichlorobenzene	0.96	RI WQ	5	2013 RGP
1,2 Dichlorobenzene	1.44	RI WQ	63.2	RI WQ
1,3 Dichlorobenzene	6.96	RI WQ	31.2	RI WQ
Total Dichlorobenzene	Monitor Only	2013 RGP	763	2013 RGP
1,1 Dichloroethane	Monitor Only	2013 RGP	70	2013 RGP
1,2 Dichloroethane	5	2013 RGP	5	2013 RGP
1,1 Dichloroethylene	3.2	2013 RGP	3.2	2013 RGP

2018 RI RGP Limits for Non Class AA Freshwaters

Pollutant	Chronic (ug/l)	Limit Source	Acute (ug/l)	Limit Source
<i>cis</i> -1,2 Dichloroethylene	Monitor Only	2013 RGP	70	2013 RGP
Dichloromethane	Monitor Only	2013 RGP	4.6	2013 RGP
Tetrachloroethylene	4.24	RI WQ	5	2013 RGP
1,1,1 Trichloroethane	Monitor Only	2013 RGP	200	2013 RGP
1,1,2 Trichloroethane	5	2013 RGP	5	2013 RGP
Trichloroethylene	5	2013 RGP	5	2013 RGP
Vinyl Chloride	1.92	RI WQ	2	2013 RGP
Acetone	Monitor Only	2013 RGP	7970	EPA 2017 RGP TBEL
1,4 Dioxane	Monitor Only	2013 RGP	200	EPA 2017 RGP TBEL
Total Phenols	4.48	RI WQ	200.8	RI WQ
Pentachlorophenol (PCP)	0.04	RI WQ	0.05	RI WQ
Total Phthalates	3	2013 RGP	190	EPA 2017 RGP TBEL
Bis (2-Ethylhexyl) Phthalate	6	2013 RGP	6	2013 RGP
Total Group I Polycyclic Aromatic Hydrocarbons (PAH)	0.14	RI WQ	1	EPA 2017 RGP TBEL
Benzo (a) Anthracene	Monitor Only	2013 RGP	0.0038	2013 RGP
Benzo (a) Pyrene	Monitor Only	2013 RGP	0.0038	2013 RGP
Benzo (b) Fluoranthene	Monitor Only	2013 RGP	0.0038	2013 RGP
Benzo (k) Fluoranthene	Monitor Only	2013 RGP	0.0038	2013 RGP
Chrysene	Monitor Only	2013 RGP	0.0038	2013 RGP
Dibenzo (a,h) anthracene	Monitor Only	2013 RGP	0.0038	2013 RGP
Indeno (1,2,3-cd) Pyrene	Monitor Only	2013 RGP	0.0038	2013 RGP
Total Group II Polycyclic Aromatic Hydrocarbons (PAH)	0.14	RI WQ	100	2013 RGP
Acenaphthene	1.52	RI WQ	1.9	2013 RGP
Acenaphthylene	Monitor Only	2013 RGP	Monitor Only	2013 RGP
Anthracene	32000	RI WQ	Monitor Only	2013 RGP
Benzo (ghi) Perylene	Monitor Only	2013 RGP	Monitor Only	2013 RGP
Fluoranthene	3.52	RI WQ	159.2	RI WQ
Fluorene	4240	RI WQ	Monitor Only	2013 RGP
Naphthalene	2.08	RI WQ	20	2013 RGP
Phenanthrene	Monitor Only	2013 RGP	Monitor Only	2013 RGP
Pyrene	3200	RI WQ	Monitor Only	2013 RGP
Total Polychlorinated Biphenyls (PCBs)	0.000064	ANTIDEG	0.000064	2013 RGP
Antimony	See Metals Worksheet	See Metals WS	See Metals Worksheet	See Metals WS
Arsenic	See Metals Worksheet	See Metals WS	See Metals Worksheet	See Metals WS
Cadmium	See Metals Worksheet	See Metals WS	See Metals Worksheet	See Metals WS
Chromium III (trivalent, total recoverable)	See Metals Worksheet	See Metals WS	See Metals Worksheet	See Metals WS
Chromium VI (hexavalent, total recoverable)	See Metals Worksheet	See Metals WS	See Metals Worksheet	See Metals WS
Copper	See Metals Worksheet	See Metals WS	See Metals Worksheet	See Metals WS
Lead (Total Recoverable)	See Metals Worksheet	See Metals WS	See Metals Worksheet	See Metals WS
Mercury	See Metals Worksheet	See Metals WS	See Metals Worksheet	See Metals WS
Nickel (total recoverable)	See Metals Worksheet	See Metals WS	See Metals Worksheet	See Metals WS
Selenium	See Metals Worksheet	See Metals WS	See Metals Worksheet	See Metals WS
Silver	See Metals Worksheet	See Metals WS	See Metals Worksheet	See Metals WS
Zinc (total recoverable)	See Metals Worksheet	See Metals WS	See Metals Worksheet	See Metals WS
Iron (Total Recoverable)	See Metals Worksheet	See Metals WS	See Metals Worksheet	See Metals WS
2. Non-Petroleum (Not Gas and Oil) Site Remediation				
D. VOC Only Sites				
Carbon Tetrachloride	4.4	2013 RGP	4.4	2013 RGP
1,2 (or o) -Dichlorobenzene (DCB)	1.44	RI WQ	63.2	RI WQ
1,3 (or m) - Dichlorobenzene	6.96	RI WQ	312	RI WQ
1,4 (or p) -Dichlorobenzene	0.96	RI WQ	5	2013 RGP
Total Dichlorobenzene	Monitor Only	2013 RGP	763	2013 RGP
1,1-Dichloroethane (DCA)	Monitor Only	2013 RGP	70	2013 RGP
1,2-Dichloroethane	5	2013 RGP	5	2013 RGP
1,1 - Dichloroethylene (DCE)	3.2	2013 RGP	3.2	2013 RGP
<i>cis</i> -1,2 Dichloroethylene	Monitor Only	2013 RGP	70	2013 RGP
Methylene Chloride	4.6	RI BPJ	4.6	RI BPJ
Tetrachloroethylene	4.24	RI WQ	5	2013 RGP
1,1,1 Trichloroethane	Monitor Only	2013 RGP	200	2013 RGP
1,1,2 Trichloroethane	5	2013 RGP	5	2013 RGP
Trichloroethylene	5	2013 RGP	5	2013 RGP
Vinyl Chloride	1.92	RI WQ	2	2013 RGP
Total Petroleum Hydrocarbons	Monitor Only	2013 RGP	1000	2013 RGP
Total Phenols	4.48	RI WQ	200.8	RI WQ
Pentachlorophenol (PCP)	0.04	RI WQ	0.05	RI WQ
Total Phthalates	3	2013 RGP	190	EPA 2017 RGP TBEL
Bis (2-Ethylhexyl) Phthalate	6	2013 RGP	6	2013 RGP
Total Polychlorinated Biphenyls (PCBs)	0.000064	ANTIDEG	0.000064	2013 RGP
Acetone	Monitor Only	2013 RGP	7970	EPA 2017 RGP TBEL
1,4 Dioxane	Monitor Only	2013 RGP	200	EPA 2017 RGP TBEL
Total Suspended Solids	Monitor Only	EPA 2017 RGP TBEL	30000	EPA 2017 RGP TBEL
Total BTEX	Monitor Only	2013 RGP	100	2013 RGP
Iron (Total Recoverable)	See Metals Worksheet	See Metals WS	See Metals Worksheet	See Metals WS

2018 RI RGP Limits for Non Class AA Freshwaters

Pollutant	Chronic (ug/l)	Limit Source	Acute (ug/l)	Limit Source
E. VOC Sites Containing Other Contaminants				
Ammonia	Monitor Only	EPA 2017 RGP TBEL	Monitor Only	EPA 2017 RGP TBEL
Ethanol	Monitor Only	EPA 2017 RGP TBEL	Monitor Only	EPA 2017 RGP TBEL
Total Suspended Solids	Monitor Only	EPA 2017 RGP TBEL	30000	EPA 2017 RGP TBEL
Total Residual Chlorine	11	RI WQ	19	RI WQ
Total Petroleum Hydrocarbons	Monitor Only	2013 RGP	1000	2013 RGP
Cyanide	4.16	RI WQ	17.6	RI WQ
Benzene	4.72	RI WQ	5	2013 RGP
Toluene	11.2	RI WQ	508	RI WQ
Ethylbenzene	28.8	RI WQ	1280	RI WQ
(m,p,o) Xylenes	2.4	RI WQ	106.4	RI WQ
Total BTEX	Monitor Only	2013 RGP	100	2013 RGP
Ethylene dibromide	Monitor Only	2013 RGP	0.05	2013 RGP
Methyl-t-Butyl Ether (MTBE)	Monitor Only	2013 RGP	70	2013 RGP
tert-Amyl Methyl Ether	Monitor Only	2013 RGP	Monitor Only	2013 RGP
Carbon Tetrachloride	4.4	2013 RGP	4.4	2013 RGP
1,4 Dichlorobenzene	0.96	RI WQ	5	2013 RGP
1,2 Dichlorobenzene	1.44	RI WQ	63.2	RI WQ
1,3 Dichlorobenzene	6.96	RI WQ	312	RI WQ
Total Dichlorobenzene	Monitor Only	2013 RGP	763	2013 RGP
1,1 Dichloroethane	Monitor Only	2013 RGP	70	2013 RGP
1,2 Dichloroethane	5	2013 RGP	5	2013 RGP
1,1 Dichloroethylene	3.2	2013 RGP	3.2	2013 RGP
cis-1,2 Dichloroethylene	Monitor Only	2013 RGP	70	2013 RGP
Dichloromethane	Monitor Only	2013 RGP	4.6	2013 RGP
Tetrachloroethylene	4.24	RI WQ	5	2013 RGP
1,1,1 Trichloroethane	Monitor Only	2013 RGP	200	2013 RGP
1,1,2 Trichloroethane	5	2013 RGP	5	2013 RGP
Trichloroethylene	5	2013 RGP	5	2013 RGP
Vinyl Chloride	1.92	RI WQ	2	2013 RGP
Acetone	Monitor Only	2013 RGP	7970	EPA 2017 RGP TBEL
1,4 Dioxane	Monitor Only	2013 RGP	200	EPA 2017 RGP TBEL
Total Phenols	4.48	RI WQ	200.8	RI WQ
Pentachlorophenol (PCP)	0.04	RI WQ	0.05	RI WQ
Total Phthalates	3	2013 RGP	190	EPA 2017 RGP TBEL
Bis (2-Ethylhexyl) Phthalate	6	2013 RGP	6	2013 RGP
Total Group I Polycyclic Aromatic Hydrocarbons	0.14	RI WQ	1	EPA 2017 RGP TBEL
Benzo (a) Anthracene	Monitor Only	2013 RGP	0.0038	2013 RGP
Benzo (a) Pyrene	Monitor Only	2013 RGP	0.0038	2013 RGP
Benzo (b) Fluoranthene	Monitor Only	2013 RGP	0.0038	2013 RGP
Benzo (k) Fluoranthene	Monitor Only	2013 RGP	0.0038	2013 RGP
Chrysene	Monitor Only	2013 RGP	0.0038	2013 RGP
Dibenzo (a,h) anthracene	Monitor Only	2013 RGP	0.0038	2013 RGP
Indeno (1,2,3-cd) Pyrene	Monitor Only	2013 RGP	0.0038	2013 RGP
Total Group II Polycyclic Aromatic Hydrocarbons (PAH)	0.14	RI WQ	100	2013 RGP
Acenaphthene	1.52	RI WQ	1.9	2013 RGP
Acenaphthylene	Monitor Only	2013 RGP	Monitor Only	2013 RGP
Anthracene	32000	RI WQ	Monitor Only	2013 RGP
Benzo (ghi) Perylene	Monitor Only	2013 RGP	Monitor Only	2013 RGP
Fluoranthene	3.52	RI WQ	159.2	RI WQ
Fluorene	4240	RI WQ	Monitor Only	2013 RGP
Naphthalene	2.08	RI WQ	20	2013 RGP
Phenanthrene	Monitor Only	2013 RGP	Monitor Only	2013 RGP
Pyrene	3200	RI WQ	Monitor Only	2013 RGP
Total Polychlorinated Biphenyls (PCBs)	0.000064	ANTIDEG	0.000064	2013 RGP
Antimony	See Metals Worksheet	See Metals WS	See Metals Worksheet	See Metals WS
Arsenic	See Metals Worksheet	See Metals WS	See Metals Worksheet	See Metals WS
Cadmium	See Metals Worksheet	See Metals WS	See Metals Worksheet	See Metals WS
Chromium III (trivalent, total recoverable)	See Metals Worksheet	See Metals WS	See Metals Worksheet	See Metals WS
Chromium VI (hexavalent, total recoverable)	See Metals Worksheet	See Metals WS	See Metals Worksheet	See Metals WS
Copper	See Metals Worksheet	See Metals WS	See Metals Worksheet	See Metals WS
Lead (Total Recoverable)	See Metals Worksheet	See Metals WS	See Metals Worksheet	See Metals WS
Mercury	See Metals Worksheet	See Metals WS	See Metals Worksheet	See Metals WS
Nickel (total recoverable)	See Metals Worksheet	See Metals WS	See Metals Worksheet	See Metals WS
Selenium	See Metals Worksheet	See Metals WS	See Metals Worksheet	See Metals WS
Silver	See Metals Worksheet	See Metals WS	See Metals Worksheet	See Metals WS
Zinc (total recoverable)	See Metals Worksheet	See Metals WS	See Metals Worksheet	See Metals WS
Iron (Total Recoverable)	See Metals Worksheet	See Metals WS	See Metals Worksheet	See Metals WS
F. Sites Containing Primarily Metals				
Antimony	See Metals Worksheet	See Metals WS	See Metals Worksheet	See Metals WS
Arsenic	See Metals Worksheet	See Metals WS	See Metals Worksheet	See Metals WS
Cadmium	See Metals Worksheet	See Metals WS	See Metals Worksheet	See Metals WS
Chromium III (trivalent, total recoverable)	See Metals Worksheet	See Metals WS	See Metals Worksheet	See Metals WS

2018 RI RGP Limits for Non Class AA Freshwaters

Pollutant	Chronic (ug/l)	Limit Source	Acute (ug/l)	Limit Source
<i>Chromium VI (hexavalent, total recoverable)</i>	See Metals Worksheet	See Metals WS	See Metals Worksheet	See Metals WS
<i>Copper</i>	See Metals Worksheet	See Metals WS	See Metals Worksheet	See Metals WS
<i>Lead (Total Recoverable)</i>	See Metals Worksheet	See Metals WS	See Metals Worksheet	See Metals WS
<i>Mercury</i>	See Metals Worksheet	See Metals WS	See Metals Worksheet	See Metals WS
<i>Nickel (total recoverable)</i>	See Metals Worksheet	See Metals WS	See Metals Worksheet	See Metals WS
<i>Selenium</i>	See Metals Worksheet	See Metals WS	See Metals Worksheet	See Metals WS
<i>Silver</i>	See Metals Worksheet	See Metals WS	See Metals Worksheet	See Metals WS
<i>Zinc (total recoverable)</i>	See Metals Worksheet	See Metals WS	See Metals Worksheet	See Metals WS
<i>Iron (Total Recoverable)</i>	See Metals Worksheet	See Metals WS	See Metals Worksheet	See Metals WS
<i>Cyanide</i>	4.16	RI WQ	17.6	RI WQ
<i>Carbon Tetrachloride</i>	4.4	2013 RGP	4.4	2013 RGP
<i>1,2 (or o) -Dichlorobenzene (DCB)</i>	1.44	RI WQ	63.2	RI WQ
<i>1,3 (or m) - Dichlorobenzene</i>	6.96	RI WQ	312	RI WQ
<i>1,4 (or p) - Dichlorobenzene</i>	0.96	RI WQ	5	2013 RGP
<i>Total Dichlorobenzene</i>	Monitor Only	2013 RGP	763	2013 RGP
<i>1,1 Dichloroethane</i>	Monitor Only	2013 RGP	70	2013 RGP
<i>1,2 Dichloroethane</i>	5	2013 RGP	5	2013 RGP
<i>1,1 Dichloroethylene</i>	3.2	2013 RGP	3.2	2013 RGP
<i>cis-1,2 Dichloroethylene</i>	Monitor Only	2013 RGP	70	2013 RGP
<i>Methylene Chloride</i>	4.6	RI BPJ	4.6	RI BPJ
<i>Tetrachloroethylene</i>	4.24	RI WQ	5	2013 RGP
<i>1,1,1 Trichloroethane</i>	Monitor Only	2013 RGP	200	2013 RGP
<i>1,1,2 Trichloroethane</i>	5	2013 RGP	5	2013 RGP
<i>Trichloroethylene</i>	5	2013 RGP	5	2013 RGP
<i>Vinyl Chloride</i>	1.92	RI WQ	2	2013 RGP
<i>Total Suspended Solids</i>	Monitor Only	EPA 2017 RGP TBEL	30000	EPA 2017 RGP TBEL
3.G. Contaminated Construction Dewatering				
<i>Ammonia</i>	Monitor Only	EPA 2017 RGP TBEL	Monitor Only	EPA 2017 RGP TBEL
<i>Ethanol</i>	Monitor Only	EPA 2017 RGP TBEL	Monitor Only	EPA 2017 RGP TBEL
<i>Total Suspended Solids</i>	Monitor Only	EPA 2017 RGP TBEL	30000	EPA 2017 RGP TBEL
<i>Total Residual Chlorine</i>	11	RI WQ	19	RI WQ
<i>Total Petroleum Hydrocarbons</i>	Monitor Only	2013 RGP	1000	2013 RGP
<i>Cyanide</i>	4.16	RI WQ	17.6	RI WQ
<i>Benzene</i>	4.72	RI WQ	5	2013 RGP
<i>Toluene</i>	11.2	RI WQ	508	RI WQ
<i>Ethylbenzene</i>	23.8	RI WQ	1280	RI WQ
<i>(m,p,o) Xylenes</i>	2.4	RI WQ	106.4	RI WQ
<i>Total BTEX</i>	Monitor Only	2013 RGP	100	2013 RGP
<i>Ethylene dibromide</i>	Monitor Only	2013 RGP	0.05	2013 RGP
<i>Methyl-t-Butyl Ether (MTBE)</i>	Monitor Only	2013 RGP	70	2013 RGP
<i>tert-Amyl Methyl Ether</i>	Monitor Only	2013 RGP	Monitor Only	2013 RGP
<i>Carbon Tetrachloride</i>	4.4	2013 RGP	4.4	2013 RGP
<i>1,4 Dichlorobenzene</i>	0.96	RI WQ	5	2013 RGP
<i>1,2 Dichlorobenzene</i>	1.44	RI WQ	63.2	RI WQ
<i>1,3 Dichlorobenzene</i>	6.96	RI WQ	312	RI WQ
<i>Total Dichlorobenzene</i>	Monitor Only	2013 RGP	763	2013 RGP
<i>1,1 Dichloroethane</i>	Monitor Only	2013 RGP	70	2013 RGP
<i>1,2 Dichloroethane</i>	5	2013 RGP	5	2013 RGP
<i>1,1 Dichloroethylene</i>	3.2	2013 RGP	3.2	2013 RGP
<i>cis-1,2 Dichloroethylene</i>	Monitor Only	2013 RGP	70	2013 RGP
<i>Dichloromethane</i>	Monitor Only	2013 RGP	4.6	2013 RGP
<i>Tetrachloroethylene</i>	4.24	RI WQ	5	2013 RGP
<i>1,1,1 Trichloroethane</i>	Monitor Only	2013 RGP	200	2013 RGP
<i>1,1,2 Trichloroethane</i>	5	2013 RGP	5	2013 RGP
<i>Trichloroethylene</i>	5	2013 RGP	5	2013 RGP
<i>Vinyl Chloride</i>	1.92	RI WQ	2	2013 RGP
<i>Acetone</i>	Monitor Only	2013 RGP	7970	EPA 2017 RGP TBEL
<i>1,4 Dioxane</i>	Monitor Only	2013 RGP	200	EPA 2017 RGP TBEL
<i>Total Phenols</i>	4.48	RI WQ	200.8	RI WQ
<i>Pentachlorophenol (PCP)</i>	0.04	RI WQ	0.05	RI WQ
<i>Total Phthalates</i>	3	2013 RGP	190	EPA 2017 RGP TBEL
<i>Bis (2-Ethylhexyl) Phthalate</i>	6	2013 RGP	6	2013 RGP
<i>Total Group I Polycyclic Aromatic Hydrocarbons</i>	0.14	RI WQ	1	EPA 2017 RGP TBEL
<i>Benzo (a) Anthracene</i>	Monitor Only	2013 RGP	0.0038	2013 RGP
<i>Benzo (a) Pyrene</i>	Monitor Only	2013 RGP	0.0038	2013 RGP
<i>Benzo (b) Fluoranthene</i>	Monitor Only	2013 RGP	0.0038	2013 RGP
<i>Benzo (k) Fluoranthene</i>	Monitor Only	2013 RGP	0.0038	2013 RGP
<i>Chrysene</i>	Monitor Only	2013 RGP	0.0038	2013 RGP
<i>Dibenzo (a,h) anthracene</i>	Monitor Only	2013 RGP	0.0038	2013 RGP
<i>Indeno (1,2,3-cd) Pyrene</i>	Monitor Only	2013 RGP	0.0038	2013 RGP
<i>Total Group II Polycyclic Aromatic Hydrocarbons (PAH)</i>	0.14	RI WQ	100	2013 RGP
<i>Acenaphthene</i>	1.52	RI WQ	1.9	2013 RGP
<i>Acenaphthylene</i>	Monitor Only	2013 RGP	Monitor Only	2013 RGP

