

## **Response to Comments on Draft National Pollutant Discharge Elimination System (NPDES) Remediation General Permit for Discharges in the Commonwealth of Massachusetts (MAG910000) and the State of New Hampshire (NHG910000)**

### **Introduction**

In accordance with the provisions of 40 C.F.R. §124.17, this document presents EPA's responses to comments received on the draft NPDES Remediation General Permit for Discharges in the Commonwealth of Massachusetts (MAG910000) and the State of New Hampshire (NHG910000). The response to comments explains and supports EPA's determinations that form the basis of the final permit. The draft Remediation General Permit public comment period began April 26, 2010 and ended at midnight on May 26, 2010. Comments were received from:

1. Jeffrey Andrews, Sanitary Engineer, Wastewater Engineering Bureau, New Hampshire Department of Environmental Services. Comments received via email dated May 23, 2010.
2. David G. Austin, Senior Project Manager at AECOM. Comments received via email dated May 25, 2010.
3. Joseph Callahan, Project Manager at Environmental Strategies and Management, Inc. Comments received via email dated May 25, 2010.
4. Tom Sylvia, President of Environmental Strategies and Management, Inc. Comments received via email dated May 25, 2010.
5. J. Andrew Irwin, President of Irwin Engineers comments on behalf of the Massachusetts Licensed Site Professionals (LSP). Comments received via email dated May 26, 2010.

### **Changes in Final Permit**

EPA's decision-making process has benefitted from the various comments and additional information submitted. The information and arguments presented did not raise any substantial new questions concerning the permit. EPA did, however, reassess certain analyses and provisions and make certain clarifications and minor changes in the final permit. These clarifications and changes are described in this document and reflected in the final permit. The analyses and rationales underlying these changes as well as the reasons for not making changes in response to comments also are explained in the responses to individual comments that follow. The text of each of the changes in the permit is listed below.

Permit Page 2 of 29. Footnote 2:

50 RSA § 485-A: 8 and the N.H. Code of Administrative Rules, Chapter Env-Wq 1700 Surface Water Quality Regulations (May 2008).

Permit Page 11 of 29:

Part I.B.4.b.ii. If a facility owner or operator has made significant changes to the discharge operations since submission of the application, the operator must within 90 days file a NOI following the instructions in Appendix V. Significant changes include: discharges containing chemicals not reported in the original application, additional discharge locations, discharges to different receiving waters, changes of flow greater than 25%, or changes of flow that would affect permit limits by lowering the dilution factor.

Permit Page 11:

Part I.B.5. Consultation with Federal Services - All applicants must comply with the requirements of Appendix VII, Section I, regarding consultation pertaining to endangered species, and with Appendix VII, Section II, regarding historic preservation.

Footnote 6. Appendix IV for Mass and New Hampshire:

Chloride & Total Recoverable Metal Limitations (ug/l) by Dilution Factor Range and, Footnote 6. For a Dilution Factor Range from 1 to 5, metals limits are calculated using DF times the base limit for the metal. For example, iron limits for DF 1-5 are equal to the base limit of 1,000 ug/L times the DF. For example, if DF is 1.5, the iron limit will be 1,500 ug/L; DF 2, then iron limit = 1,000 x 2 = 2,000 ug/L., etc. not to exceed the DF=5

Footnote 11. Appendix III, Page 15 of 15:

For a Dilution Factor (DF) from 1 to 5, metals limits are calculated using DF times the base limit for the metal. See Appendix IV. For example, iron limits are calculated using DF x 1,000ug/L (the iron base limit). Therefore, if the DF is 1.5, the iron limit is 1,500 ug/L. The iron limit is not to exceed 5,000 ug/L.

Appendix V.II.2, Page 1 of 8:

1. Reduction in certain monitoring requirements - Certain monitoring requirements may be reduced upon demonstration by ongoing sampling and analytical data.

i. To be eligible for a reduction in influent monitoring, the permittee must provide a minimum of 6-12 consecutive months of data. This data must be submitted with the NOC.

ii. To be eligible for a reduction in effluent monitoring, the permittee must provide 12- 24 consecutive months of data demonstrating compliance with the applicable parameter limits, applicable ML (see Part I.D.1.d), or demonstrating no toxicity, in the case where whole effluent toxicity testing is required. This type of change requires written approval by the Director. Prior to receiving written approval, the permittee must continue to monitor at the frequency specified in the RGP. This data must be submitted with the NOC.

Appendix VI. Page 4 of 7:

30. 1, 4 Dioxane (123-91-1): Method 522(0.1 ug/L), 5 ug/L, Method 8260C, 50 ug/L, Method 1624C.

31. Total Phenols (108-95-2): 5 ug/L, Methods 8260C and 8270D, 2ug/L, Methods 420.1, 420.2, 50 ug/L, 420.4.

Appendix III. Page 15 of 15. Footnote 6:

Total values calculated for reporting on NOIs and discharge monitoring reports shall be calculated by adding the measured concentration of each constituent. If the measurement of a constituent is less than the ML, the permittee shall use a value of zero for that constituent. For each test, the permittee shall also attach the raw data for each constituent to the discharge monitoring report, including the minimum level and minimum detection level for the analysis.

Permit Table I (Page 6 of 29): Activity Category IV – Miscellaneous Related Discharges. On Activity Sub-Category D. “Long-Term Remediation of Contaminated Sumps and Dikes”. The language in the final permit is as follows:

Activity Category –

IV - Miscellaneous Related Discharges - Activity Sub-Category

A. Aquifer Pump Testing to Evaluate Formerly contaminated Sites

B. Well Development/Rehabilitation at Contaminated/Formerly Contaminated Sites

C. Hydrostatic Testing of Pipelines and Tanks

D. Long-Term Remediation of Contaminated Sumps and Dikes.

E. Short-term Contaminated Dredging Drain Back Waters (if not covered by 401/404 permit)

Permit Page 7 of 29. Part I.3.k. New paragraph k language:

k. Uncontaminated pumped groundwater discharges authorized under the EPA Region I's General Permit for Stormwater Dischargers from Small Municipal Separate Storm Sewer Systems effective May 1, 2003, any subsequent reissuance of this permit, or any other EPA Region 1 permit for stormwater dischargers from a Municipal Separate Storm Sewer System.

Permit Page 8 of 29. Part I.A.3.k is to be Part I.A.3.l as follows:

l. Short-term discharges (typically lasting less than 7 days or as determined by EPA on a case-by-case basis) from sumps or other similar water collection structures.

Permit Page 8 of 29: Part I.A.3.l is renumbered as Part I.A.3.m, and Part I.A.3.m as Part I.A.3.n, etc, to end with