2018 RI RGP Limits for Non Class AA Freshwaters

Pollutant	Chronic (ug/l)	Limit Source	Acute (ug/l)	Limit Source
Anthracene	32000	RI WQ	Monitor Only	2013 RGP
Benzo (ghi) Perylene	Monitor Only	2013 RGP	Monitor Only	2013 RGP
Fluoranthene	3.52	RI WQ	159.2	RI WQ
Fluorene	4240	RI WQ	Monitor Only	2013 RGP
Naphthalene	2.08	RI WQ	20	2013 RGP
Phenanthrene	Monitor Only	2013 RGP	Monitor Only	2013 RGP
Pyrene	3200	RI WQ	Monitor Only	2013 RGP
Total Polychlorinated Biphenyls (PCBs)	0.000064	ANTIDEG	0.000064	2013 RGP
Antimony	See Metals Worksheet	See Metals WS	See Metals Worksheet	See Metals WS
Arsenic	See Metals Worksheet	See Metals WS	See Metals Worksheet	See Metals WS
Cadmium	See Metals Worksheet	See Metals WS	See Metals Worksheet	See Metals WS
Chromium III (trivalent, total recoverable)	See Metals Worksheet	See Metals WS	See Metals Worksheet	See Metals WS
Chromium VI (hexavalent, total recoverable)	See Metals Worksheet	See Metals WS	See Metals Worksheet	See Metals WS
Copper	See Metals Worksheet	See Metals WS	See Metals Worksheet	See Metals WS
Lead (Total Recoverable)	See Metals Worksheet	See Metals WS	See Metals Worksheet	See Metals WS
Mercury	See Metals Worksheet	See Metals WS	See Metals Worksheet	See Metals WS
Nickel (total recoverable)	See Metals Worksheet	See Metals WS	See Metals Worksheet	See Metals WS
Selenium	See Metals Worksheet	See Metals WS	See Metals Worksheet	See Metals WS
Silver	See Metals Worksheet	See Metals WS	See Metals Worksheet	See Metals WS
Zinc (total recoverable)	See Metals Worksheet	See Metals WS	See Metals Worksheet	See Metals WS
Iron (Total Recoverable)	See Metals Worksheet	See Metals WS	See Metals Worksheet	See Metals WS
4. Miscellaneous Discharges				
H. Pump Testing, Well Development or Rehabilitation				
Ammonia	Monitor Only	EPA 2017 RGP TBEL	Monitor Only	EPA 2017 RGP TBEL
Ethanol	Monitor Only	EPA 2017 RGP TBEL	Monitor Only	EPA 2017 RGP TBEL
Total Suspended Solids	Monitor Only	EPA 2017 RGP TBEL	30000	EPA 2017 RGP TBEL
Total Residual Chlorine	11	RI WQ	19	RI WQ
Total Petroleum Hydrocarbons	Monitor Only	2013 RGP	1000	2013 RGP
Cyanide	4.16	RI WQ	17.6	RI WQ
Benzene	4.72	RI WQ	5	2013 RGP
Toluene	11.2	RI WQ	508	RI WQ
Ethylbenzene	28.8	RI WQ	1280	RI WQ
(m,p,o) Xylenes	2.4	RI WQ	106.4	RI WQ
Total BTEX	Monitor Only	2013 RGP	100	2013 RGP
Ethylene dibromide	Monitor Only	2013 RGP	0.05	2013 RGP
Methyl-t-Butyl Ether (MTBE)	Monitor Only	2013 RGP	70	2013 RGP
tert-Amyl Methyl Ether	Monitor Only	2013 RGP	Monitor Only	2013 RGP
Carbon Tetrachloride	4.4	2013 RGP	4.4	2013 RGP
1,4 Dichlorobenzene	0.96	RI WQ	5	2013 RGP
1,2 Dichlorobenzene	1.44	RI WQ	63.2	RI WQ
1,3 Dichlorobenzene	6.96	RI WQ	312	RI WQ
Total Dichlorobenzene	Monitor Only	2013 RGP	763	2013 RGP
1,1 Dichloroethane	Monitor Only	2013 RGP	70	2013 RGP
1,2 Dichloroethane	5	2013 RGP	5	2013 RGP
1,1 Dichloroethylene	3.2	2013 RGP	3.2	2013 RGP
cis-1,2 Dichloroethylene	Monitor Only	2013 RGP	70	2013 RGP
Dichloromethane	Monitor Only	2013 RGP	4.6	2013 RGP
Tetrachloroethylene	4.24	RI WQ	5	2013 RGP
1,1,1 Trichloroethane	Monitor Only	2013 RGP	200	2013 RGP
1,1,2 Trichloroethane	5	2013 RGP	5	2013 RGP
Trichloroethylene	5	2013 RGP	5	2013 RGP
Vinyl Chloride	1.92	RI WQ	2	2013 RGP
Acetone	Monitor Only	2013 RGP	7970	EPA 2017 RGP TBEL
1,4 Dioxane	Monitor Only	2013 RGP	200	EPA 2017 RGP TBEL
Total Phenols	4.48	RI WQ	200.8	RI WQ
Pentachlorophenol (PCP)	0.04	RI WQ	0.05	RI WQ
Total Phthalates	3	2013 RGP	190	EPA 2017 RGP TBEL
Bis (2-Ethylhexyl) Phthalate	6	2013 RGP	6	2013 RGP
Total Group I Polycyclic Aromatic Hydrocarbons	0.14	RI WQ	1	EPA 2017 RGP TBEL
Benzo (a) Anthracene	Monitor Only	2013 RGP	0.0038	2013 RGP
Benzo (a) Pyrene	Monitor Only	2013 RGP	0.0038	2013 RGP
Benzo (b) Fluoranthene	Monitor Only	2013 RGP	0.0038	2013 RGP
Benzo (k) Fluoranthene	Monitor Only	2013 RGP	0.0038	2013 RGP
Chrysene	Monitor Only	2013 RGP	0.0038	2013 RGP
Dibenzo (a,h) anthracene	Monitor Only	2013 RGP	0.0038	2013 RGP
Indeno (1,2,3-cd) Pyrene	Monitor Only	2013 RGP	0.0038	2013 RGP
Total Group II Polycyclic Aromatic Hydrocarbons (PAH)	0.14	RI WQ	100	2013 RGP
Acenaphthene	1.52	RI WQ	1.9	2013 RGP
Acenaphthylene	Monitor Only	2013 RGP	Monitor Only	2013 RGP
Anthracene	32000	RI WQ	Monitor Only	2013 RGP
Benzo (ghi) Perylene	Monitor Only	2013 RGP	Monitor Only	2013 RGP
Fluoranthene	3.52	RI WQ	159.2	RI WQ
Fluorene	4240	RI WQ	Monitor Only	2013 RGP

2018 RI RGP Limits for Non Class AA Freshwaters

Pollutant	Chronic (ug/l)	Limit Source	Acute (ug/l)	Limit Source
<i>Napthalene</i>	2.08	RI WQ	20	2013 RGP
<i>Phenanthrene</i>	Monitor Only	2013 RGP	Monitor Only	2013 RGP
<i>Pyrene</i>	3200	RI WQ	Monitor Only	2013 RGP
<i>Total Polychlorinated Biphenyls (PCBs)</i>	0.000064	ANTIDEG	0.000064	2013 RGP
<i>Antimony</i>	See Metals Worksheet	See Metals WS	See Metals Worksheet	See Metals WS
<i>Arsenic</i>	See Metals Worksheet	See Metals WS	See Metals Worksheet	See Metals WS
<i>Cadmium</i>	See Metals Worksheet	See Metals WS	See Metals Worksheet	See Metals WS
<i>Chromium III (trivalent, total recoverable)</i>	See Metals Worksheet	See Metals WS	See Metals Worksheet	See Metals WS
<i>Chromium VI (hexavalent, total recoverable)</i>	See Metals Worksheet	See Metals WS	See Metals Worksheet	See Metals WS
<i>Copper</i>	See Metals Worksheet	See Metals WS	See Metals Worksheet	See Metals WS
<i>Lead (Total Recoverable)</i>	See Metals Worksheet	See Metals WS	See Metals Worksheet	See Metals WS
<i>Mercury</i>	See Metals Worksheet	See Metals WS	See Metals Worksheet	See Metals WS
<i>Nickel (total recoverable)</i>	See Metals Worksheet	See Metals WS	See Metals Worksheet	See Metals WS
<i>Selenium</i>	See Metals Worksheet	See Metals WS	See Metals Worksheet	See Metals WS
<i>Silver</i>	See Metals Worksheet	See Metals WS	See Metals Worksheet	See Metals WS
<i>Zinc (total recoverable)</i>	See Metals Worksheet	See Metals WS	See Metals Worksheet	See Metals WS
<i>Iron (Total Recoverable)</i>	See Metals Worksheet	See Metals WS	See Metals Worksheet	See Metals WS
I. Hydrostatic Testing of Pipelines and Tanks				
<i>Ethanol</i>	Monitor Only	EPA 2017 RGP TBEL	Monitor Only	EPA 2017 RGP TBEL
<i>Total Suspended Solids</i>	Monitor Only	EPA 2017 RGP TBEL	30000	EPA 2017 RGP TBEL
<i>Total Residual Chlorine</i>	11	RI WQ	19	RI WQ
<i>Total Petroleum Hydrocarbons</i>	Monitor Only	2013 RGP	1000	2013 RGP
<i>Benzene</i>	4.72	RI WQ	5	2013 RGP
<i>Total BTEX</i>	Monitor Only	2013 RGP	100	2013 RGP
<i>Napthalene</i>	2.08	RI WQ	20	2013 RGP
<i>Ethylene dibromide</i>	Monitor Only	2013 RGP	0.05	2013 RGP
<i>Methyl-t-Butyl Ether (MTBE)</i>	Monitor Only	2013 RGP	70	2013 RGP
<i>tert-Butyl Alcohol</i>	Monitor Only	2013 RGP	Monitor Only	2013 RGP
<i>tert-Amyl Methyl Ether</i>	Monitor Only	2013 RGP	Monitor Only	2013 RGP
<i>Total Group 1 Polycyclic Aromatic Hydrocarbons (PAH)</i>	0.14	RI WQ	1	EPA 2017 RGP TBEL
<i>Bis (2-Ethylhexyl) Phthalate</i>	6	2013 RGP	6	2013 RGP
<i>Benzo (a) Anthracene</i>	Monitor Only	2013 RGP	0.0038	2013 RGP
<i>Benzo (a) Pyrene</i>	Monitor Only	2013 RGP	0.0038	2013 RGP
<i>Benzo (b) Fluoranthene</i>	Monitor Only	2013 RGP	0.0038	2013 RGP
<i>Benzo (k) Fluoranthene</i>	Monitor Only	2013 RGP	0.0038	2013 RGP
<i>Chrysene</i>	Monitor Only	2013 RGP	0.0038	2013 RGP
<i>Dibenzo (a,h) anthracene</i>	Monitor Only	2013 RGP	0.0038	2013 RGP
<i>Indeno (1,2,3-cd) Pyrene</i>	Monitor Only	2013 RGP	0.0038	2013 RGP
<i>Copper</i>	See Metals Worksheet	See Metals WS	See Metals Worksheet	See Metals WS
<i>Lead (Total Recoverable)</i>	See Metals Worksheet	See Metals WS	See Metals Worksheet	See Metals WS
<i>Nickel (total recoverable)</i>	See Metals Worksheet	See Metals WS	See Metals Worksheet	See Metals WS
<i>Chromium III (trivalent, total recoverable)</i>	See Metals Worksheet	See Metals WS	See Metals Worksheet	See Metals WS
<i>Chromium VI (hexavalent, total recoverable)</i>	See Metals Worksheet	See Metals WS	See Metals Worksheet	See Metals WS
<i>Zinc (total recoverable)</i>	See Metals Worksheet	See Metals WS	See Metals Worksheet	See Metals WS
<i>Iron (Total Recoverable)</i>	See Metals Worksheet	See Metals WS	See Metals Worksheet	See Metals WS
J. Contaminated Sumps				
<i>Ammonia</i>	Monitor Only	EPA 2017 RGP TBEL	Monitor Only	EPA 2017 RGP TBEL
<i>Ethanol</i>	Monitor Only	EPA 2017 RGP TBEL	Monitor Only	EPA 2017 RGP TBEL
<i>Total Suspended Solids</i>	Monitor Only	EPA 2017 RGP TBEL	30000	EPA 2017 RGP TBEL
<i>Total Residual Chlorine</i>	11	RI WQ	19	RI WQ
<i>Total Petroleum Hydrocarbons</i>	Monitor Only	2013 RGP	1000	2013 RGP
<i>Cyanide</i>	4.16	RI WQ	17.6	RI WQ
<i>Benzene</i>	4.72	RI WQ	5	2013 RGP
<i>Toluene</i>	11.2	RI WQ	508	RI WQ
<i>Ethylbenzene</i>	28.8	RI WQ	1280	RI WQ
<i>(m,p,o) Xylenes</i>	2.4	RI WQ	106.4	RI WQ
<i>Total BTEX</i>	Monitor Only	2013 RGP	100	2013 RGP
<i>Ethylene dibromide</i>	Monitor Only	2013 RGP	0.05	2013 RGP
<i>Methyl-t-Butyl Ether (MTBE)</i>	Monitor Only	2013 RGP	70	2013 RGP
<i>tert-Amyl Methyl Ether</i>	Monitor Only	2013 RGP	Monitor Only	2013 RGP
<i>Carbon Tetrachloride</i>	4.4	2013 RGP	4.4	2013 RGP
<i>1,4 Dichlorobenzene</i>	0.96	RI WQ	5	2013 RGP
<i>1,2 Dichlorobenzene</i>	1.44	RI WQ	63.2	RI WQ
<i>1,3 Dichlorobenzene</i>	6.96	RI WQ	312	RI WQ
<i>Total Dichlorobenzene</i>	Monitor Only	2013 RGP	763	2013 RGP
<i>1,1 Dichloroethane</i>	Monitor Only	2013 RGP	70	2013 RGP
<i>1,2 Dichloroethane</i>	5	2013 RGP	5	2013 RGP
<i>1,1 Dichloroethylene</i>	3.2	2013 RGP	3.2	2013 RGP
<i>cis-1,2 Dichloroethylene</i>	Monitor Only	2013 RGP	70	2013 RGP
<i>Dichloromethane</i>	Monitor Only	2013 RGP	4.6	2013 RGP
<i>Tetrachloroethylene</i>	4.24	RI WQ	5	2013 RGP
<i>1,1,1 Trichloroethane</i>	Monitor Only	2013 RGP	200	2013 RGP
<i>1,1,2 Trichloroethane</i>	5	2013 RGP	5	2013 RGP

2018 RI RGP Limits for Non Class AA Freshwaters

Pollutant	Chronic (ug/l)	Limit Source	Acute (ug/l)	Limit Source
<i>Trichloroethylene</i>	5	2013 RGP	5	2013 RGP
<i>Vinyl Chloride</i>	1.92	RI WQ	2	2013 RGP
<i>Acetone</i>	Monitor Only	2013 RGP	7970	EPA 2017 RGP TBEL
<i>1,4 Dioxane</i>	Monitor Only	2013 RGP	200	EPA 2017 RGP TBEL
<i>Total Phenols</i>	4.48	RI WQ	200.8	RI WQ
<i>Pentachlorophenol (PCP)</i>	0.04	RI WQ	0.05	RI WQ
<i>Total Phthalates</i>	3	2013 RGP	190	EPA 2017 RGP TBEL
<i>Bis (2-Ethylhexyl) Phthalate</i>	6	2013 RGP	6	2013 RGP
<i>Polycyclic Aromatic Hydrocarbons (PAH)</i>	0.14	RI WQ	1	EPA 2017 RGP TBEL
<i>Benzo (a) Anthracene</i>	Monitor Only	2013 RGP	0.0038	2013 RGP
<i>Benzo (a) Pyrene</i>	Monitor Only	2013 RGP	0.0038	2013 RGP
<i>Benzo (b) Fluoranthene</i>	Monitor Only	2013 RGP	0.0038	2013 RGP
<i>Benzo (k) Fluoranthene</i>	Monitor Only	2013 RGP	0.0038	2013 RGP
<i>Chrysene</i>	Monitor Only	2013 RGP	0.0038	2013 RGP
<i>Dibenzo (a,h) anthracene</i>	Monitor Only	2013 RGP	0.0038	2013 RGP
<i>Indeno (1,2,3-cd) Pyrene</i>	Monitor Only	2013 RGP	0.0038	2013 RGP
<i>Polycyclic Aromatic Hydrocarbons (PAH)</i>	0.14	RI WQ	100	2013 RGP
<i>Acenaphthene</i>	1.52	RI WQ	1.9	2013 RGP
<i>Acenaphthylene</i>	Monitor Only	2013 RGP	Monitor Only	2013 RGP
<i>Anthracene</i>	32000	RI WQ	Monitor Only	2013 RGP
<i>Benzo (ghi) Perylene</i>	Monitor Only	2013 RGP	Monitor Only	2013 RGP
<i>Fluoranthene</i>	3.52	RI WQ	159.2	RI WQ
<i>Fluorene</i>	4240	RI WQ	Monitor Only	2013 RGP
<i>Napthalene</i>	2.08	RI WQ	20	2013 RGP
<i>Phenanthrene</i>	Monitor Only	2013 RGP	Monitor Only	2013 RGP
<i>Pyrene</i>	3200	RI WQ	Monitor Only	2013 RGP
<i>Total Polychlorinated Biphenyls (PCBs)</i>	0.000064	ANTIDEG	0.000064	2013 RGP
<i>Antimony</i>	See Metals Worksheet	See Metals WS	See Metals Worksheet	See Metals WS
<i>Arsenic</i>	See Metals Worksheet	See Metals WS	See Metals Worksheet	See Metals WS
<i>Cadmium</i>	See Metals Worksheet	See Metals WS	See Metals Worksheet	See Metals WS
<i>Chromium III (trivalent, total recoverable)</i>	See Metals Worksheet	See Metals WS	See Metals Worksheet	See Metals WS
<i>Chromium VI (hexavalent, total recoverable)</i>	See Metals Worksheet	See Metals WS	See Metals Worksheet	See Metals WS
<i>Copper</i>	See Metals Worksheet	See Metals WS	See Metals Worksheet	See Metals WS
<i>Lead (Total Recoverable)</i>	See Metals Worksheet	See Metals WS	See Metals Worksheet	See Metals WS
<i>Mercury</i>	See Metals Worksheet	See Metals WS	See Metals Worksheet	See Metals WS
<i>Nickel (total recoverable)</i>	See Metals Worksheet	See Metals WS	See Metals Worksheet	See Metals WS
<i>Selenium</i>	See Metals Worksheet	See Metals WS	See Metals Worksheet	See Metals WS
<i>Silver</i>	See Metals Worksheet	See Metals WS	See Metals Worksheet	See Metals WS
<i>Zinc (total recoverable)</i>	See Metals Worksheet	See Metals WS	See Metals Worksheet	See Metals WS
<i>Iron (Total Recoverable)</i>	See Metals Worksheet	See Metals WS	See Metals Worksheet	See Metals WS

2018 RI RGP Limits for Saltwater

Pollutant	Chronic (ug/l)	Limit Source	Acute (ug/l)	Limit Source
1. Petroleum Related Site Remediation				
A. Gasoline Remediation Sites				
Ethanol	Monitor Only	EPA 2017 RGP TBEL	Monitor Only	EPA 2017 RGP TBEL
Benzene	5	2013 RGP	5	2013 RGP
Toluene	12000	RI WQ	Monitor Only	2013 RGP
Ethylbenzene	1680	RI WQ	Monitor Only	2013 RGP
(m,p,o) Xylenes	Monitor Only	2013 RGP	Monitor Only	2013 RGP
Total BTEX	100	2013 RGP	100	2013 RGP
Naphthalene	Monitor Only	2013 RGP	20	2013 RGP
Ethylene dibromide	Monitor Only	2013 RGP	0.05	2013 RGP
Methyl-t-Butyl Ether (MTBE)	Monitor Only	2013 RGP	70	2013 RGP
tert-Butyl Alcohol	Monitor Only	2013 RGP	Monitor Only	2013 RGP
tert-Amyl Methyl Ether	Monitor Only	2013 RGP	Monitor Only	2013 RGP
Total Suspended Solids	Monitor Only	EPA 2017 RGP TBEL	30000	EPA 2017 RGP TBEL
Total Petroleum Hydrocarbons	Monitor Only	2013 RGP	1000	2013 RGP
Lead (Total Recoverable)	6.81	RI WQ	160	EPA 2017 RGP TBEL
Iron (Total Recoverable)	Monitor Only	RI WQ	1000	2013 RGP
B. Fuel Oils (and Other Oils) Sites				
Acetone	Monitor Only	2013 RGP	7970	EPA 2017 RGP TBEL
Total Suspended Solids	Monitor Only	EPA 2017 RGP TBEL	30000	EPA 2017 RGP TBEL
Total Petroleum Hydrocarbons	Monitor Only	2013 RGP	1000	2013 RGP
Naphthalene	Monitor Only	2013 RGP	20	2013 RGP
Total Group I Polycyclic Aromatic Hydrocarbons	0.14	RI WQ	1	EPA 2017 RGP TBEL
Benzo (a) Anthracene	0.0038	2013 RGP	0.0038	2013 RGP
Benzo (a) Pyrene	0.0038	2013 RGP	0.0038	2013 RGP
Benzo (b) Fluoranthene	0.0038	2013 RGP	0.0038	2013 RGP
Benzo (k) Fluoranthene	0.0038	2013 RGP	0.0038	2013 RGP
Chrysene	0.0038	2013 RGP	0.0038	2013 RGP
Dibenzo (a,h) anthracene	0.0038	2013 RGP	0.0038	2013 RGP
Indeno (1,2,3-cd) Pyrene	0.0038	2013 RGP	0.0038	2013 RGP
Total Group II Polycyclic Aromatic Hydrocarbons	0.14	RI WQ	100	2013 RGP
Acenaphthene	1.9	2013 RGP	1.9	2013 RGP
Acenaphthylene	Monitor Only	2013 RGP	Monitor Only	2013 RGP
Anthracene	32000	RI WQ	Monitor Only	2013 RGP
Benzo (ghi) Perylene	Monitor Only	2013 RGP	Monitor Only	2013 RGP
Fluoranthene	112	RI WQ	Monitor Only	2013 RGP
Fluorene	4240	RI WQ	Monitor Only	2013 RGP
Phenanthrene	Monitor Only	2013 RGP	Monitor Only	2013 RGP
Pyrene	3200	RI WQ	Monitor Only	2013 RGP
Benzene	5	2013 RGP	5	2013 RGP
Toluene	12000	RI WQ	Monitor Only	2013 RGP
Ethylbenzene	1680	RI WQ	Monitor Only	2013 RGP
(m,p,o) Xylenes	Monitor Only	2013 RGP	Monitor Only	2013 RGP
Total BTEX	100	2013 RGP	100	2013 RGP
Methyl-t-Butyl Ether (MTBE)	Monitor Only	2013 RGP	70	2013 RGP
Nickel (total recoverable)	6.62	RI WQ	59.79	RI WQ
Chromium III (trivalent, total recoverable)	100	2013 RGP	323	EPA 2017 RGP TBEL
Chromium VI (hexavalent, total recoverable)	40.28	RI WQ	323	EPA 2017 RGP TBEL
Zinc (total recoverable)	68.5	RI WQ	76.11	RI WQ
Iron (Total Recoverable)	Monitor Only	RI WQ	1000	2013 RGP
C. Petroleum Sites Containing Other Pollutants				
Ammonia	Monitor Only	EPA 2017 RGP TBEL	Monitor Only	EPA 2017 RGP TBEL
Ethanol	Monitor Only	EPA 2017 RGP TBEL	Monitor Only	EPA 2017 RGP TBEL
Total Suspended Solids	Monitor Only	EPA 2017 RGP TBEL	30000	EPA 2017 RGP TBEL
Total Residual Chlorine	7.5	RI WQ	13	RI WQ
Total Petroleum Hydrocarbons	Monitor Only	2013 RGP	1000	2013 RGP
Cyanide	0.8	RI WQ	0.8	RI WQ
Benzene	5	2013 RGP	5	2013 RGP
Toluene	12000	RI WQ	Monitor Only	2013 RGP
Ethylbenzene	1680	RI WQ	Monitor Only	2013 RGP
(m,p,o) Xylenes	Monitor Only	2013 RGP	Monitor Only	2013 RGP
Total BTEX	100	2013 RGP	100	2013 RGP
Ethylene dibromide	Monitor Only	2013 RGP	0.05	2013 RGP
Methyl-t-Butyl Ether (MTBE)	Monitor Only	2013 RGP	70	2013 RGP
tert-Amyl Methyl Ether	Monitor Only	2013 RGP	Monitor Only	2013 RGP
Carbon Tetrachloride	4.4	2013 RGP	4.4	2013 RGP
1,4 Dichlorobenzene	5	2013 RGP	5	2013 RGP
1,2 Dichlorobenzene	600	2013 RGP	600	2013 RGP
1,3 Dichlorobenzene	320	2013 RGP	320	2013 RGP
Total Dichlorobenzene	Monitor Only	2013 RGP	763	2013 RGP
1,1 Dichloroethane	Monitor Only	2013 RGP	70	2013 RGP
1,2 Dichloroethane	5	2013 RGP	5	2013 RGP
1,1 Dichloroethylene	3.2	2013 RGP	3.2	2013 RGP

2018 RI RGP Limits for Saltwater

Pollutant	Chronic (ug/l)	Limit Source	Acute (ug/l)	Limit Source
<i>cis</i> -1,2 Dichloroethylene	Monitor Only	2013 RGP	70	2013 RGP
Dichloromethane	Monitor Only	2013 RGP	4.6	2013 RGP
Tetrachloroethylene	5	2013 RGP	5	2013 RGP
1,1,1 Trichloroethane	Monitor Only	2013 RGP	200	2013 RGP
1,1,2 Trichloroethane	5	2013 RGP	5	2013 RGP
Trichloroethylene	5	2013 RGP	5	2013 RGP
Vinyl Chloride	1.92	RI WQ	2	2013 RGP
Acetone	Monitor Only	2013 RGP	7970	EPA 2017 RGP TBEL
1,4 Dioxane	Monitor Only	2013 RGP	200	EPA 2017 RGP TBEL
Total Phenols	300	RI WQ	300	2013 RGP
Pentachlorophenol (PCP)	1	2013 RGP	1	2013 RGP
Total Phthalates	3	2013 RGP	190	EPA 2017 RGP TBEL
Bis (2-Ethylhexyl) Phthalate	6	2013 RGP	6	2013 RGP
Total Group I Polycyclic Aromatic Hydrocarbons (PAH)	0.14	RI WQ	1	EPA 2017 RGP TBEL
Benzo (a) Anthracene	0.0038	2013 RGP	0.0038	2013 RGP
Benzo (a) Pyrene	0.0038	2013 RGP	0.0038	2013 RGP
Benzo (b) Fluoranthene	0.0038	2013 RGP	0.0038	2013 RGP
Benzo (k) Fluoranthene	0.0038	2013 RGP	0.0038	2013 RGP
Chrysene	0.0038	2013 RGP	0.0038	2013 RGP
Dibenzo (a,h) anthracene	0.0038	2013 RGP	0.0038	2013 RGP
Indeno (1,2,3-cd) Pyrene	0.0038	2013 RGP	0.0038	2013 RGP
Total Group II Polycyclic Aromatic Hydrocarbons (PAH)	0.14	RI WQ	100	2013 RGP
Acenaphthene	1.9	2013 RGP	1.9	2013 RGP
Acenaphthylene	Monitor Only	2013 RGP	Monitor Only	2013 RGP
Anthracene	32000	RI WQ	Monitor Only	2013 RGP
Benzo (ghi) Perylene	Monitor Only	2013 RGP	Monitor Only	2013 RGP
Fluoranthene	112	RI WQ	Monitor Only	2013 RGP
Fluorene	4240	RI WQ	Monitor Only	2013 RGP
Naphthalene	Monitor Only	2013 RGP	20	2013 RGP
Phenanthrene	Monitor Only	2013 RGP	Monitor Only	2013 RGP
Pyrene	3200	RI WQ	Monitor Only	2013 RGP
Total Polychlorinated Biphenyls (PCBs)	0.000064	2013 RGP	0.000064	2013 RGP
Antimony	5.6	2013 RGP	5.6	2013 RGP
Arsenic	1.12	RI WQ	55.2	RI WQ
Cadmium	7.08	RI WQ	10.2	EPA 2017 RGP TBEL
Chromium III (trivalent, total recoverable)	100	2013 RGP	323	EPA 2017 RGP TBEL
Chromium VI (hexavalent, total recoverable)	40.28	RI WQ	323	EPA 2017 RGP TBEL
Copper	2.98	RI WQ	4.62	RI WQ
Lead (Total Recoverable)	6.81	RI WQ	160	EPA 2017 RGP TBEL
Mercury	0.12	RI WQ	1.69	RI WQ
Nickel (total recoverable)	6.62	RI WQ	59.79	RI WQ
Selenium	56.91	RI WQ	232.46	RI WQ
Silver	1.78	2013 RGP	1.78	RI WQ
Zinc (total recoverable)	68.5	RI WQ	76.11	RI WQ
Iron (Total Recoverable)	Monitor Only	RI WQ	1000	2013 RGP
2. Non-Petroleum (Not Gas and Oil) Site Remediation				
D. VOC Only Sites				
Carbon Tetrachloride	4.4	2013 RGP	4.4	2013 RGP
1,2 (or o) -Dichlorobenzene (DCB)	600	2013 RGP	600	2013 RGP
1,3 (or m) - Dichlorobenzene	320	2013 RGP	320	2013 RGP
1,4 (or p) - Dichlorobenzene	5	2013 RGP	5	2013 RGP
Total Dichlorobenzene	Monitor Only	2013 RGP	763	2013 RGP
1,1-Dichloroethane (DCA)	Monitor Only	2013 RGP	70	2013 RGP
1,2-Dichloroethane	5	2013 RGP	5	2013 RGP
1,1 - Dichloroethylene (DCE)	3.2	2013 RGP	3.2	2013 RGP
<i>cis</i> -1,2 Dichloroethylene	Monitor Only	2013 RGP	70	2013 RGP
Methylene Chloride	4.6	2013 RGP	4.6	2013 RGP
Tetrachloroethylene	5	2013 RGP	5	2013 RGP
1,1,1 Trichloroethane	Monitor Only	2013 RGP	200	2013 RGP
1,1,2 Trichloroethane	5	2013 RGP	5	2013 RGP
Trichloroethylene	5	2013 RGP	5	2013 RGP
Vinyl Chloride	1.92	RI WQ	2	2013 RGP
Total Petroleum Hydrocarbons	Monitor Only	2013 RGP	1000	2013 RGP
Total Phenols	300	RI WQ	300	2013 RGP
Pentachlorophenol (PCP)	1	2013 RGP	1	2013 RGP
Total Phthalates	3	2013 RGP	190	EPA 2017 RGP TBEL
Bis (2-Ethylhexyl) Phthalate	6	2013 RGP	6	2013 RGP
Total Polychlorinated Biphenyls (PCBs)	0.000064	2013 RGP	0.000064	2013 RGP
Acetone	Monitor Only	2013 RGP	7970	EPA 2017 RGP TBEL
Total Suspended Solids	Monitor Only	EPA 2017 RGP TBEL	30000	EPA 2017 RGP TBEL
1,4 Dioxane	Monitor Only	2013 RGP	200	EPA 2017 RGP TBEL
Total BTEX	100	2013 RGP	100	2013 RGP
Iron (Total Recoverable)	Monitor Only	RI WQ	1000	2013 RGP
E. VOC Sites Containing Other Contaminants				

2018 RI RGP Limits for Saltwater

Pollutant	Chronic (ug/l)	Limit Source	Acute (ug/l)	Limit Source
Ammonia	Monitor Only	EPA 2017 RGP TBEL	Monitor Only	EPA 2017 RGP TBEL
Ethanol	Monitor Only	EPA 2017 RGP TBEL	Monitor Only	EPA 2017 RGP TBEL
Total Suspended Solids	Monitor Only	EPA 2017 RGP TBEL	30000	EPA 2017 RGP TBEL
Total Residual Chlorine	7.5	RI WQ	13	RI WQ
Total Petroleum Hydrocarbons	Monitor Only	2013 RGP	1000	2013 RGP
Cyanide	0.8	RI WQ	0.8	RI WQ
Benzene	5	2013 RGP	5	2013 RGP
Toluene	12000	RI WQ	Monitor Only	2013 RGP
Ethylbenzene	1680	RI WQ	Monitor Only	2013 RGP
(m,p,o) Xylenes	Monitor Only	2013 RGP	Monitor Only	2013 RGP
Total BTEX	100	2013 RGP	100	2013 RGP
Ethylene dibromide	Monitor Only	2013 RGP	0.05	2013 RGP
Methyl-t-Butyl Ether (MTBE)	Monitor Only	2013 RGP	70	2013 RGP
tert-Amyl Methyl Ether	Monitor Only	2013 RGP	Monitor Only	2013 RGP
Carbon Tetrachloride	4.4	2013 RGP	4.4	2013 RGP
1,4 Dichlorobenzene	5	2013 RGP	5	2013 RGP
1,2 Dichlorobenzene	600	2013 RGP	600	2013 RGP
1,3 Dichlorobenzene	320	2013 RGP	320	2013 RGP
Total Dichlorobenzene	Monitor Only	2013 RGP	763	2013 RGP
1,1 Dichloroethane	Monitor Only	2013 RGP	70	2013 RGP
1,2 Dichloroethane	5	2013 RGP	5	2013 RGP
1,1 Dichloroethylene	3.2	2013 RGP	3.2	2013 RGP
cis-1,2 Dichloroethylene	Monitor Only	2013 RGP	70	2013 RGP
Dichloromethane	Monitor Only	2013 RGP	4.6	2013 RGP
Tetrachloroethylene	5	2013 RGP	5	2013 RGP
1,1,1 Trichloroethane	Monitor Only	2013 RGP	200	2013 RGP
1,1,2 Trichloroethane	5	2013 RGP	5	2013 RGP
Trichloroethylene	5	2013 RGP	5	2013 RGP
Vinyl Chloride	1.92	RI WQ	2	2013 RGP
Acetone	Monitor Only	2013 RGP	7970	EPA 2017 RGP TBEL
1,4 Dioxane	Monitor Only	2013 RGP	200	EPA 2017 RGP TBEL
Total Phenols	300	RI WQ	300	2013 RGP
Pentachlorophenol (PCP)	1	2013 RGP	1	2013 RGP
Total Phthalates	3	2013 RGP	190	EPA 2017 RGP TBEL
Bis (2-Ethylhexyl) Phthalate	6	2013 RGP	6	2013 RGP
Total Group I Polycyclic Aromatic Hydrocarbons	0.14	RI WQ	1	EPA 2017 RGP TBEL
Benzo (a) Anthracene	0.0038	2013 RGP	0.0038	2013 RGP
Benzo (a) Pyrene	0.0038	2013 RGP	0.0038	2013 RGP
Benzo (b) Fluoranthene	0.0038	2013 RGP	0.0038	2013 RGP
Benzo (k) Fluoranthene	0.0038	2013 RGP	0.0038	2013 RGP
Chrysene	0.0038	2013 RGP	0.0038	2013 RGP
Dibenzo (a,h) anthracene	0.0038	2013 RGP	0.0038	2013 RGP
Indeno (1,2,3-cd) Pyrene	0.0038	2013 RGP	0.0038	2013 RGP
Total Group II Polycyclic Aromatic Hydrocarbons (PAH)	0.14	RI WQ	100	2013 RGP
Acenaphthene	1.9	2013 RGP	1.9	2013 RGP
Acenaphthylene	Monitor Only	2013 RGP	Monitor Only	2013 RGP
Anthracene	32000	RI WQ	Monitor Only	2013 RGP
Benzo (ghi) Perylene	Monitor Only	2013 RGP	Monitor Only	2013 RGP
Fluoranthene	112	RI WQ	Monitor Only	2013 RGP
Fluorene	4240	RI WQ	Monitor Only	2013 RGP
Napthalene	Monitor Only	2013 RGP	20	2013 RGP
Phenanthrene	Monitor Only	2013 RGP	Monitor Only	2013 RGP
Pyrene	3200	RI WQ	Monitor Only	2013 RGP
Total Polychlorinated Biphenyls (PCBs)	0.000064	2013 RGP	0.000064	2013 RGP
Antimony	5.6	2013 RGP	5.6	2013 RGP
Arsenic	1.12	RI WQ	55.2	RI WQ
Cadmium	7.08	RI WQ	10.2	EPA 2017 RGP TBEL
Chromium III (trivalent, total recoverable)	100	2013 RGP	323	EPA 2017 RGP TBEL
Chromium VI (hexavalent, total recoverable)	40.28	RI WQ	323	EPA 2017 RGP TBEL
Copper	2.98	RI WQ	4.62	RI WQ
Lead (Total Recoverable)	6.81	RI WQ	160	EPA 2017 RGP TBEL
Mercury	0.12	RI WQ	1.69	RI WQ
Nickel (total recoverable)	6.62	RI WQ	59.79	RI WQ
Selenium	56.91	RI WQ	232.46	RI WQ
Silver	1.78	2013 RGP	1.78	RI WQ
Zinc (total recoverable)	68.5	RI WQ	76.11	RI WQ
Iron (Total Recoverable)	Monitor Only	RI WQ	1000	2013 RGP
F. Sites Containing Primarily Metals				
Antimony	5.6	2013 RGP	5.6	2013 RGP
Arsenic	1.12	RI WQ	55.2	RI WQ
Cadmium	7.08	RI WQ	10.2	EPA 2017 RGP TBEL
Chromium III (trivalent, total recoverable)	100	2013 RGP	323	EPA 2017 RGP TBEL
Chromium VI (hexavalent, total recoverable)	40.28	RI WQ	323	EPA 2017 RGP TBEL

2018 RI RGP Limits for Saltwater

Pollutant	Chronic (ug/l)	Limit Source	Acute (ug/l)	Limit Source
Copper	2.98	RI WQ	4.62	RI WQ
Lead (Total Recoverable)	6.81	RI WQ	160	EPA 2017 RGP TBEL
Mercury	0.12	RI WQ	1.69	RI WQ
Nickel (total recoverable)	6.62	RI WQ	59.79	RI WQ
Selenium	56.91	RI WQ	232.46	RI WQ
Silver	1.78	2013 RGP	1.78	RI WQ
Zinc (total recoverable)	68.5	RI WQ	76.11	RI WQ
Iron (Total Recoverable)	Monitor Only	RI WQ	1000	2013 RGP
Cyanide	0.8	RI WQ	0.8	RI WQ
Carbon Tetrachloride	4.4	2013 RGP	4.4	2013 RGP
1,2 (or o) -Dichlorobenzene (DCB)	600	2013 RGP	600	2013 RGP
1,3 (or m) - Dichlorobenzene	320	2013 RGP	320	2013 RGP
1,4 (or p) - Dichlorobenzene	5	2013 RGP	5	2013 RGP
Total Dichlorobenzene	Monitor Only	2013 RGP	763	2013 RGP
1,1 Dichloroethane	Monitor Only	2013 RGP	70	2013 RGP
1,2 Dichloroethane	5	2013 RGP	5	2013 RGP
1,1 Dichloroethylene	3.2	2013 RGP	3.2	2013 RGP
cis-1,2 Dichloroethylene	Monitor Only	2013 RGP	70	2013 RGP
Methylene Chloride	4.6	2013 RGP	4.6	2013 RGP
Tetrachloroethylene	5	2013 RGP	5	2013 RGP
1,1,1 Trichloroethane	Monitor Only	2013 RGP	200	2013 RGP
1,1,2 Trichloroethane	5	2013 RGP	5	2013 RGP
Trichloroethylene	5	2013 RGP	5	2013 RGP
Vinyl Chloride	1.92	RI WQ	2	2013 RGP
Total Suspended Solids	Monitor Only	EPA 2017 RGP TBEL	30000	EPA 2017 RGP TBEL
3.G. Contaminated Construction Dewatering				
Ammonia	Monitor Only	EPA 2017 RGP TBEL	Monitor Only	EPA 2017 RGP TBEL
Ethanol	Monitor Only	EPA 2017 RGP TBEL	Monitor Only	EPA 2017 RGP TBEL
Total Suspended Solids	Monitor Only	EPA 2017 RGP TBEL	30000	EPA 2017 RGP TBEL
Total Residual Chlorine	7.5	RI WQ	13	RI WQ
Total Petroleum Hydrocarbons	Monitor Only	2013 RGP	1000	2013 RGP
Cyanide	0.8	RI WQ	0.8	RI WQ
Benzene	5	2013 RGP	5	2013 RGP
Toluene	12000	RI WQ	Monitor Only	2013 RGP
Ethylbenzene	1680	RI WQ	Monitor Only	2013 RGP
(m,p,o) Xylenes	Monitor Only	2013 RGP	Monitor Only	2013 RGP
Total BTEX	100	2013 RGP	100	2013 RGP
Ethylene dibromide	Monitor Only	2013 RGP	0.05	2013 RGP
Methyl-t-Butyl Ether (MTBE)	Monitor Only	2013 RGP	70	2013 RGP
tert-Amyl Methyl Ether	Monitor Only	2013 RGP	Monitor Only	2013 RGP
Carbon Tetrachloride	4.4	2013 RGP	4.4	2013 RGP
1,4 Dichlorobenzene	5	2013 RGP	5	2013 RGP
1,2 Dichlorobenzene	600	2013 RGP	600	2013 RGP
1,3 Dichlorobenzene	320	2013 RGP	320	2013 RGP
Total Dichlorobenzene	Monitor Only	2013 RGP	763	2013 RGP
1,1 Dichloroethane	Monitor Only	2013 RGP	70	2013 RGP
1,2 Dichloroethane	5	2013 RGP	5	2013 RGP
1,1 Dichloroethylene	3.2	2013 RGP	3.2	2013 RGP
cis-1,2 Dichloroethylene	Monitor Only	2013 RGP	70	2013 RGP
Dichloromethane	Monitor Only	2013 RGP	4.6	2013 RGP
Tetrachloroethylene	5	2013 RGP	5	2013 RGP
1,1,1 Trichloroethane	Monitor Only	2013 RGP	200	2013 RGP
1,1,2 Trichloroethane	5	2013 RGP	5	2013 RGP
Trichloroethylene	5	2013 RGP	5	2013 RGP
Vinyl Chloride	1.92	RI WQ	2	2013 RGP
Acetone	Monitor Only	2013 RGP	7970	EPA 2017 RGP TBEL
1,4 Dioxane	Monitor Only	2013 RGP	200	EPA 2017 RGP TBEL
Total Phenols	300	RI WQ	300	2013 RGP
Pentachlorophenol (PCP)	1	2013 RGP	1	2013 RGP
Total Phthalates	3	2013 RGP	190	EPA 2017 RGP TBEL
Bis (2-Ethylhexyl) Phthalate	6	2013 RGP	6	2013 RGP
Total Group I Polycyclic Aromatic Hydrocarbons	0.14	RI WQ	1	EPA 2017 RGP TBEL
Benzo (a) Anthracene	0.0038	2013 RGP	0.0038	2013 RGP
Benzo (a) Pyrene	0.0038	2013 RGP	0.0038	2013 RGP
Benzo (b) Fluoranthene	0.0038	2013 RGP	0.0038	2013 RGP
Benzo (k) Fluoranthene	0.0038	2013 RGP	0.0038	2013 RGP
Chrysene	0.0038	2013 RGP	0.0038	2013 RGP
Dibenzo (a,h) anthracene	0.0038	2013 RGP	0.0038	2013 RGP
Indeno (1,2,3-cd) Pyrene	0.0038	2013 RGP	0.0038	2013 RGP
Total Group II Polycyclic Aromatic Hydrocarbons (PAH)	0.14	RI WQ	100	2013 RGP
Acenaphthene	1.9	2013 RGP	1.9	2013 RGP
Acenaphthylene	Monitor Only	2013 RGP	Monitor Only	2013 RGP
Anthracene	32000	RI WQ	Monitor Only	2013 RGP

2018 RI RGP Limits for Saltwater

Pollutant	Chronic (ug/l)	Limit Source	Acute (ug/l)	Limit Source
<i>Benzo (ghi) Perylene</i>	Monitor Only	2013 RGP	Monitor Only	2013 RGP
<i>Fluoranthene</i>	1.12	RI WQ	Monitor Only	2013 RGP
<i>Fluorene</i>	4240	RI WQ	Monitor Only	2013 RGP
<i>Napthalene</i>	Monitor Only	2013 RGP	20	2013 RGP
<i>Phenanthrene</i>	Monitor Only	2013 RGP	Monitor Only	2013 RGP
<i>Pyrene</i>	3200	RI WQ	Monitor Only	2013 RGP
<i>Total Polychlorinated Biphenyls (PCBs)</i>	0.000064	2013 RGP	0.000064	2013 RGP
<i>Antimony</i>	5.6	2013 RGP	5.6	2013 RGP
<i>Arsenic</i>	1.12	RI WQ	55.2	RI WQ
<i>Cadmium</i>	7.08	RI WQ	10.2	EPA 2017 RGP TBEL
<i>Chromium III (trivalent, total recoverable)</i>	100	2013 RGP	323	EPA 2017 RGP TBEL
<i>Chromium VI (hexavalent, total recoverable)</i>	40.28	RI WQ	323	EPA 2017 RGP TBEL
<i>Copper</i>	2.98	RI WQ	4.62	RI WQ
<i>Lead (Total Recoverable)</i>	6.81	RI WQ	160	EPA 2017 RGP TBEL
<i>Mercury</i>	0.12	RI WQ	1.69	RI WQ
<i>Nickel (total recoverable)</i>	6.62	RI WQ	59.79	RI WQ
<i>Selenium</i>	56.91	RI WQ	232.46	RI WQ
<i>Silver</i>	1.78	2013 RGP	1.78	RI WQ
<i>Zinc (total recoverable)</i>	68.5	RI WQ	76.11	RI WQ
<i>Iron (Total Recoverable)</i>	Monitor Only	RI WQ	1000	2013 RGP

4. Miscellaneous Discharges

H. Pump Testing, Well Development or Rehabilitation

<i>Ammonia</i>	Monitor Only	EPA 2017 RGP TBEL	Monitor Only	EPA 2017 RGP TBEL
<i>Ethanol</i>	Monitor Only	EPA 2017 RGP TBEL	Monitor Only	EPA 2017 RGP TBEL
<i>Total Suspended Solids</i>	Monitor Only	EPA 2017 RGP TBEL	30000	EPA 2017 RGP TBEL
<i>Total Residual Chlorine</i>	7.5	RI WQ	13	RI WQ
<i>Total Petroleum Hydrocarbons</i>	Monitor Only	2013 RGP	1000	2013 RGP
<i>Cyanide</i>	0.8	RI WQ	0.8	RI WQ
<i>Benzene</i>	5	2013 RGP	5	2013 RGP
<i>Toluene</i>	12000	RI WQ	Monitor Only	2013 RGP
<i>Ethylbenzene</i>	1680	RI WQ	Monitor Only	2013 RGP
<i>(m,p,o) Xylenes</i>	Monitor Only	2013 RGP	Monitor Only	2013 RGP
<i>Total BTEX</i>	100	2013 RGP	100	2013 RGP
<i>Ethylene dibromide</i>	Monitor Only	2013 RGP	0.05	2013 RGP
<i>Methyl-t-Butyl Ether (MTBE)</i>	Monitor Only	2013 RGP	70	2013 RGP
<i>tert-Amyl Methyl Ether</i>	Monitor Only	2013 RGP	Monitor Only	2013 RGP
<i>Carbon Tetrachloride</i>	4.4	2013 RGP	4.4	2013 RGP
<i>1,4 Dichlorobenzene</i>	5	2013 RGP	5	2013 RGP
<i>1,2 Dichlorobenzene</i>	600	2013 RGP	600	2013 RGP
<i>1,3 Dichlorobenzene</i>	320	2013 RGP	320	2013 RGP
<i>Total Dichlorobenzene</i>	Monitor Only	2013 RGP	763	2013 RGP
<i>1,1 Dichloroethane</i>	Monitor Only	2013 RGP	70	2013 RGP
<i>1,2 Dichloroethane</i>	5	2013 RGP	5	2013 RGP
<i>1,1 Dichloroethylene</i>	3.2	2013 RGP	3.2	2013 RGP
<i>cis-1,2 Dichloroethylene</i>	Monitor Only	2013 RGP	70	2013 RGP
<i>Dichloromethane</i>	Monitor Only	2013 RGP	4.6	2013 RGP
<i>Tetrachloroethylene</i>	5	2013 RGP	5	2013 RGP
<i>1,1,1 Trichloroethane</i>	Monitor Only	2013 RGP	200	2013 RGP
<i>1,1,2 Trichloroethane</i>	5	2013 RGP	5	2013 RGP
<i>Trichloroethylene</i>	5	2013 RGP	5	2013 RGP
<i>Vinyl Chloride</i>	1.92	RI WQ	2	2013 RGP
<i>Acetone</i>	Monitor Only	2013 RGP	7970	EPA 2017 RGP TBEL
<i>1,4 Dioxane</i>	Monitor Only	2013 RGP	200	EPA 2017 RGP TBEL
<i>Total Phenols</i>	300	RI WQ	300	2013 RGP
<i>Pentachlorophenol (PCP)</i>	1	2013 RGP	1	2013 RGP
<i>Total Phthalates</i>	3	2013 RGP	190	EPA 2017 RGP TBEL
<i>Bis (2-Ethylhexyl) Phthalate</i>	6	2013 RGP	6	2013 RGP
<i>Total Group I Polycyclic Aromatic Hydrocarbons</i>	0.14	RI WQ	1	EPA 2017 RGP TBEL
<i>Benzo (a) Anthracene</i>	0.0038	2013 RGP	0.0038	2013 RGP
<i>Benzo (a) Pyrene</i>	0.0038	2013 RGP	0.0038	2013 RGP
<i>Benzo (b) Fluoranthene</i>	0.0038	2013 RGP	0.0038	2013 RGP
<i>Benzo (k) Fluoranthene</i>	0.0038	2013 RGP	0.0038	2013 RGP
<i>Chrysene</i>	0.0038	2013 RGP	0.0038	2013 RGP
<i>Dibenzo (a,h) anthracene</i>	0.0038	2013 RGP	0.0038	2013 RGP
<i>Indeno (1,2,3-cd) Pyrene</i>	0.0038	2013 RGP	0.0038	2013 RGP
<i>Total Group II Polycyclic Aromatic Hydrocarbons (PAH)</i>	0.14	RI WQ	100	2013 RGP
<i>Acenaphthene</i>	1.9	2013 RGP	1.9	2013 RGP
<i>Acenaphthylene</i>	Monitor Only	2013 RGP	Monitor Only	2013 RGP
<i>Anthracene</i>	32000	RI WQ	Monitor Only	2013 RGP
<i>Benzo (ghi) Perylene</i>	Monitor Only	2013 RGP	Monitor Only	2013 RGP
<i>Fluoranthene</i>	112	RI WQ	Monitor Only	2013 RGP
<i>Fluorene</i>	4240	RI WQ	Monitor Only	2013 RGP
<i>Napthalene</i>	Monitor Only	2013 RGP	20	2013 RGP

2018 RI RGP Limits for Saltwater				
Pollutant	Chronic (ug/l)	Limit Source	Acute (ug/l)	Limit Source
Phenanthrene	Monitor Only	2013 RGP	Monitor Only	2013 RGP
Pyrene	3200	RI WQ	Monitor Only	2013 RGP
Total Polychlorinated Biphenyls (PCBs)	0.000064	2013 RGP	0.000064	2013 RGP
Antimony	5.6	2013 RGP	5.6	2013 RGP
Arsenic	1.12	RI WQ	55.2	RI WQ
Cadmium	7.08	RI WQ	10.2	EPA 2017 RGP TBEL
Chromium III (trivalent, total recoverable)	100	2013 RGP	323	EPA 2017 RGP TBEL
Chromium VI (hexavalent, total recoverable)	40.28	RI WQ	323	EPA 2017 RGP TBEL
Copper	2.98	RI WQ	4.62	RI WQ
Lead (Total Recoverable)	6.81	RI WQ	160	EPA 2017 RGP TBEL
Mercury	0.12	RI WQ	1.69	RI WQ
Nickel (total recoverable)	6.62	RI WQ	59.79	RI WQ
Selenium	56.91	RI WQ	232.46	RI WQ
Silver	1.78	2013 RGP	1.78	RI WQ
Zinc (total recoverable)	68.5	RI WQ	76.11	RI WQ
Iron (Total Recoverable)	Monitor Only	RI WQ	1000	2013 RGP
I. Hydrostatic Testing of Pipelines and Tanks				
Ethanol	Monitor Only	EPA 2017 RGP TBEL	Monitor Only	EPA 2017 RGP TBEL
Total Suspended Solids	Monitor Only	EPA 2017 RGP TBEL	30000	EPA 2017 RGP TBEL
Total Residual Chlorine	7.5	RI WQ	13	RI WQ
Total Petroleum Hydrocarbons	Monitor Only	2013 RGP	1000	2013 RGP
Benzene	50	2013 RGP	50	2013 RGP
Total BTEX	100	2013 RGP	100	2013 RGP
Napthalene	Monitor Only	2013 RGP	20	2013 RGP
Ethylene dibromide	Monitor Only	2013 RGP	0.05	2013 RGP
Methyl-t-Butyl Ether (MTBE)	Monitor Only	2013 RGP	70	2013 RGP
tert-Butyl Alcohol	Monitor Only	2013 RGP	Monitor Only	2013 RGP
tert-Amyl Methyl Ether	Monitor Only	2013 RGP	Monitor Only	2013 RGP
Total Group I Polycyclic Aromatic Hydrocarbons (PAH)	0.14	RI WQ	1	EPA 2017 RGP TBEL
Bis (2-Ethylhexyl) Phthalate	6	2013 RGP	6	2013 RGP
Benzo (a) Anthracene	0.0038	2013 RGP	0.0038	2013 RGP
Benzo (a) Pyrene	0.0038	2013 RGP	0.0038	2013 RGP
Benzo (b) Fluoranthene	0.0038	2013 RGP	0.0038	2013 RGP
Benzo (k) Fluoranthene	0.0038	2013 RGP	0.0038	2013 RGP
Chrysene	0.0038	2013 RGP	0.0038	2013 RGP
Dibenzo (a,h) anthracene	0.0038	2013 RGP	0.0038	2013 RGP
Indeno (1,2,3-cd) Pyrene	0.0038	2013 RGP	0.0038	2013 RGP
Copper	2.98	RI WQ	4.62	RI WQ
Lead (Total Recoverable)	6.81	RI WQ	160	EPA 2017 RGP TBEL
Nickel (total recoverable)	6.62	RI WQ	59.79	RI WQ
Chromium III (trivalent, total recoverable)	100	2013 RGP	323	EPA 2017 RGP TBEL
Chromium VI (hexavalent, total recoverable)	40.28	RI WQ	323	EPA 2017 RGP TBEL
Zinc (total recoverable)	68.5	RI WQ	76.11	RI WQ
Iron (Total Recoverable)	Monitor Only	RI WQ	1000	2013 RGP
J. Contaminated Sumps				
Ammonia	Monitor Only	EPA 2017 RGP TBEL	Monitor Only	EPA 2017 RGP TBEL
Ethanol	Monitor Only	EPA 2017 RGP TBEL	Monitor Only	EPA 2017 RGP TBEL
Total Suspended Solids	Monitor Only	EPA 2017 RGP TBEL	30000	EPA 2017 RGP TBEL
Total Residual Chlorine	7.5	RI WQ	13	RI WQ
Total Petroleum Hydrocarbons	Monitor Only	2013 RGP	1000	2013 RGP
Cyanide	0.8	RI WQ	0.8	RI WQ
Benzene	5	2013 RGP	5	2013 RGP
Toluene	12000	RI WQ	Monitor Only	2013 RGP
Ethylbenzene	1680	RI WQ	Monitor Only	2013 RGP
(m,p,o) Xylenes	Monitor Only	2013 RGP	Monitor Only	2013 RGP
Total BTEX	100	2013 RGP	100	2013 RGP
Ethylene dibromide	Monitor Only	2013 RGP	0.05	2013 RGP
Methyl-t-Butyl Ether (MTBE)	Monitor Only	2013 RGP	70	2013 RGP
tert-Amyl Methyl Ether	Monitor Only	2013 RGP	Monitor Only	2013 RGP
Carbon Tetrachloride	4.4	2013 RGP	4.4	2013 RGP
1,4 Dichlorobenzene	5	2013 RGP	5	2013 RGP
1,2 Dichlorobenzene	600	2013 RGP	600	2013 RGP
1,3 Dichlorobenzene	320	2013 RGP	320	2013 RGP
Total Dichlorobenzene	Monitor Only	2013 RGP	763	2013 RGP
1,1 Dichloroethane	Monitor Only	2013 RGP	70	2013 RGP
1,2 Dichloroethane	5	2013 RGP	5	2013 RGP
1,1 Dichloroethylene	3.2	2013 RGP	3.2	2013 RGP
cis-1,2 Dichloroethylene	Monitor Only	2013 RGP	70	2013 RGP
Dichloromethane	Monitor Only	2013 RGP	4.6	2013 RGP
Tetrachloroethylene	5	2013 RGP	5	2013 RGP
1,1,1 Trichloroethane	Monitor Only	2013 RGP	200	2013 RGP
1,1,2 Trichloroethane	5	2013 RGP	5	2013 RGP
Trichloroethylene	5	2013 RGP	5	2013 RGP

2018 RI RGP Limits for Saltwater

Pollutant	Chronic (ug/l)	Limit Source	Acute (ug/l)	Limit Source
Vinyl Chloride	1.92	RI WQ	2	2013 RGP
Acetone	Monitor Only	2013 RGP	7970	EPA 2017 RGP TBEL
1,4 Dioxane	Monitor Only	2013 RGP	200	EPA 2017 RGP TBEL
Total Phenols	300	RI WQ	300	2013 RGP
Pentachlorophenol (PCP)	1	2013 RGP	1	2013 RGP
Total Phthalates	3	2013 RGP	190	EPA 2017 RGP TBEL
Bis (2-Ethylhexyl) Phthalate	6	2013 RGP	6	2013 RGP
Polycyclic Aromatic Hydrocarbons (PAH)	0.14	RI WQ	1	EPA 2017 RGP TBEL
Benzo (a) Anthracene	0.0038	2013 RGP	0.0038	2013 RGP
Benzo (a) Pyrene	0.0038	2013 RGP	0.0038	2013 RGP
Benzo (b) Fluoranthene	0.0038	2013 RGP	0.0038	2013 RGP
Benzo (k) Fluoranthene	0.0038	2013 RGP	0.0038	2013 RGP
Chrysene	0.0038	2013 RGP	0.0038	2013 RGP
Dibenzo (a,h) anthracene	0.0038	2013 RGP	0.0038	2013 RGP
Indeno (1,2,3-cd) Pyrene	0.0038	2013 RGP	0.0038	2013 RGP
Polycyclic Aromatic Hydrocarbons (PAH)	0.14	RI WQ	100	2013 RGP
Acenaphthene	1.9	2013 RGP	1.9	2013 RGP
Acenaphthylene	Monitor Only	2013 RGP	Monitor Only	2013 RGP
Anthracene	32000	RI WQ	Monitor Only	2013 RGP
Benzo (ghi) Perylene	Monitor Only	2013 RGP	Monitor Only	2013 RGP
Fluoranthene	112	RI WQ	Monitor Only	2013 RGP
Fluorene	4240	RI WQ	Monitor Only	2013 RGP
Napthalene	Monitor Only	2013 RGP	20	2013 RGP
Phenanthrene	Monitor Only	2013 RGP	Monitor Only	2013 RGP
Pyrene	3200	RI WQ	Monitor Only	2013 RGP
Total Polychlorinated Biphenyls (PCBs)	0.000064	2013 RGP	0.000064	2013 RGP
Antimony	5.6	2013 RGP	5.6	2013 RGP
Arsenic	1.12	RI WQ	55.2	RI WQ
Cadmium	7.08	RI WQ	10.2	EPA 2017 RGP TBEL
Chromium III (trivalent, total recoverable)	100	2013 RGP	323	EPA 2017 RGP TBEL
Chromium VI (hexavalent, total recoverable)	40.28	RI WQ	323	EPA 2017 RGP TBEL
Copper	2.98	RI WQ	4.62	RI WQ
Lead (Total Recoverable)	6.81	RI WQ	160	EPA 2017 RGP TBEL
Mercury	0.12	RI WQ	1.69	RI WQ
Nickel (total recoverable)	6.62	RI WQ	59.79	RI WQ
Selenium	56.91	RI WQ	232.46	RI WQ
Silver	1.78	2013 RGP	1.78	RI WQ
Zinc (total recoverable)	68.5	RI WQ	76.11	RI WQ
Iron (Total Recoverable)	Monitor Only	RI WQ	1000	2013 RGP

Appendix A.1
Class AA Freshwaters

CALCULATION OF WATER QUALITY BASED CLASS AA FRESHWATER DISCHARGE LIMITS FACILITY SPECIFIC DATA INPUT SHEET

NOTE: LIMITS BASED ON RI WATER QUALITY CRITERIA DATED AUGUST 2018

FACILITY NAME: Remediation General Permit
RIPDES PERMIT #: DF=1

DISSOLVED BACKGROUND DATA (ug/L)	ACUTE METAL TRANSLATOR	CHRONIC METAL TRANSLATOR	FLOW DATA
ALUMINUM	NA	NA	DESIGN FLOW = 1.500 MGD
ARSENIC	1	1	= 2.321 CFS
CADMIUM	1.002000673	0.967000673	7Q10 FLOW = 0.000 CFS
CHROMIUM III	0.316	0.86	7Q10 (JUNE-OCT) = 0.000 CFS
CHROMIUM VI	0.982	0.962	7Q10 (NOV-MAY) = 0.000 CFS
COPPER	0.96	0.96	30Q5 FLOW = 0.000 CFS
LEAD	0.993001166	0.993001166	HARMONIC FLOW = 0.000 CFS
MERCURY	0.85	0.85	
NICKEL	0.998	0.997	
SELENIUM	NA	NA	
SILVER	0.85	NA	
ZINC	0.978	NA	
AMMONIA (as N)	NA	0.986	
			DILUTION FACTORS
			ACUTE = 1.000
			CHRONIC = 1.000
			(MAY-OCT) = 1.000
			(NOV-APR) = 1.000
			30Q5 FLOW = 1.000
			HARMONIC FLOW = 1.000

USE NA WHEN NO DATA IS AVAILABLE

NOTE 1: METAL TRANSLATORS FROM RI WATER QUALITY REGS.

pH =	7.5 S.U.
HARDNESS =	25.0 (mg/L as CaCO3)

WATER QUALITY BASED EFFLUENT LIMITS - FRESHWATER

CALCULATION OF WATER QUALITY BASED CLASS AA FRESHWATER DISCHARGE LIMITS
 FACILITY NAME: Remediation General Permit
 RIPDES PERMIT #: DF=1

Month	Upper 90 th % pH	Acute Criteria* ug/L as N	Chronic Criteria* ug/L as N
May	7.9	10.1	1.46
Jun	7.9	10.1	1.46
Jul	7.9	10.1	1.46
Aug	7.9	10.1	1.46
Sep	7.9	10.1	1.46
Oct	7.9	10.1	1.46
Nov	7.9	10.1	1.46
Dec	7.9	10.1	1.46
Jan	7.9	10.1	1.46
Feb	7.9	10.1	1.46
Mar	7.9	10.1	1.46
Apr	7.9	10.1	1.46

*NOTE: Criteria from Appendix B of the RI Water Quality Regs., July 2006.

CALCULATION OF WATER QUALITY BASED CLASS AA FRESHWATER DISCHARGE LIMITS

FACILITY NAME: Remediation General Permit RIPDES PERMIT #: DF=1

NOTE: METALS CRITERIA ARE EXPRESSED AS DISSOLVED, METALS LIMITS ARE EXPRESSED AS TOTAL

CHEMICAL NAME	CAS #	BACKGROUND CONCENTRATION (ug/L)	FRESHWATER CRITERIA ACUTE (ug/L)	DAILY MAX LIMIT (ug/L)	FRESHWATER CRITERIA CHRONIC (ug/L)	HUMAN HEALTH NON-CLASS A CRITERIA (ug/L)	MONTHLY AVE LIMIT (ug/L)
PRIORITY POLLUTANTS							
TOXIC METALS AND CYANIDE							
ANTIMONY	7440360		450	360	10	5.6	4.48
ARSENIC (limits are total recoverable)	7440382	NA	340	272	150	0.18	0.144
ASBESTOS	1332214			No Criteria		7000000	5600000
BERYLLIUM	7440417		7.5	6	0.17		0.136
CADMIUM (limits are total recoverable)	7440439	NA	0.522206507	0.416931063	0.093696824		0.077515416
CHROMIUM III (limits are total recoverable)	16065831	NA	183.0659069	463.4579922	23.81311337		22.15173337
CHROMIUM VI (limits are total recoverable)	18540299	NA	16	13.03462322	11		9.147609148
COPPER (limits are total recoverable)	7440508	NA	3.640069619	3.033391349	2.739313654	1300	2.282761378
CYANIDE	57125		22	17.6	5.2	140	4.16
LEAD (limits are total recoverable)	7439921	NA	13.88217279	11.18401329	0.540968344		0.435824942
MERCURY (limits are total recoverable)	7439976	NA	1.4	1.317647059	0.77	0.14	0.131764706
NICKEL (limits are total recoverable)	7440020	NA	144.9178377	116.1666034	16.09589771	610	12.91546456
SELENIUM (limits are total recoverable)	7782492	NA	20	16	5	170	4
SILVER (limits are total recoverable)	7440224	NA	0.31788916	0.299189798	NA		No Criteria
THALLIUM	7440280		46	36.8	1	0.24	0.192
ZINC (limits are total recoverable)	7440666	NA	36.20176511	29.61289579	36.49789406	7400	29.61289579
VOLATILE ORGANIC COMPOUNDS							
ACROLEIN	107028		2.9	2.32	0.06	190	0.048
ACRYLONITRILE	107131		378	302.4	8.4	0.51	0.408
BENZENE	71432		265	212	5.9	22	4.72
BROMOFORM	75252		1465	1172	33	43	26.4
CARBON TETRACHLORIDE	56235		1365	1092	30	2.3	1.84
CHLOROBENZENE	108907		795	636	18	130	14.4
CHLORODIBROMOMETHANE	124481			No Criteria		4	3.2
CHLOROFORM	67663		1445	1156	32	57	25.6
DICHLOROBROMOMETHANE	75274			No Criteria		5.5	4.4
1,2DICHLOROETHANE	107062		5900	4720	131	3.8	3.04
1,1DICHLOROETHYLENE	75354		580	464	13	330	10.4
1,2DICHLOROPROPANE	78875		2625	2100	58	5	4
1,3DICHLOROPROPYLENE	542756			No Criteria		0.34	0.272
ETHYLBENZENE	100414		1600	1280	36	530	28.8
BROMOMETHANE (methyl bromide)	74839			No Criteria		47	37.6
CHLOROMETHANE (methyl chloride)	74873			No Criteria			No Criteria
METHYLENE CHLORIDE	75092		9650	7720	214	46	36.8

CALCULATION OF WATER QUALITY BASED CLASS AA FRESHWATER DISCHARGE LIMITS
FACILITY NAME: Remediation General Permit RIPDES PERMIT #: DF=1

NOTE: METALS CRITERIA ARE EXPRESSED AS DISSOLVED, METALS LIMITS ARE EXPRESSED AS TOTAL

CHEMICAL NAME	CAS #	BACKGROUND CONCENTRATION (ug/L)	FRESHWATER CRITERIA ACUTE (ug/L)	DAILY MAX LIMIT (ug/L)	FRESHWATER CRITERIA CHRONIC (ug/L)	HUMAN HEALTH NON-CLASS A CRITERIA (ug/L)	MONTHLY AVE LIMIT (ug/L)
1,1,2,2-TETRACHLOROETHANE	79345		466	372.8	10	1.7	1.36
TETRACHLOROETHYLENE	127184		240	192	5.3	6.9	4.24
TOLUENE	108883		635	508	14	1300	11.2
1,2-TRANS-DICHLOROETHYLENE	156605			No Criteria		140	112
1,1,1-TRICHLOROETHANE	71556		900	No Criteria		5.9	No Criteria
1,1,2-TRICHLOROETHANE	79005		1950	720	20	25	4.72
TRICHLOROETHYLENE	79016			1560	43	0.025	20
VINYL CHLORIDE	75014			No Criteria			0.02
ACID ORGANIC COMPOUNDS							
2-CHLOROPHENOL	95578		129	103.2	2.9	81	2.32
2,4-DICHLOROPHENOL	120832		101	80.8	2.2	77	1.76
2,4-DIMETHYLPHENOL	105679		106	84.8	2.4	380	1.92
4,6-DINITRO-2-METHYL PHENOL	534521			No Criteria		13	10.4
2,4-DINITROPHENOL	51285		31	24.8	0.69	69	0.552
4-NITROPHENOL	88755			No Criteria			No Criteria
PENTACHLOROPHENOL	87865			0.046552898	0.044644576	2.7	0.035715661
PHENOL	108952		251	200.8	5.6	21000	4.48
2,4,6-TRICHLOROPHENOL	88062		16	12.8	0.36	14	0.288
BASE NEUTRAL COMPOUNDS							
ACENAPHTHENE	83329		85	68	1.9	670	1.52
ANTHRACENE	120127			No Criteria		8300	6640
BENZIDINE	92875			No Criteria		0.00086	0.000688
POLYCYCLIC AROMATIC HYDROCARBONS				No Criteria		0.038	0.0304
BIS(2-CHLOROETHYL)ETHER	111444			No Criteria		0.3	0.24
BIS(2-CHLOROISOPROPYL)ETHER	108601			No Criteria		1400	1120
BIS(2-ETHYLHEXYL)PHTHALATE	117817			No Criteria		12	9.6
BUTYL BENZYL PHTHALATE	85687		555	444	12	1500	1.52
2-CHLORONAPHTHALENE	91587		85	68	1.9	1000	800
1,2-DICHLOROBENZENE	95501		79	No Criteria		420	1.44
1,3-DICHLOROBENZENE	541731		390	63.2	1.8	320	6.96
1,4-DICHLOROBENZENE	106467		56	312	8.7	63	0.96
3,3-DICHLOROBENZIDENE	91941			44.8	1.2	0.21	0.168
DIETHYL PHTHALATE	84662		2605	No Criteria		17000	46.4
DIMETHYL PHTHALATE	131113		1650	2084	58	270000	29.6
DI-n-BUTYL PHTHALATE	84742			1320	37	2000	1600
2,4-DINITROTOLUENE	121142		1550	No Criteria		1.1	0.88

CALCULATION OF WATER QUALITY BASED CLASS AA FRESHWATER DISCHARGE LIMITS

FACILITY NAME: Remediation General Permit RIPDES PERMIT #: DF=1

NOTE: METALS CRITERIA ARE EXPRESSED AS DISSOLVED, METALS LIMITS ARE EXPRESSED AS TOTAL

CHEMICAL NAME	CAS #	BACKGROUND CONCENTRATION (ug/L)	FRESHWATER CRITERIA ACUTE (ug/L)	DAILY MAX LIMIT (ug/L)	FRESHWATER CRITERIA CHRONIC (ug/L)	HUMAN HEALTH NON-CLASS A CRITERIA (ug/L)	MONTHLY AVE LIMIT (ug/L)
1,2DIPHENYLHYDRAZINE	122667		14	11.2	0.31	0.36	0.248
FLUORANTHENE	206440		199	159.2	4.4	130	3.52
FLUORENE	86737			No Criteria		1100	880
HEXACHLOROBENZENE	118741			No Criteria		0.0028	0.00224
HEXACHLOROBUTADIENE	87683			No Criteria		4.4	3.52
HEXACHLOROCYCLOPENTADIENE	77474		0.35	0.28	0.008	40	0.0064
HEXACHLOROETHANE	67721		49	39.2	1.1	14	0.88
ISOPHORONE	78591		5850	4680	130	350	104
NAPHTHALENE	91203		115	92	2.6		2.08
NITROBENZENE	98953		1350	1080	30	17	13.6
N-NITROSODIMETHYLAMINE	62759			No Criteria		0.0069	0.00552
N-NITROSODI-N-PROPYLAMINE	621647			No Criteria		0.05	0.04
N-NITROSODIPHENYLAMINE	86306		293	234.4	6.5	33	5.2
PYRENE	129000		75	No Criteria	1.7	830	664
1,2,4trichlorobenzene	120821			60		35	1.36
PESTICIDES/PCBs							
ALDRIN	309002		3	2.4		0.00049	0.000392
Alpha BHC	319846			No Criteria		0.026	0.0208
Beta BHC	319857			No Criteria		0.091	0.0728
Gamma BHC (Lindane)	58899		0.95	0.76	0.0043	0.98	0.784
CHLORDANE	57749		2.4	1.92		0.008	0.00344
4,4DDT	50293		1.1	0.88	0.001	0.0022	0.0008
4,4DDE	72559			No Criteria		0.0022	0.00176
4,4DDD	72548			No Criteria		0.0031	0.00248
DIELDRIN	60571		0.24	0.192	0.056	0.00052	0.000416
ENDOSULFAN (alpha)	959988		0.22	0.176	0.056	62	0.0448
ENDOSULFAN (beta)	33213659		0.22	0.176	0.056	62	0.0448
ENDOSULFAN (sulfate)	1031078			No Criteria		62	49.6
ENDRIN	72208		0.086	0.0688	0.036	0.059	0.0288
ENDRIN ALDEHYDE	7421934			No Criteria		0.29	0.232
HEPTACHLOR	76448		0.52	0.416	0.0038	0.00079	0.000632
HEPTACHLOR EPOXIDE	1024573		0.52	0.416	0.0038	0.00039	0.000312
POLYCHLORINATED BIPHENYLS3	1336363			No Criteria	0.014	0.00064	0.000512
2,3,7,8TCDD (Dioxin)	1746016		0.73	No Criteria		0.00000005	0.00000004
TOXAPHENE	8001352		0.46	0.584	0.0002	0.0028	0.00016
TRIBUTYL TIN				0.368	0.072		0.0576

CALCULATION OF WATER QUALITY BASED CLASS AA FRESHWATER DISCHARGE LIMITS
FACILITY NAME: Remediation General Permit RIPDES PERMIT #: DF=1
NOTE: METALS CRITERIA ARE EXPRESSED AS DISSOLVED, METALS LIMITS ARE EXPRESSED AS TOTAL

CHEMICAL NAME	CAS #	BACKGROUND CONCENTRATION (ug/L)	FRESHWATER CRITERIA ACUTE (ug/L)	DAILY MAX LIMIT (ug/L)	FRESHWATER CRITERIA CHRONIC (ug/L)	HUMAN HEALTH NON-CLASS A CRITERIA (ug/L)	MONTHLY AVE LIMIT (ug/L)
NON PRIORITY POLLUTANTS							
OTHER SUBSTANCES							
ALUMINUM (limits are total recoverable)	7429905	NA	750	600	87		69.6
AMMONIA as N(winter/summer)	7664417		10.1	8080	1.46		1168
4BROMOPHENYL PHENYL ETHER			18	14.4	0.4		0.32
CHLORIDE	16887006		860000	688000	230000		184000
CHLORINE	7782505		19	19	11		11
4CHLORO2METHYLPHENOL			15	12	0.32		0.256
1CHLORONAPHTHALENE			80	64	1.8		1.44
4CHLOROPHENOL	106489		192	153.6	4.3		3.44
2,4DICHLORO6METHYLPHENOL			22	17.6	0.48		0.384
1,1DICHLOROPROPANE	142289		1150	920	26		20.8
1,3DICHLOROPROPANE			303	242.4	6.7		5.36
2,3DINITROTOLUENE			17	13.6	0.37		0.296
2,4DINITRO6METHYL PHENOL			12	9.6	0.26		0.208
IRON	7439896			No Criteria	1000	300	240
pentachlorobenzene	608935		13	10.4	0.28		0.224
PENTACHLOROETHANE			362	289.6	8		6.4
1,2,3,5tetrachlorobenzene			321	256.8	7.1		5.68
1,1,1,2TETRACHLOROETHANE	630206		980	784	22		17.6
2,3,4,6TETRACHLOROPHENOL	58902		7	5.6	0.16		0.128
2,3,5,6TETRACHLOROPHENOL			8.5	6.8	0.19		0.152
2,4,5TRICHLOROPHENOL	95954		23	18.4	0.51		0.408
2,4,6TRINITROPHENOL	88062		4235	3388	94		75.2
XYLENE	1330207		133	106.4	3		2.4

CALCULATION OF WATER QUALITY BASED CLASS AA FRESHWATER DISCHARGE LIMITS
FACILITY NAME: Remediation General Permit RIPDES PERMIT #: DF=1

CHEMICAL NAME	CAS#	DAILY MAX LIMIT (ug/L)	MONTHLY AVE LIMIT (ug/L)
PRIORITY POLLUTANTS			
TOXIC METALS AND CYANIDE			
ANTIMONY	7440360	360.00	4.48
ARSENIC, TOTAL	7440382	272.00	0.14
ASBESTOS	1332214	No Criteria	5600000.00
BERYLLIUM	7440417	6.00	0.14
CADMIUM, TOTAL	7440439	0.42	0.08
CHROMIUM III, TOTAL	16065831	463.46	22.15
CHROMIUM VI, TOTAL	18540299	13.03	9.15
COPPER, TOTAL	7440508	3.03	2.28
CYANIDE	57125	17.60	4.16
LEAD, TOTAL	7439921	11.18	0.44
MERCURY, TOTAL	7439976	1.32	0.13
NICKEL, TOTAL	7440020	116.17	12.92
SELENIUM, TOTAL	7782492	16.00	4.00
SILVER, TOTAL	7440224	0.30	0.30
THALLIUM	7440280	36.80	0.19
ZINC, TOTAL	7440666	29.61	29.61
VOLATILE ORGANIC COMPOUNDS			
ACROLEIN	107028	2.32	0.05
ACRYLONITRILE	107131	302.40	0.41
BENZENE	71432	212.00	4.72
BROMOFORM	75252	1172.00	26.40
CARBON TETRACHLORIDE	56235	1092.00	1.84
CHLOROBENZENE	108907	636.00	14.40
CHLORODIBROMOMETHANE	124481	No Criteria	3.20
CHLOROFORM	67663	1156.00	25.60
DICHLOROBROMOMETHANE	75274	No Criteria	4.40
1,2DICHLOROETHANE	107062	4720.00	3.04
1,1DICHLOROETHYLENE	75354	464.00	10.40
1,2DICHLOROPROPANE	78875	2100.00	4.00
1,3DICHLOROPROPYLENE	542756	No Criteria	0.27
ETHYLBENZENE	100414	1280.00	28.80
BROMOMETHANE (methyl bromide)	74839	No Criteria	37.60
CHLOROMETHANE (methyl chloride)	74873	No Criteria	0.00000
METHYLENE CHLORIDE	75092	7720.00	36.80
1,1,2,2TETRACHLOROETHANE	79345	372.80	1.36

CHEMICAL NAME	CAS#	DAILY MAX LIMIT (ug/L)	MONTHLY AVE LIMIT (ug/L)
TETRACHLOROETHYLENE	127184	192.00	4.24
TOLUENE	108883	508.00	11.20
1,2TRANSDICHLOROETHYLENE	156605	No Criteria	112.00
1,1,1TRICHLOROETHANE	71556	No Criteria	0.00000
1,1,2TRICHLOROETHANE	79005	720.00	4.72
TRICHLOROETHYLENE	79016	1560.00	20.00
VINYL CHLORIDE	75014	No Criteria	0.02
ACID ORGANIC COMPOUNDS			
2CHLOROPHENOL	95578	103.20	2.32
2,4DICHLOROPHENOL	120832	80.80	1.76
2,4DIMETHYLPHENOL	105679	84.80	1.92
4,6DINITRO2METHYL PHENOL	534521	No Criteria	10.40
2,4DINITROPHENOL	51285	24.80	0.55
4NITROPHENOL	88755	No Criteria	0.00000
PENTACHLOROPHENOL	87865	0.05	0.04
PHENOL	108952	200.80	4.48
2,4,6TRICHLOROPHENOL	88062	12.80	0.29
BASE NEUTRAL COMPOUNDS			
ACENAPHTHENE	83329	68.00	1.52
ANTHRACENE	120127	No Criteria	6640.00
BENZIDINE	92875	No Criteria	0.00069
PAHS		No Criteria	0.03
BIS(2CHLOROETHYL)ETHER	111444	No Criteria	0.24
BIS(2CHLOROISOPROPYL)ETHER	108601	No Criteria	1120.00
BIS(2ETHYLHEXYL)PHTHALATE	117817	444.00	9.60
BUTYL BENZYL PHTHALATE	85687	68.00	1.52
2CHLORONAPHTHALENE	91587	No Criteria	800.00
1,2DICHLOROBENZENE	95501	63.20	1.44
1,3DICHLOROBENZENE	541731	312.00	6.96
1,4DICHLOROBENZENE	106467	44.80	0.96
3,3DICHLOROBENZIDENE	91941	No Criteria	0.17
DIETHYL PHTHALATE	84662	2084.00	46.40
DIMETHYL PHTHALATE	131113	1320.00	29.60
DI-n-BUTYL PHTHALATE	84742	No Criteria	1600.00
2,4DINITROTOLUENE	121142	1240.00	0.88
1,2DIPHENYLHYDRAZINE	122667	11.20	0.25
FLUORANTHENE	206440	159.20	3.52

CALCULATION OF WATER QUALITY BASED CLASS AA FRESHWATER DISCHARGE LIMITS
FACILITY NAME: Remediation General Permit RIPDES PERMIT #: DF=1

CHEMICAL NAME	CAS#	DAILY MAX LIMIT (ug/L)	MONTHLY AVE LIMIT (ug/L)
FLUORENE	86737	No Criteria	880.00
HEXACHLOROBENZENE	118741	No Criteria	0.00224
HEXACHLOROBUTADIENE	87683	No Criteria	3.52
HEXACHLOROCYCLOPENTADIENE	77474	0.28	0.00640
HEXACHLOROETHANE	67721	39.20	0.88
ISOPHORONE	78591	4680.00	104.00
NAPHTHALENE	91203	92.00	2.08
NITROBENZENE	98953	1080.00	13.60
N-NITROSODIMETHYLAMINE	62759	No Criteria	0.00552
N-NITROSODI-N-PROPYLAMINE	621647	No Criteria	0.04
N-NITROSODIPHENYLAMINE	86306	234.40	5.20
PYRENE	129000	No Criteria	664.00
1,2,4trichlorobenzene	120821	60.00	1.36
PESTICIDES/PCBs			
ALDRIN	309002	2.40	0.00039
Alpha BHC	319846	No Criteria	0.02
Beta BHC	319857	No Criteria	0.07
Gamma BHC (Lindane)	58899	0.76	0.76
CHLORDANE	57749	1.92	0.00344
4,4DDT	50293	0.88	0.00080
4,4DDE	72559	No Criteria	0.00176
4,4DDD	72548	No Criteria	0.00248
DIELDRIN	60571	0.19	0.00042
ENDOSULFAN (alpha)	95988	0.18	0.04
ENDOSULFAN (beta)	33213659	0.18	0.04
ENDOSULFAN (sulfate)	1031078	No Criteria	49.60
ENDRIN	72208	0.07	0.03
ENDRIN ALDEHYDE	7421934	No Criteria	0.23
HEPTACHLOR	76448	0.42	0.00063
HEPTACHLOR EPOXIDE	1024573	0.42	0.00031
POLYCHLORINATED BIPHENYLS3	1336363	No Criteria	0.00051
2,3,7,8TCDD (Dioxin)	1746016	No Criteria	0.00000
TOXAPHENE	8001352	0.58	0.00016
TRIBUTYLTIN		0.37	0.06

CHEMICAL NAME	CAS#	DAILY MAX LIMIT (ug/L)	MONTHLY AVE LIMIT (ug/L)
NON PRIORITY POLLUTANTS			
OTHER SUBSTANCES			
ALUMINUM, TOTAL	7429905	600.00	69.60
AMMONIA (as N), WINTER (NOV-APR)	7664417	8080.00	1168.00
AMMONIA (as N), SUMMER (MAY-OC)	7664417	8080.00	1168.00
4BROMOPHENYL PHENYL ETHER		14.40	0.32
CHLORIDE	16887006	688000.00	184000.00
CHLORINE	7782505	19.00	11.00
4CHLORO2METHYLPHENOL		12.00	0.26
1CHLORONAPHTHALENE		64.00	1.44
4CHLOROPHENOL	106489	153.60	3.44
2,4DICHLORO6METHYLPHENOL		17.60	0.38
1,1DICHLOROPROPANE		920.00	20.80
1,3DICHLOROPROPANE	142289	242.40	5.36
2,3DINITROTOLUENE		13.60	0.30
2,4DINITRO6METHYL PHENOL		9.60	0.21
IRON	7439896	No Criteria	240.00
pentachlorobenzene	608935	10.40	0.22
PENTACHLOROETHANE		289.60	6.40
1,2,3,5tetrachlorobenzene		256.80	5.68
1,1,1,2TETRACHLOROETHANE	630206	784.00	17.60
2,3,4,6TETRACHLOROPHENOL	58902	5.60	0.13
2,3,5,6TETRACHLOROPHENOL		6.80	0.15
2,4,5TRICHLOROPHENOL	95954	18.40	0.41
2,4,6TRINITROPHENOL	88062	3388.00	75.20
XYLENE	1330207	106.40	2.40

Appendix A.2
Non-Class AA Freshwaters

CALCULATION OF WATER QUALITY BASED NON-CLASS AA FRESHWATER DISCHARGE LIMITS
FACILITY SPECIFIC DATA INPUT SHEET

NOTE: LIMITS BASED ON RI WATER QUALITY CRITERIA DATED AUGUST 2018

FACILITY NAME: Remediation General Permit
 RIPDES PERMIT #: DF=1

	DISSOLVED BACKGROUND DATA (ug/L)	ACUTE METAL TRANSLATOR	CHRONIC METAL TRANSLATOR
ALUMINIUM	NA	NA	NA
ARSENIC	NA	1	1
CADMIUM	NA	1.002000673	0.967000673
CHROMIUM III	NA	0.316	0.86
CHROMIUM VI	NA	0.982	0.962
COPPER	NA	0.96	0.96
LEAD	NA	0.993001166	0.993001166
MERCURY	NA	0.85	0.85
NICKEL	NA	0.998	0.997
SELENIUM	NA	NA	NA
SILVER	NA	0.85	NA
ZINC	NA	0.978	0.986
AMMONIA (as N)	NA		

FLOW DATA	
DESIGN FLOW =	1.500 MGD
=	2.321 CFS
7Q10 FLOW =	0.000 CFS
7Q10 (JUNE-OCT) =	0.000 CFS
7Q10 (NOV-MAY) =	0.000 CFS
30Q5 FLOW =	0.000 CFS
HARMONIC FLOW =	0.000 CFS

DILUTION FACTORS	
ACUTE =	1.000
CHRONIC =	1.000
(MAY-OCT) =	1.000
(NOV-APR) =	1.000
30Q5 FLOW =	1.000
HARMONIC FLOW =	1.000

USE NA WHEN NO DATA IS AVAILABLE

NOTE 1: METAL TRANSLATORS FROM RI WATER QUALITY REGS

PH =	7.5 S.U.
HARDNESS =	25.0 (mg/L as CaCO3)

WATER QUALITY BASED EFFLUENT LIMITS - FRESHWATER

CALCULATION OF WATER QUALITY BASED NON-CLASS AA FRESHWATER DISCHARGE LIMITS
 FACILITY NAME: Remediation General Permit
 RIPDES PERMIT #: DF=1

Month	Upper 90 th % pH	Acute Criteria* ug/L as N	Chronic Criteria* ug/L as N
May	7.9	10.1	1.46
Jun	7.9	10.1	1.46
Jul	7.9	10.1	1.46
Aug	7.9	10.1	1.46
Sep	7.9	10.1	1.46
Oct	7.9	10.1	1.46
Nov	7.9	10.1	1.46
Dec	7.9	10.1	1.46
Jan	7.9	10.1	1.46
Feb	7.9	10.1	1.46
Mar	7.9	10.1	1.46
Apr	7.9	10.1	1.46

*NOTE: Criteria from Appendix B of the RI Water Quality Regs., July 2006.

CALCULATION OF WATER QUALITY BASED NON-CLASS AA FRESHWATER DISCHARGE LIMITS

FACILITY NAME: Remediation General Permit RIPDES PERMIT #: DF=1

NOTE: METALS CRITERIA ARE EXPRESSED AS DISSOLVED, METALS LIMITS ARE EXPRESSED AS TOTAL

CHEMICAL NAME	CAS #	BACKGROUND CONCENTRATION (ug/L)	FRESHWATER CRITERIA ACUTE (ug/L)	DAILY MAX LIMIT (ug/L)	FRESHWATER CRITERIA CHRONIC (ug/L)	HUMAN HEALTH NON-CLASS A CRITERIA (ug/L)	MONTHLY AVE LIMIT (ug/L)
PRIORITY POLLUTANTS							
TOXIC METALS AND CYANIDE							
ANTIMONY	7440360		450	360	10	640	8
ARSENIC (limits are total recoverable)	7440382	NA	340	272	150	1.4	1.12
ASBESTOS	1332214			No Criteria			No Criteria
BERYLLIUM	7440417		7.5	6	0.17		0.136
CADMIUM (limits are total recoverable)	7440439	NA	0.522206507	0.416931063	0.093696824		0.077515416
CHROMIUM III (limits are total recoverable)	16065831	NA	183.0659069	463.4579922	23.81311337		22.15173337
CHROMIUM VI (limits are total recoverable)	18540299	NA	16	13.03462322	11		9.147609148
COPPER (limits are total recoverable)	7440508	NA	3.640069619	3.033391349	2.739313654		2.282761378
CYANIDE	57125		22	17.6	5.2	140	4.16
LEAD (limits are total recoverable)	7439921	NA	13.88217279	11.18401329	0.540968344		0.435824942
MERCURY (limits are total recoverable)	7439976	NA	1.4	1.317647059	0.77	0.15	0.141176471
NICKEL (limits are total recoverable)	7440020	NA	144.9178377	116.1666034	16.09589771	4600	12.91546456
SELENIUM (limits are total recoverable)	7782492	NA	20	16	5	4200	4
SILVER (limits are total recoverable)	7440224	NA	0.31788916	0.299189798	NA		No Criteria
THALLIUM	7440280		46	36.8	1	0.47	0.376
ZINC (limits are total recoverable)	7440666	NA	36.20176511	29.61289579	36.49789406	26000	29.61289579
VOLATILE ORGANIC COMPOUNDS							
ACROLEIN	107028		2.9	2.32	0.06	290	0.048
ACRYLONITRILE	107131		378	302.4	8.4	2.5	2
BENZENE	71432		265	212	5.9	510	4.72
BROMOFORM	75252		1465	1172	33	1400	26.4
CARBON TETRACHLORIDE	56235		1365	1092	30	16	12.8
CHLOROBENZENE	108907		795	636	18	1600	14.4
CHLORODIBROMOMETHANE	124481			No Criteria		130	104
CHLOROFORM	67663		1445	1156	32	4700	25.6
DICHLOROBROMOMETHANE	75274			No Criteria		170	136
1,2DICHLOROETHANE	107062		5900	4720	131	370	104.8
1,1DICHLOROETHYLENE	75354		580	464	13	7100	10.4
1,2DICHLOROPROPANE	78875		2625	2100	58	150	46.4
1,3DICHLOROPROPYLENE	542756			No Criteria		21	16.8
ETHYLBENZENE	100414		1600	1280	36	2100	28.8
BROMOMETHANE (methyl bromide)	74839			No Criteria		1500	1200
CHLOROMETHANE (methyl chloride)	74873			No Criteria			No Criteria
METHYLENE CHLORIDE	75092		9650	7720	214	5900	171.2

CALCULATION OF WATER QUALITY BASED NON-CLASS AA FRESHWATER DISCHARGE LIMITS
FACILITY NAME: Remediation General Permit RIPDES PERMIT #: DF=1
NOTE: METALS CRITERIA ARE EXPRESSED AS DISSOLVED, METALS LIMITS ARE EXPRESSED AS TOTAL

CHEMICAL NAME	CAS #	BACKGROUND CONCENTRATION (ug/L)	FRESHWATER CRITERIA ACUTE (ug/L)	DAILY MAX LIMIT (ug/L)	FRESHWATER CRITERIA CHRONIC (ug/L)	HUMAN HEALTH NON-CLASS A CRITERIA (ug/L)	MONTHLY AVE LIMIT (ug/L)
1,1,2,2TETRACHLOROETHANE	79345		466	372.8	10	40	8
TETRACHLOROETHYLENE	127184		240	192	5.3	33	4.24
TOLUENE	108883		635	508	14	15000	11.2
1,2TRANSDICHLOROETHYLENE	156605			No Criteria		10000	8000
1,1,1TRICHLOROETHANE	71556		900	No Criteria			No Criteria
1,1,2TRICHLOROETHANE	79005		1950	720	20	160	16
TRICHLOROETHYLENE	79016			1560	43	300	34.4
VINYL CHLORIDE	75014			No Criteria		2.4	1.92
ACID ORGANIC COMPOUNDS							
2CHLOROPHENOL	95578		129	103.2	2.9	150	2.32
2,4DICHLOROPHENOL	120832		101	80.8	2.2	290	1.76
2,4DIMETHYLPHENOL	105679		106	84.8	2.4	850	1.92
4,6DINITRO2METHYL PHENOL	534521			No Criteria		280	224
2,4DINITROPHENOL	51285		31	24.8	0.69	5300	0.552
4NITROPHENOL	88755			No Criteria			No Criteria
PENTACHLOROPHENOL	87865			0.046552898	0.044644576	30	0.035715661
PHENOL	108952		251	200.8	5.6	170000	4.48
2,4,6TRICHLOROPHENOL	88062		16	12.8	0.36	24	0.288
BASE NEUTRAL COMPOUNDS							
ACENAPHTHENE	83329			68	1.9	990	1.52
ANTHRACENE	120127			No Criteria		40000	32000
BENZIDINE	92875			No Criteria		0.002	0.0016
POLYCYCLIC AROMATIC HYDROCARBONS				No Criteria		0.18	0.144
BIS(2CHLOROETHYL)ETHER	111444			No Criteria		5.3	4.24
BIS(2CHLOROISOPROPYL)ETHER	108601			No Criteria		65000	52000
BIS(2ETHYLHEXYL)PHTHALATE	117817			No Criteria		22	9.6
BUTYL BENZYL PHTHALATE	85687		555	444	12	1900	1.52
2CHLORONAPHTHALENE	91587		85	68	1.9	1600	1280
1,2DICHLOROBENZENE	95501			No Criteria		1300	1.44
1,3DICHLOROBENZENE	541731			63.2	1.8	960	6.96
1,4DICHLOROBENZENE	106467			312	8.7	190	0.96
3,3DICHLOROBENZIDENE	106467		56	44.8	1.2	0.28	0.224
DIETHYL PHTHALATE	91941			No Criteria		44000	46.4
DIMETHYL PHTHALATE	84662		2605	2084	58	1100000	29.6
DI-n-BUTYL PHTHALATE	131113		1650	1320	37	4500	3600
2,4DINITROTOLUENE	84742			No Criteria			
	121142		1550	1240	34	34	27.2

CALCULATION OF WATER QUALITY BASED NON-CLASS AA FRESHWATER DISCHARGE LIMITS

FACILITY NAME: Remediation General Permit RIPDES PERMIT #: DF=1

NOTE: METALS CRITERIA ARE EXPRESSED AS DISSOLVED, METALS LIMITS ARE EXPRESSED AS TOTAL

CHEMICAL NAME	CAS #	BACKGROUND CONCENTRATION (ug/L)	FRESHWATER CRITERIA ACUTE (ug/L)	DAILY MAX LIMIT (ug/L)	FRESHWATER CRITERIA CHRONIC (ug/L)	HUMAN HEALTH NON-CLASS A CRITERIA (ug/L)	MONTHLY AVE LIMIT (ug/L)
1,2-DIPHENYLHYDRAZINE	122667		14	11.2	0.31	2	0.248
FLUORANTHENE	206440		199	159.2	4.4	140	3.52
FLUORENE	86737			No Criteria		5300	4240
HEXACHLOROBENZENE	118741			No Criteria		0.0029	0.00232
HEXACHLOROBUTADIENE	87683			No Criteria		180	144
HEXACHLOROCYCLOPENTADIENE	77474		0.35	0.28	0.008	1100	0.0064
HEXACHLOROETHANE	67721		49	39.2	1.1	33	0.88
ISOPHORONE	78591		5850	4680	130	9600	104
NAPHTHALENE	91203		115	92	2.6		2.08
NITROBENZENE	98953		1350	1080	30	690	24
N-NITROSODIMETHYLAMINE	62759			No Criteria		30	24
N-NITROSODI-N-PROPYLAMINE	621647			No Criteria		5.1	4.08
N-NITROSODIPHENYLAMINE	86306		293	234.4	6.5	60	5.2
PYRENE	129000			No Criteria		4000	3200
1,2,4-trichlorobenzene	120821		75	60	1.7	70	1.36
PESTICIDES/PCBs							
ALDRIN	309002		3	2.4		0.0005	0.0004
Alpha BHC	319846			No Criteria		0.049	0.0392
Beta BHC	319857			No Criteria		0.17	0.136
Gamma BHC (Lindane)	58899		0.95	0.76		1.8	1.44
CHLORDANE	57749		2.4	1.92	0.0043	0.0081	0.00344
4,4DDT	50293		1.1	0.88	0.001	0.0022	0.0008
4,4DDE	72559			No Criteria		0.0022	0.00176
4,4DDD	72548			No Criteria		0.0031	0.00248
DIELDRIN	60571		0.24	0.192	0.056	0.00054	0.000432
ENDOSULFAN (alpha)	959988		0.22	0.176	0.056	89	0.0448
ENDOSULFAN (beta)	33213659		0.22	0.176	0.056	89	0.0448
ENDOSULFAN (sulfate)	1031078			No Criteria		89	71.2
ENDRIN	72208		0.086	0.0688	0.036	0.06	0.0288
ENDRIN ALDEHYDE	7421934			No Criteria		0.3	0.24
HEPTACHLOR	76448		0.52	0.416	0.0038	0.00079	0.000632
HEPTACHLOR EPOXIDE	1024573		0.52	0.416	0.0038	0.00039	0.000312
POLYCHLORINATED BIPHENYLS3	1336363			No Criteria	0.014	0.00064	0.000512
2,3,7,8TCDD (Dioxin)	1746016			No Criteria		0.000000051	4.08E-08
TOXAPHENE	8001352		0.73	0.584	0.0002	0.0028	0.00016
TRIBUTYL TIN			0.46	0.368	0.072		0.0576

CALCULATION OF WATER QUALITY BASED NON-CLASS AA FRESHWATER DISCHARGE LIMITS

FACILITY NAME: Remediation General Permit RIPDES PERMIT #: DF=1

NOTE: METALS CRITERIA ARE EXPRESSED AS DISSOLVED, METALS LIMITS ARE EXPRESSED AS TOTAL

CHEMICAL NAME	CAS #	BACKGROUND CONCENTRATION (ug/L)	FRESHWATER CRITERIA ACUTE (ug/L)	DAILY MAX LIMIT (ug/L)	FRESHWATER CRITERIA CHRONIC (ug/L)	HUMAN HEALTH NON-CLASS A CRITERIA (ug/L)	MONTHLY AVE LIMIT (ug/L)
NON PRIORITY POLLUTANTS:							
OTHER SUBSTANCES							
ALUMINUM (limits are total recoverable)	7429905	NA	750	600	87		69.6
AMMONIA (as N(winter/summer))	7664417		10.1	8080	1.46		1168
4BROMOPHENYL PHENYL ETHER			18	14.4	0.4		0.32
CHLORIDE	16887006		860000	688000	230000		184000
CHLORINE	7782505		19	19	11		11
4CHLORO2METHYLPHENOL			15	12	0.32		0.256
1CHLORONAPHTHALENE			80	64	1.8		1.44
4CHLOROPHENOL	106489		192	153.6	4.3		3.44
2,4DICHLORO6METHYLPHENOL			22	17.6	0.48		0.384
1,1DICHLOROPROPANE	142289		1150	920	26		20.8
1,3DICHLOROPROPANE			303	242.4	6.7		5.36
2,3DINITROTOLUENE			17	13.6	0.37		0.296
2,4DINITRO6METHYL PHENOL			12	9.6	0.26		0.208
IRON	7439896		13	No Criteria	1000		800
pentachlorobenzene	608935		362	10.4	0.28		0.224
PENTACHLOROETHANE			321	289.6	8		6.4
1,2,3,5tetrachlorobenzene			980	256.8	7.1		5.68
1,1,1,2TETRACHLOROETHANE	630206		7	784	22		17.6
2,3,4,6TETRACHLOROPHENOL	58902		8.5	5.6	0.16		0.128
2,3,5,6TETRACHLOROPHENOL			23	6.8	0.19		0.152
2,4,5TRICHLOROPHENOL	95954		4235	18.4	0.51		0.408
2,4,6TRINITROPHENOL	88062		133	3388	94		75.2
XYLENE	1330207			106.4	3		2.4

CALCULATION OF WATER QUALITY BASED NON-CLASS AA FRESHWATER DISCHARGE LIMITS
FACILITY NAME: IEST WWTF **RIPDES PERMIT #: RI8675309**

CHEMICAL NAME	CAS#	DAILY MAX LIMIT (ug/L)	MONTHLY AVE LIMIT (ug/L)
PRIORITY POLLUTANTS			
TOXIC METALS AND CYANIDE			
ANTIMONY	7440360	360.00	8.00
ARSENIC, TOTAL	7440382	272.00	1.12
ASBESTOS	1332214	No Criteria	0.00000
BERYLLIUM	7440417	6.00	0.14
CADMIUM, TOTAL	7440439	0.42	0.07752
CHROMIUM III, TOTAL	16065831	463.46	22.15
CHROMIUM VI, TOTAL	18540299	13.03	9.15
COPPER, TOTAL	7440508	3.03	2.28
CYANIDE	57125	17.60	4.16
LEAD, TOTAL	7439921	11.18	0.44
MERCURY, TOTAL	7439976	1.32	0.14
NICKEL, TOTAL	7440020	116.17	12.92
SELENIUM, TOTAL	7782492	16.00	4.00
SILVER, TOTAL	7440224	0.30	0.30
THALLIUM	7440280	36.80	0.38
ZINC, TOTAL	7440666	29.61	29.61
VOLATILE ORGANIC COMPOUNDS			
ACROLEIN	107028	2.32	0.04800
ACRYLONITRILE	107131	302.40	2.00
BENZENE	71432	212.00	4.72
BROMOFORM	75252	1172.00	26.40
CARBON TETRACHLORIDE	56235	1092.00	12.80
CHLOROBENZENE	108907	636.00	14.40
CHLORODIBROMOMETHANE	124481	No Criteria	104.00
CHLOROFORM	67663	1156.00	25.60
DICHLOROBROMOMETHANE	75274	No Criteria	136.00
1,2DICHLOROETHANE	107062	4720.00	104.80
1,1DICHLOROETHYLENE	75354	464.00	10.40
1,2DICHLOROPROPANE	78875	2100.00	46.40
1,3DICHLOROPROPYLENE	542756	No Criteria	16.80
ETHYLBENZENE	100414	1280.00	28.80
BROMOMETHANE (methyl bromide)	74839	No Criteria	1200.00
CHLOROMETHANE (methyl chloride)	74873	No Criteria	0.00000
METHYLENE CHLORIDE	75092	7720.00	171.20
1,1,2,2TETRACHLOROETHANE	79345	372.80	8.00

CHEMICAL NAME	CAS#	DAILY MAX LIMIT (ug/L)	MONTHLY AVE LIMIT (ug/L)
TETRACHLOROETHYLENE	127184	192.00	4.24
TOLUENE	108883	508.00	11.20
1,2TRANSDICHLOROETHYLENE	156605	No Criteria	8000.00
1,1,1TRICHLOROETHANE	71556	No Criteria	0.00000
1,1,2TRICHLOROETHANE	79005	720.00	16.00
TRICHLOROETHYLENE	79016	1560.00	34.40
VINYL CHLORIDE	75014	No Criteria	1.92
ACID ORGANIC COMPOUNDS			
2CHLOROPHENOL	95578	103.20	2.32
2,4DICHLOROPHENOL	120832	80.80	1.76
2,4DIMETHYLPHENOL	105679	84.80	1.92
4,6DINITRO2METHYL PHENOL	534521	No Criteria	224.00
2,4DINITROPHENOL	51285	24.80	0.55
4NITROPHENOL	88755	No Criteria	0.00000
PENTACHLOROPHENOL	87865	0.05	0.03572
PHENOL	108952	200.80	4.48
2,4,6TRICHLOROPHENOL	88062	12.80	0.29
BASE NEUTRAL COMPOUNDS			
ACENAPHTHENE	83329	68.00	1.52
ANTHRACENE	120127	No Criteria	32000.00
BENZIDINE	92875	No Criteria	0.00160
PAHS		No Criteria	0.14
BIS(2CHLOROETHYL)ETHER	111444	No Criteria	4.24
BIS(2CHLOROISOPROPYL)ETHER	108601	No Criteria	52000.00
BIS(2ETHYLHEXYL)PHTHALATE	117817	444.00	9.60
BUTYL BENZYL PHTHALATE	85687	68.00	1.52
2CHLORONAPHTHALENE	91587	No Criteria	1280.00
1,2DICHLOROBENZENE	95501	63.20	1.44
1,3DICHLOROBENZENE	541731	312.00	6.96
1,4DICHLOROBENZENE	106467	44.80	0.96
3,3DICHLOROBENZIDENE	91941	No Criteria	0.22
DIETHYL PHTHALATE	84662	2084.00	46.40
DIMETHYL PHTHALATE	131113	1320.00	29.60
DI-n-BUTYL PHTHALATE	84742	No Criteria	3600.00
2,4DINITROTOLUENE	121142	1240.00	27.20
1,2DIPHENYLHYDRAZINE	122667	11.20	0.25
FLUORANTHENE	206440	159.20	3.52

CALCULATION OF WATER QUALITY BASED NON-CLASS AA FRESHWATER DISCHARGE LIMITS
FACILITY NAME: TEST WWTF
RIPDES PERMIT #: RI8675309

CHEMICAL NAME	CAS#	DAILY MAX LIMIT (ug/L)	MONTHLY AVE LIMIT (ug/L)
FLUORENE	86737	No Criteria	4240.00
HEXACHLOROBENZENE	118741	No Criteria	0.00232
HEXACHLOROBUTADIENE	87683	No Criteria	144.00
HEXACHLOROCYCLOPENTADIENE	77474	No Criteria	0.00640
HEXACHLOROETHANE	67721	0.28	0.88
ISOPHORONE	78591	39.20	104.00
NAPHTHALENE	91203	4680.00	2.08
NITROBENZENE	98953	92.00	24.00
N-NITROSODIMETHYLAMINE	62759	1080.00	24.00
N-NITROSODI-N-PROPYLAMINE	621647	No Criteria	4.08
N-NITROSODIPHENYLAMINE	86306	No Criteria	5.20
PYRENE	129000	234.40	3200.00
1,2,4trichlorobenzene	120821	No Criteria	1.36
PESTICIDES/PCBS			
ALDRIN	309002	2.40	0.00040
Alpha BHC	319846	No Criteria	0.04
Beta BHC	319857	No Criteria	0.14
Gamma BHC (Lindane)	58899	0.76	0.76
CHLORDANE	57749	1.92	0.00344
4,4DDT	50293	0.88	0.00080
4,4DDE	72559	No Criteria	0.00176
4,4DDD	72548	No Criteria	0.00248
DIELDRIN	60571	0.19	0.00043
ENDOSULFAN (alpha)	959988	0.18	0.04480
ENDOSULFAN (beta)	33213659	0.18	0.04480
ENDOSULFAN (sulfate)	1031078	No Criteria	71.20
ENDRIN	72208	0.07	0.03
ENDRIN ALDEHYDE	7421934	No Criteria	0.24
HEPTACHLOR	76448	0.42	0.00
HEPTACHLOR EPOXIDE	1024573	0.42	0.00
POLYCHLORINATED BIPHENYLS3	1336363	No Criteria	0.00
2,3,7,8TCDD (Dioxin)	1746016	No Criteria	0.00
TOXAPHENE	8001352	No Criteria	0.58
TRIBUTYL TIN		0.37	0.06

CHEMICAL NAME	CAS#	DAILY MAX LIMIT (ug/L)	MONTHLY AVE LIMIT (ug/L)
NON PRIORITY POLLUTANTS			
OTHER SUBSTANCES			
ALUMINUM, TOTAL	7429905	600.00	69.60
AMMONIA (as N), WINTER (NOV-APR)	7664417	8080.00	1168.00
AMMONIA (as N), SUMMER (MAY-OCT)	7664417	8080.00	1168.00
4BROMOPHENYL PHENYL ETHER	16887006	14.40	0.32
CHLORIDE	7782505	688000.00	184000.00
CHLORINE		19.00	11.00
4CHLORO2METHYLPHENOL		12.00	0.26
1CHLORONAPHTHALENE		64.00	1.44
4CHLOROPHENOL	106489	153.60	3.44
2,4DICHLORO6METHYLPHENOL		17.60	0.38
1,1DICHLOROPROPANE		920.00	20.80
1,3DICHLOROPROPANE	142289	242.40	5.36
2,3DINITROTOLUENE		13.60	0.30
2,4DINITRO6METHYL PHENOL		9.60	0.21
IRON	7439896	No Criteria	800.00
pentachlorobenzene	608935	10.40	0.22
PENTACHLOROETHANE		289.60	6.40
1,2,3,5tetrachlorobenzene		256.80	5.68
1,1,1,2TETRACHLOROETHANE	630206	784.00	17.60
2,3,4,6TETRACHLOROPHENOL	58902	5.60	0.13
2,3,5,6TETRACHLOROPHENOL		6.80	0.15
2,4,5TRICHLOROPHENOL	95954	18.40	0.41
2,4,6TRINITROPHENOL	88062	3388.00	75.20
XYLENE	1330207	106.40	2.40

Appendix A.3

Class SA or SB Saltwaters

CALCULATION OF WATER QUALITY BASED SALTWATER DISCHARGE LIMITS FACILITY SPECIFIC DATA INPUT SHEET

NOTE: LIMITS BASED ON RI WATER QUALITY CRITERIA DATED AUGUST 2018

FACILITY NAME: Remediation General Permit

RIPDES PERMIT #: _____

DISSOLVED BACKGROUND DATA (ug/L)	ACUTE METAL TRANSLATOR	CHRONIC METAL TRANSLATOR
ALUMINUM	NA	NA
ARSENIC	1	1
CADMIUM	0.994	0.994
CHROMIUM III	NA	NA
CHROMIUM VI	0.993	0.993
COPPER	0.83	0.83
LEAD	0.951	0.951
MERCURY	0.85	NA
NICKEL	0.99	0.99
SELENIUM	0.998	0.998
SILVER	0.85	0.85
ZINC	0.946	0.946

USE NA WHEN NO DATA IS AVAILABLE

NOTE 1: BACKGROUND DATA BASED ON AVERAGE CONCENTRATIONS OBTAINED FROM THE FOUR SINBADD CRUISES IN CURRENT REPORT #: NBP-89-22 (LOCATIONS B7, B8, B9, B13, B14, B15, & B16).

NOTE 2: METAL TRANSLATORS FROM RI WATER QUALITY REGS.

DILUTION FACTORS	
ACUTE =	1 x
CHRONIC =	1 x
HUMAN HEALTH =	1 x

NOTE: TEST VVWTF'S DILUTION FACTORS OBTAINED FROM A DYE STUDY.

TOTAL AMMONIA CRITERIA (ug/L)	
WINTER ACUTE =	6000
CHRONIC =	900
SUMMER ACUTE =	5000
CHRONIC =	750

NOTE 1: LIMITS ARE FROM TABLE 3 IN THE RI WATER QUALITY REGS. USING:

SALINITY = 30 g/Kg; pH = 8.0 s.u.
 WINTER (NOV-APRIL) pH=8.4 s.u.;
 SUMMER (MAY-OCT) pH=8.0 s.u.
 WINTER (NOV-APRIL) TEMP=10.0 C;
 SUMMER (MAY-OCT) TEMP=25.0 C.

CALCULATION OF WATER QUALITY BASED SALTWATER DISCHARGE LIMITS

FACILITY NAME: Remediation General Permit RIPDES PERMIT #: 0

NOTE: METALS CRITERIA ARE DISSOLVED, METALS LIMITS ARE TOTAL; AMMONIA CRITERIA AND LIMITS HAVE BEEN CONVERTED TO ug/l N.

CHEMICAL NAME	CAS #	BACKGROUND CONCENTRATION (ug/L)	SALTWATER CRITERIA ACUTE (ug/L)	DAILY MAX LIMIT (ug/L)	SALTWATER CRITERIA CHRONIC (ug/L)	HUMAN HEALTH NON-CLASS A CRITERIA (ug/L)	MONTHLY AVE LIMIT (ug/L)
PRIORITY POLLUTANTS							
TOXIC METALS AND CYANIDE							
ANTIMONY	7440360			No Criteria		640	512
ARSENIC (limits are total recoverable)	7440382	NA	69	55.2	36	1.4	1.12
ASBESTOS	1332214			No Criteria			No Criteria
BERYLLIUM	7440417			No Criteria			No Criteria
CADMIUM (limits are total recoverable)	7440439	NA	40	32.19315895	8.8		7.08249497
CHROMIUM III (limits are total recoverable)	16065831	NA		No Criteria			No Criteria
CHROMIUM VI (limits are total recoverable)	18540299	NA	1100	886.203424	50		40.28197382
COPPER (limits are total recoverable)	7440508	NA	4.8	4.626506024	3.1		2.987951807
CYANIDE	57125		1	0.80	1	140	0.8
LEAD (limits are total recoverable)	7439921	NA	210	176.6561514	8.1		6.813880126
MERCURY (limits are total recoverable)	7439976	NA	1.8	1.694117647	0.94	0.15	0.12
NICKEL (limits are total recoverable)	7440020	NA	74	59.7979798	8.2	4600	6.626262626
SELENIUM (limits are total recoverable)	7782492	NA	290	232.4649299	71	4200	56.91382766
SILVER (limits are total recoverable)	7440224	NA	1.9	1.788235294			No Criteria
THALLIUM	7440280			No Criteria		0.47	0.376
ZINC (limits are total recoverable)	7440666	NA	90	76.10993658	81	26000	68.49894292
VOLATILE ORGANIC COMPOUNDS							
ACROLEIN	107028			No Criteria			232
ACRYLONITRILE	107131			No Criteria			2
BENZENE	71432			No Criteria		510	408
BROMOFORM	75252			No Criteria		1400	1120
CARBON TETRACHLORIDE	56235			No Criteria		16	12.8
CHLOROBENZENE	108907			No Criteria		1600	1280
CHLORODIBROMOMETHANE	124481			No Criteria		130	104
CHLOROFORM	67663			No Criteria		4700	3760
DICHLOROBROMOMETHANE	75274			No Criteria		170	136
1,2DICHLOROETHANE	107062			No Criteria		370	296
1,1DICHLOROETHYLENE	75354			No Criteria		7100	5680
1,2DICHLOROPROPANE	78875			No Criteria		150	120
1,3DICHLOROPROPYLENE	542756			No Criteria		21	16.8
ETHYLBENZENE	100414			No Criteria		2100	1680
BROMOMETHANE (methyl bromide)	74839			No Criteria		1500	1200
CHLOROMETHANE (methyl chloride)	74873			No Criteria			No Criteria
METHYLENE CHLORIDE	75092			No Criteria		5900	4720

CALCULATION OF WATER QUALITY BASED SALTWATER DISCHARGE LIMITS

FACILITY NAME: Remediation General Permit RPPDES PERMIT #: 0

NOTE: METALS CRITERIA ARE DISSOLVED, METALS LIMITS ARE TOTAL; AMMONIA CRITERIA AND LIMITS HAVE BEEN CONVERTED TO ug/l N.

CHEMICAL NAME	CAS #	BACKGROUND CONCENTRATION (ug/L)	SALTWATER CRITERIA ACUTE (ug/L)	DAILY MAX LIMIT (ug/L)	SALTWATER CRITERIA CHRONIC (ug/L)	HUMAN HEALTH NON-CLASS A CRITERIA (ug/L)	MONTHLY AVE LIMIT (ug/L)
1,1,2,2TETRACHLOROETHANE	79345			No Criteria		40	32
TETRACHLOROETHYLENE	127184			No Criteria		33	26.4
TOLUENE	108883			No Criteria		15000	12000
1,2TRANSDICHLOROETHYLENE	156605			No Criteria		10000	8000
1,1,1TRICHLOROETHANE	71556			No Criteria		160	No Criteria
1,1,2TRICHLOROETHANE	79005			No Criteria		300	128
TRICHLOROETHYLENE	79016			No Criteria		240	240
VINYL CHLORIDE	75014			No Criteria		2.4	1.92
ACID ORGANIC COMPOUNDS							
2CHLOROPHENOL	95578			No Criteria		150	120
2,4DICHLOROPHENOL	120832			No Criteria		290	232
2,4DIMETHYLPHENOL	105679			No Criteria		850	680
4,6DINITRO2METHYL PHENOL	534521			No Criteria		280	224
2,4DINITROPHENOL	51285			No Criteria		5300	4240
4NITROPHENOL	88755			No Criteria			No Criteria
PENTACHLOROPHENOL	87865		13	10.4	7.9	30	No Criteria
PHENOL	87865			No Criteria		1700000	6.32
2,4,6TRICHLOROPHENOL	108952			No Criteria		24	1360000
BASE NEUTRAL COMPNDS							
ACENAPHTHENE	83329			No Criteria		990	792
ANTHRACENE	120127			No Criteria		40000	32000
BENZIDINE	92875			No Criteria		0.002	0.0016
POLYCYCLIC AROMATIC HYDROCARBONS				No Criteria		0.18	0.144
BIS(2CHLOROETHYL)ETHER	111444			No Criteria		5.3	4.24
BIS(2CHLOROISOPROPYL)ETHER	108601			No Criteria		65000	52000
BIS(2ETHYLHEXYL)PHTHALATE	117817			No Criteria		22	17.6
BUTYL BENZYL PHTHALATE	85687			No Criteria		1900	1520
2CHLORONAPHTHALENE	91587			No Criteria		1600	1280
1,2DICHLOROBENZENE	95501			No Criteria		1300	1040
1,3DICHLOROBENZENE	541731			No Criteria		960	768
1,4DICHLOROBENZENE	106467			No Criteria		190	152
3,3DICHLOROBENZIDENE	91941			No Criteria		0.28	0.224
DIETHYL PHTHALATE	84662			No Criteria		44000	35200
DIMETHYL PHTHALATE	131113			No Criteria		1100000	880000
DiNBUTYL PHTHALATE	84742			No Criteria		4500	3600
2,4DINITROTOLUENE	121142			No Criteria		34	27.2

CALCULATION OF WATER QUALITY BASED SALTWATER DISCHARGE LIMITS

FACILITY NAME: Remediation General Permit RIPDES PERMIT #: 0

NOTE: METALS CRITERIA ARE DISSOLVED, METALS LIMITS ARE TOTAL; AMMONIA CRITERIA AND LIMITS HAVE BEEN CONVERTED TO ug/l N.

CHEMICAL NAME	CAS #	BACKGROUND CONCENTRATION (ug/L)	SALTWATER CRITERIA ACUTE (ug/L)	DAILY MAX LIMIT (ug/L)	SALTWATER CRITERIA CHRONIC (ug/L)	HUMAN HEALTH NON-CLASS A CRITERIA (ug/L)	MONTHLY AVE LIMIT (ug/L)
1,2DIPHENYLHYDRAZINE	122667			No Criteria		2	1.6
FLUORANTHENE	206440			No Criteria		140	112
FLUORENE	86737			No Criteria		5300	4240
HEXACHLORO BENZENE	118741			No Criteria		0.0029	0.00232
HEXACHLORO BUTADIENE	87683			No Criteria		180	144
HEXACHLORO CYCLOPENTADIENE	77474			No Criteria		1100	880
HEXACHLORO ETHANE	67721			No Criteria		33	26.4
ISOPHORONE	78591			No Criteria		9600	7680
NAPHTHALENE	91203			No Criteria			No Criteria
NITRO BENZENE	98953			No Criteria		690	552
NNITROSODIMETHYLAMINE	62759			No Criteria		30	24
NNITROSODINPROPYLAMINE	621647			No Criteria		5.1	4.08
NNITROSODIPHENYLAMINE	86306			No Criteria		60	48
PYRENE	129000			No Criteria		4000	3200
1,2,4trichlorobenzene	120821			No Criteria		70	56
PESTICIDES/PCBS							
ALDRIN	309002		1.3	1.04		0.0005	0.0004
Alpha BHC	319846			No Criteria		0.049	0.0392
Beta BHC	319857			No Criteria		0.17	0.136
Gamma BHC (Lindane)	58899		0.16	0.128		1.8	1.44
CHLORDANE	57749		0.09	0.072	0.004	0.0081	0.0032
4,4DDT	50293		0.13	0.104	0.001	0.0022	0.0008
4,4DDE	72559			No Criteria		0.0022	0.00176
4,4DDD	72548			No Criteria		0.0031	0.00248
DIELDRIN	60571		0.71	0.568	0.0019	0.00054	0.000432
ENDOSULFAN (alpha)	959988		0.034	0.0272	0.0087	89	0.00696
ENDOSULFAN (beta)	33213659		0.034	0.0272	0.0087	89	0.00696
ENDOSULFAN (sulfate)	1031078			No Criteria		89	71.2
ENDRIN	72208		0.037	0.0296	0.0023	0.06	0.00184
ENDRIN ALDEHYDE	7421934			No Criteria		0.3	0.24
HEPTACHLOR	76448		0.053	0.0424	0.0036	0.00079	0.000632
HEPTACHLOR EPOXIDE	1024573		0.053	0.0424	0.0036	0.00039	0.000312
POLYCHLORINATED BIPHENYLS	1336363			No Criteria	0.03	0.00064	0.000512
2,3,7,8TCDD (Dioxin)	1746016			No Criteria		0.000000051	4.08E-08
TOXAPHENE	8001352		0.21	0.168	0.0002	0.0028	0.00016
TRIBUTYL TIN			0.42	0.336	0.0074		0.00592

CALCULATION OF WATER QUALITY BASED SALTWATER DISCHARGE LIMITS

FACILITY NAME: Remediation General Permit RIPDES PERMIT #: 0

NOTE: METALS CRITERIA ARE DISSOLVED, METALS LIMITS ARE TOTAL; AMMONIA CRITERIA AND LIMITS HAVE BEEN CONVERTED TO ug/l N.

CHEMICAL NAME	CAS #	BACKGROUND CONCENTRATION (ug/L)	SALTWATER CRITERIA ACUTE (ug/L)	DAILY MAX LIMIT (ug/L)	SALTWATER CRITERIA CHRONIC (ug/L)	HUMAN HEALTH NON-CLASS A CRITERIA (ug/L)	MONTHLY AVE LIMIT (ug/L)
NON PRIORITY POLLUTANTS							
OTHER SUBSTANCES							
ALUMINUM (limits are total recoverable)	7429905	NA	4932	No Criteria	739.8		No Criteria
AMMONIA as N (winter/summer)	7664417			3945.6	616.5		591.84 493.2
4BROMOPHENYL PHENYL ETHER	16887006			No Criteria			No Criteria
CHLORIDE	7782505			No Criteria			No Criteria
CHLORINE			13	13	7.5		7.5
4CHLORO2METHYLPHENOL				No Criteria			No Criteria
1CHLORONAPHTHALENE				No Criteria			No Criteria
4CHLOROPHENOL	106489			No Criteria			No Criteria
2,4DICHLORO6METHYLPHENOL				No Criteria			No Criteria
1,1DICHLOROPROPANE	142289			No Criteria			No Criteria
1,3DICHLOROPROPANE				No Criteria			No Criteria
2,3DINITROTOLUENE				No Criteria			No Criteria
2,4DINITRO6METHYL PHENOL				No Criteria			No Criteria
IRON	7439896			No Criteria			No Criteria
pentachlorobenzene	608935			No Criteria			No Criteria
PENTACHLOROETHANE				No Criteria			No Criteria
1,2,3,5tetrachlorobenzene				No Criteria			No Criteria
1,1,1,2TETRACHLOROETHANE	630206			No Criteria			No Criteria
2,3,4,6TETRACHLOROPHENOL	58902			No Criteria			No Criteria
2,3,5,6TETRACHLOROPHENOL				No Criteria			No Criteria
2,4,5TRICHLOROPHENOL	95954			No Criteria			No Criteria
2,4,6TRINITROPHENOL	88062			No Criteria			No Criteria
XYLENE	1330207			No Criteria			No Criteria

CALCULATION OF WATER QUALITY BASED SALTWATER DISCHARGE LIMITS

FACILITY NAME: Remediation General ~~PERMITS~~ PERMIT #: 0

CHEMICAL NAME	CAS#	DAILY MAX LIMIT (ug/L)	MONTHLY AVE LIMIT (ug/L)
PRIORITY POLLUTANTS			
TOXIC METALS AND CYANIDE			
ANTIMONY	7440360	No Criteria	512.00
ARSENIC, TOTAL	7440382	55.20	1.12
ASBESTOS	1332214	No Criteria	0.00
BERYLLIUM	7440417	No Criteria	0.00
CADMIUM, TOTAL	7440439	32.19	7.08
CHROMIUM III, TOTAL	16065831	No Criteria	0.00
CHROMIUM VI, TOTAL	18540299	886.20	40.28
COPPER, TOTAL	7440508	4.63	2.99
CYANIDE	57125	0.80	0.80
LEAD, TOTAL	7439921	176.66	6.81
MERCURY, TOTAL	7439976	1.69	0.12
NICKEL, TOTAL	7440020	59.80	6.63
SELENIUM, TOTAL	7782492	232.46	56.91
SILVER, TOTAL	7440224	1.79	1.79
THALLIUM	7440280	No Criteria	0.38
ZINC, TOTAL	7440666	76.11	68.50
VOLATILE ORGANIC COMPOUNDS			
ACROLEIN	107028	No Criteria	232.00
ACRYLONITRILE	107131	No Criteria	2.00
BENZENE	71432	No Criteria	408.00
BROMOFORM	75252	No Criteria	1120.00
CARBON TETRACHLORIDE	56235	No Criteria	12.80
CHLOROBENZENE	108907	No Criteria	1280.00
CHLORODIBROMOMETHANE	124481	No Criteria	104.00
CHLOROFORM	67663	No Criteria	3760.00
DICHLOROBROMOMETHANE	75274	No Criteria	136.00
1,2DICHLOROETHANE	107062	No Criteria	296.00
1,1DICHLOROETHYLENE	75354	No Criteria	5680.00
1,2DICHLOROPROPANE	78875	No Criteria	120.00
1,3DICHLOROPROPYLENE	542756	No Criteria	16.80
ETHYLBENZENE	100414	No Criteria	1680.00
BROMOMETHANE (methyl bromide)	74839	No Criteria	1200.00
CHLOROMETHANE (methyl chloride)	74873	No Criteria	0.00
METHYLENE CHLORIDE	75092	No Criteria	4720.00
1,1,2,2-TETRACHLOROETHANE	79345	No Criteria	32.00

CHEMICAL NAME	CAS#	DAILY MAX LIMIT (ug/L)	MONTHLY AVE LIMIT (ug/L)
TETRACHLOROETHYLENE	127184	No Criteria	26.40
TOLUENE	108883	No Criteria	12000.00
1,2-TRANS-DICHLOROETHYLENE	156605	No Criteria	8000.00
1,1,1-TRICHLOROETHANE	71556	No Criteria	0.00
1,1,2-TRICHLOROETHANE	79005	No Criteria	128.00
TRICHLOROETHYLENE	79016	No Criteria	240.00
VINYL CHLORIDE	75014	No Criteria	1.92
ACID ORGANIC COMPOUNDS			
2-CHLOROPHENOL	95578	No Criteria	120.00
2,4-DICHLOROPHENOL	120832	No Criteria	232.00
2,4-DIMETHYLPHENOL	105679	No Criteria	680.00
4,6-DINITRO-2-METHYL PHENOL	534521	No Criteria	224.00
2,4-DINITROPHENOL	51285	No Criteria	4240.00
4-NITROPHENOL	88755	No Criteria	0.00
PENTACHLOROPHENOL	87865	10.40	6.32
PHENOL	108952	No Criteria	136000.00
2,4,6-TRICHLOROPHENOL	88062	No Criteria	19.20
BASE NEUTRAL COMPOUNDS			
ACENAPHTHENE	83329	No Criteria	792.00
ANTHRACENE	120127	No Criteria	32000.00
BENZIDINE	92875	No Criteria	0.00
PAHS		No Criteria	0.14
BIS(2-CHLOROETHYL)ETHER	111444	No Criteria	4.24
BIS(2-CHLOROISOPROPYL)ETHER	108601	No Criteria	52000.00
BIS(2-ETHYLHEXYL)PHTHALATE	117817	No Criteria	17.60
BUTYL BENZYL PHTHALATE	85687	No Criteria	1520.00
2-CHLORONAPHTHALENE	91587	No Criteria	1280.00
1,2-DICHLOROBENZENE	95501	No Criteria	1040.00
1,3-DICHLOROBENZENE	541731	No Criteria	768.00
1,4-DICHLOROBENZENE	106467	No Criteria	152.00
3,3-DICHLOROBENZIDENE	91941	No Criteria	0.22
DIETHYL PHTHALATE	84662	No Criteria	35200.00
DIMETHYL PHTHALATE	131113	No Criteria	880000.00
DI-n-BUTYL PHTHALATE	84742	No Criteria	3600.00
2,4-DINITROTOLUENE	121142	No Criteria	27.20
1,2-DIPHENYLHYDRAZINE	122667	No Criteria	1.60
FLUORANTHENE	206440	No Criteria	112.00

CALCULATION OF WATER QUALITY BASED SALTWATER DISCHARGE LIMITS

FACILITY NAME: Remediation General ~~PERMITS~~ PERMIT #: 0

CHEMICAL NAME	CAS#	DAILY MAX LIMIT (ug/L)	MONTHLY AVE LIMIT (ug/L)
FLUORENE	86737	No Criteria	4240.00
HEXACHLOROBENZENE	118741	No Criteria	0.00
HEXACHLOROBUTADIENE	87683	No Criteria	144.00
HEXACHLOROCYCLOPENTADIENE	77474	No Criteria	880.00
HEXACHLOROETHANE	67721	No Criteria	26.40
ISOPHORONE	78591	No Criteria	7680.00
NAPHTHALENE	91203	No Criteria	0.00
NITROBENZENE	98953	No Criteria	552.00
N-NITROSODIMETHYLAMINE	62759	No Criteria	24.00
N-NITROSODI-N-PROPYLAMINE	621647	No Criteria	4.08
N-NITROSODIPHENYLAMINE	86306	No Criteria	48.00
PYRENE	129000	No Criteria	3200.00
1,2,4trichlorobenzene	120821	No Criteria	56.00
PESTICIDES/PCBS			
ALDRIN	309002	1.04	0.00
Alpha BHC	319846	No Criteria	0.04
Beta BHC	319857	No Criteria	0.14
Gamma BHC (Lindane)	58899	0.13	0.13
CHLORDANE	57749	0.07	0.00
4,4DDT	50293	0.10	0.00
4,4DDE	72559	No Criteria	0.00
4,4DDD	72548	No Criteria	0.00
DIELDRIN	60571	0.57	0.00
ENDOSULFAN (alpha)	959988	0.03	0.01
ENDOSULFAN (beta)	33213659	0.03	0.01
ENDOSULFAN (sulfate)	1031078	No Criteria	71.20
ENDRIN	72208	0.03	0.00
ENDRIN ALDEHYDE	7421934	No Criteria	0.24
HEPTACHLOR	76448	0.04	0.00
HEPTACHLOR EPOXIDE	1024573	0.04	0.00
POLYCHLORINATED BIPHENYLS3	1336363	No Criteria	0.00
2,3,7,8TCDD (Dioxin)	1746016	No Criteria	0.0000000
TOXAPHENE	8001352	0.17	0.00
TRIBUTYL TIN		0.34	0.01

CHEMICAL NAME	CAS#	DAILY MAX LIMIT (ug/L)	MONTHLY AVE LIMIT (ug/L)
NON PRIORITY POLLUTANTS			
OTHER SUBSTANCES			
ALUMINUM, TOTAL	7429905	No Criteria	0.00
AMMONIA (as N), WINTER (NOV-APR)	7664417	3945.60	591.84
AMMONIA (as N), SUMMER (MAY-OC)	7664417	3288.00	493.20
4BROMOPHENYL PHENYL ETHER		No Criteria	0.00
CHLORIDE	16887006	No Criteria	0.00
CHLORINE	7782505	13.00	7.50
4CHLORO2METHYLPHENOL		No Criteria	0.00
1CHLORONAPHTHALENE		No Criteria	0.00
4CHLOROPHENOL	106489	No Criteria	0.00
2,4DICHLORO6METHYLPHENOL		No Criteria	0.00
1,1DICHLOROPROPANE	142289	No Criteria	0.00
1,3DICHLOROPROPANE		No Criteria	0.00
2,3DINITROTOLUENE		No Criteria	0.00
2,4DINITRO6METHYL PHENOL		No Criteria	0.00
IRON	7439896	No Criteria	0.00
pentachlorobenzene	608935	No Criteria	0.00
PENTACHLOROETHANE		No Criteria	0.00
1,2,3,5tetrachlorobenzene		No Criteria	0.00
1,1,1,2TETRACHLOROETHANE	630206	No Criteria	0.00
2,3,4,6TETRACHLOROPHENOL	58902	No Criteria	0.00
2,3,5,6TETRACHLOROPHENOL		No Criteria	0.00
2,4,5TRICHLOROPHENOL	95954	No Criteria	0.00
2,4,6TRINITROPHENOL	88062	No Criteria	0.00
XYLENE	1330207	No Criteria	0.00

Appendix A.4
Metals Limitations

RIDEM RIPDES Remediation General Permit Development 2019

Allowable Freshwater Metals Limits										
<5										
Dilution Range	Class AA FW					Non Class AA FW				
Water Body Class	2019 RGP Monthly Avg. Limit	Source of Proposed Limit	2019 RGP Daily Max Limit	Source of Proposed Limit	2019 RGP Monthly Avg. Limit	Source of Proposed Limit	2019 RGP Daily Max Limit	Source of Proposed Limit	2019 RGP Monthly Avg. Limit	Source of Proposed Limit
Limit Type										
Antimony	4.48	RIWQ	206	EPA TBEL	8	RIWQ	206	EPA TBEL		EPA TBEL
Arsenic	0.14	RIWQ	104	EPA TBEL	1.12	RIWQ	104	EPA TBEL		EPA TBEL
Cadmium	0.08	RIWQ	0.42	RIWQ	0.08	RIWQ	0.42	RIWQ		RIWQ
Chromium III	22.15	RIWQ	323	EPA TBEL	22.15	RIWQ	323	EPA TBEL		EPA TBEL
Chromium IV	9.15	RIWQ	13.03	RIWQ	9.15	RIWQ	13.03	RIWQ		RIWQ
Copper	2.28	RIWQ	3.03	RIWQ	2.28	RIWQ	3.03	RIWQ		RIWQ
Lead	0.44	RIWQ	11.18	RIWQ	0.44	RIWQ	11.18	RIWQ		RIWQ
Mercury	0.13	RIWQ	0.739	EPA TBEL	0.14	RIWQ	0.739	EPA TBEL		EPA TBEL
Nickel	12.92	RIWQ	116.17	RIWQ	12.92	RIWQ	116.17	RIWQ		RIWQ
Selenium	4	RIWQ	16	RIWQ	4	RIWQ	16	RIWQ		RIWQ
Silver	---	ANTI DEG	0.3	RIWQ	---	ANTI DEG	0.3	RIWQ		RIWQ
Zinc	29.61	RIWQ	29.61	RIWQ	29.61	RIWQ	29.61	RIWQ		RIWQ
Iron	240	RIWQ	5000	EPA TBEL	800	RIWQ	5000	EPA TBEL		EPA TBEL

Allowable Freshwater Metals Limits										
5-10										
Dilution Range	Class AA FW					Non Class AA FW				
Water Body Class	Proposed 2019 RGP Monthly Avg. Limit	Source of Proposed Limit	Proposed 2019 RGP Daily Max Limit	Source of Proposed Limit	Proposed 2019 RGP Monthly Avg. Limit	Source of Proposed Limit	Proposed 2019 RGP Daily Max Limit	Source of Proposed Limit	Proposed 2019 RGP Monthly Avg. Limit	Source of Proposed Limit
Limit Type										
Antimony	22.4	RIWQ	206	EPA TBEL	40	RIWQ	206	EPA TBEL		EPA TBEL
Arsenic	0.7	RIWQ	104	EPA TBEL	5.6	RIWQ	104	EPA TBEL		EPA TBEL
Cadmium	0.4	RIWQ	2.1	RIWQ	0.4	RIWQ	2.1	RIWQ		RIWQ
Chromium III	110.75	RIWQ	323	EPA TBEL	110.75	RIWQ	323	EPA TBEL		EPA TBEL
Chromium IV	45.75	RIWQ	65.15	RIWQ	45.75	RIWQ	65.15	RIWQ		RIWQ
Copper	11.4	RIWQ	15.15	RIWQ	11.4	RIWQ	15.15	RIWQ		RIWQ
Lead	2.2	RIWQ	55.9	RIWQ	2.2	RIWQ	55.9	RIWQ		RIWQ
Mercury	0.65	RIWQ	0.739	EPA TBEL	0.7	RIWQ	0.739	EPA TBEL		EPA TBEL
Nickel	64.6	RIWQ	580.85	RIWQ	64.6	RIWQ	580.85	RIWQ		RIWQ
Selenium	20	RIWQ	80	RIWQ	20	RIWQ	80	RIWQ		RIWQ
Silver	---	ANTI DEG	1.5	RIWQ	---	ANTI DEG	1.5	RIWQ		RIWQ

Zinc	148.05	RI WQ	148.05	RI WQ	148.05	RI WQ	148.05	RI WQ	RI WQ
Iron	1200	RI WQ	5000	EPA TBEL	4000	RI WQ	5000	RI WQ	EPA TBEL

Allowable Freshwater Metals Limits									
10-20									
Dilution Range Water Body Class	Class AA FW					Non Class AA FW			
	Proposed 2019 RGP Monthly Avg. Limit	Source of Proposed Limit	Proposed 2019 RGP Daily Max Limit	Source of Proposed Limit	Proposed 2019 RGP Monthly Avg. Limit	Source of Proposed Limit	Proposed 2019 RGP Daily Max Limit	Source of Proposed Limit	Source
Antimony	44.8	RI WQ	206	EPA TBEL	80	RI WQ	206	EPA TBEL	EPA TBEL
Arsenic	1.4	RI WQ	104	EPA TBEL	11.2	RI WQ	104	EPA TBEL	EPA TBEL
Cadmium	0.8	RI WQ	4.2	RI WQ	0.8	RI WQ	4.2	RI WQ	RI WQ
Chromium III	221.5	RI WQ	323	EPA TBEL	221.5	RI WQ	323	EPA TBEL	EPA TBEL
Chromium IV	91.5	RI WQ	130.3	RI WQ	91.5	RI WQ	130.3	RI WQ	RI WQ
Copper	22.8	RI WQ	30.3	RI WQ	22.8	RI WQ	30.3	RI WQ	RI WQ
Lead	4.4	RI WQ	111.8	RI WQ	4.4	RI WQ	111.8	RI WQ	RI WQ
Mercury	0.739	EPA TBEL	0.739	EPA TBEL	0.739	EPA TBEL	0.739	EPA TBEL	EPA TBEL
Nickel	129.2	RI WQ	1161.7	RI WQ	129.2	RI WQ	1161.7	RI WQ	RI WQ
Selenium	40	RI WQ	160	RI WQ	40	RI WQ	160	RI WQ	RI WQ
Silver	---	ANTI DEG	3	RI WQ	---	ANTI DEG	3	RI WQ	RI WQ
Zinc	296.1	RI WQ	296.1	RI WQ	296.1	RI WQ	296.1	RI WQ	RI WQ
Iron	2400	RI WQ	5000	EPA TBEL	5000	EPA TBEL	5000	EPA TBEL	EPA TBEL

Allowable Freshwater Metals Limits									
20-40									
Dilution Range Water Body Class	Class AA FW					Non Class AA FW			
	Proposed 2019 RGP Monthly Avg. Limit	Source of Proposed Limit	Proposed 2019 RGP Daily Max Limit	Source of Proposed Limit	Proposed 2019 RGP Monthly Avg. Limit	Source of Proposed Limit	Proposed 2019 RGP Daily Max Limit	Source of Proposed Limit	Source of Proposed Limit
Antimony	89.6	RI WQ	206	EPA TBEL	160	RI WQ	206	EPA TBEL	EPA TBEL
Arsenic	2.8	RI WQ	104	EPA TBEL	22.4	RI WQ	104	EPA TBEL	EPA TBEL
Cadmium	1.6	RI WQ	8.4	RI WQ	1.6	RI WQ	8.4	RI WQ	RI WQ
Chromium III	323	EPA TBEL	323	EPA TBEL	323	EPA TBEL	323	EPA TBEL	EPA TBEL
Chromium IV	183	RI WQ	260.6	RI WQ	183	RI WQ	260.6	RI WQ	RI WQ
Copper	45.6	RI WQ	60.6	RI WQ	45.6	RI WQ	60.6	RI WQ	RI WQ
Lead	8.8	RI WQ	160	EPA TBEL	8.8	RI WQ	160	EPA TBEL	EPA TBEL
Mercury	0.739	EPA TBEL	0.739	EPA TBEL	0.739	EPA TBEL	0.739	EPA TBEL	EPA TBEL
Nickel	258.4	RI WQ	1450	EPA TBEL	258.4	RI WQ	1450	EPA TBEL	EPA TBEL

Selenium	80	RIWQ	235.8	EPA TBEL	80	RIWQ	235.8	EPA TBEL
Silver	---	ANTI DEG	6	RIWQ	---	ANTI DEG	6	RIWQ
Zinc	420	EPA TBEL	420	EPA TBEL	420	EPA TBEL	420	EPA TBEL
Iron	4800	RIWQ	5000	EPA TBEL	5000	EPA TBEL	5000	EPA TBEL

Allowable Freshwater Metals Limits														
40-60														
Dilution Range	Water Body Class	Class AA FW					Non Class AA FW			Source of Proposed Limit				
		Proposed 2019 RGP Monthly Avg. Limit	Source of Proposed Limit	Proposed 2019 RGP Daily Max Limit	Source of Proposed Limit	Proposed 2019 RGP Monthly Avg. Limit	Source of Proposed Limit	Proposed 2019 RGP Daily Max Limit	Source of Proposed Limit					
Antimony		179.2	RIWQ	206	EPA TBEL	206	EPA TBEL	206	EPA TBEL	206	EPA TBEL	206	EPA TBEL	EPA TBEL
Arsenic		5.6	RIWQ	104	EPA TBEL	44.8	RIWQ	104	EPA TBEL	44.8	RIWQ	104	EPA TBEL	EPA TBEL
Cadmium		3.2	RIWQ	10.2	EPA TBEL	3.2	RIWQ	10.2	EPA TBEL	3.2	RIWQ	10.2	EPA TBEL	EPA TBEL
Chromium III		323	EPA TBEL	323	EPA TBEL	323	EPA TBEL	323	EPA TBEL	323	EPA TBEL	323	EPA TBEL	EPA TBEL
Chromium IV		323	EPA TBEL	323	EPA TBEL	323	EPA TBEL	323	EPA TBEL	323	EPA TBEL	323	EPA TBEL	EPA TBEL
Copper		91.2	RIWQ	121.2	RIWQ	91.2	RIWQ	121.2	RIWQ	91.2	RIWQ	121.2	RIWQ	RIWQ
Lead		17.6	RIWQ	160	EPA TBEL	17.6	RIWQ	160	EPA TBEL	17.6	RIWQ	160	EPA TBEL	EPA TBEL
Mercury		0.739	EPA TBEL	0.739	EPA TBEL	0.739	EPA TBEL	0.739	EPA TBEL	0.739	EPA TBEL	0.739	EPA TBEL	EPA TBEL
Nickel		516.8	RIWQ	1450	EPA TBEL	516.8	RIWQ	1450	EPA TBEL	516.8	RIWQ	1450	EPA TBEL	EPA TBEL
Selenium		160	RIWQ	235.8	EPA TBEL	160	RIWQ	235.8	EPA TBEL	160	RIWQ	235.8	EPA TBEL	EPA TBEL
Silver		---	ANTI DEG	12	RIWQ	---	ANTI DEG	12	RIWQ	---	ANTI DEG	12	RIWQ	RIWQ
Zinc		420	EPA TBEL	420	EPA TBEL	420	EPA TBEL	420	EPA TBEL	420	EPA TBEL	420	EPA TBEL	EPA TBEL
Iron		5000	EPA TBEL	5000	EPA TBEL	5000	EPA TBEL	5000	EPA TBEL	5000	EPA TBEL	5000	EPA TBEL	EPA TBEL

Allowable Freshwater Metals Limits														
> or = 60														
Dilution Range	Water Body Class	Class AA FW					Non Class AA FW			Source of Proposed Limit				
		Proposed 2019 RGP Monthly Avg. Limit	Source of Proposed Limit	Proposed 2019 RGP Daily Max Limit	Source of Proposed Limit	Proposed 2019 RGP Monthly Avg. Limit	Source of Proposed Limit	Proposed 2019 RGP Daily Max Limit	Source of Proposed Limit					
Antimony		206	EPA TBEL	206	EPA TBEL	206	EPA TBEL	206	EPA TBEL	206	EPA TBEL	206	EPA TBEL	EPA TBEL
Arsenic		8.4	RIWQ	104	EPA TBEL	67.2	RIWQ	104	EPA TBEL	67.2	RIWQ	104	EPA TBEL	EPA TBEL
Cadmium		4.8	RIWQ	10.2	EPA TBEL	4.8	RIWQ	10.2	EPA TBEL	4.8	RIWQ	10.2	EPA TBEL	EPA TBEL
Chromium III		323	EPA TBEL	323	EPA TBEL	323	EPA TBEL	323	EPA TBEL	323	EPA TBEL	323	EPA TBEL	EPA TBEL
Chromium IV		323	EPA TBEL	323	EPA TBEL	323	EPA TBEL	323	EPA TBEL	323	EPA TBEL	323	EPA TBEL	EPA TBEL
Copper		136.8	RIWQ	181.8	RIWQ	136.8	RIWQ	181.8	RIWQ	136.8	RIWQ	181.8	RIWQ	RIWQ
Lead		26.4	RIWQ	160	EPA TBEL	26.4	RIWQ	160	EPA TBEL	26.4	RIWQ	160	EPA TBEL	EPA TBEL

Mercury	0.739	EPA TBEL	0.739	EPA TBEL	0.739	EPA TBEL	EPA TBEL
Nickel	775.2	RI WQ	775.2	EPA TBEL	1450	RI WQ	EPA TBEL
Selenium	235.8	EPA TBEL	235.8	EPA TBEL	235.8	EPA TBEL	EPA TBEL
Silver	---	ANTI DEG	---	RI WQ	18	ANTI DEG	RI WQ
Zinc	420	EPA TBEL	420	EPA TBEL	420	EPA TBEL	EPA TBEL
Iron	5000	EPA TBEL	5000	EPA TBEL	5000	EPA TBEL	EPA TBEL

* All values are in ug/l.

** All values are based on no background data, hardness = 25, and the more stringent of either the RI WQ Standards or EPA TBELs.

--- = monitor only, no limits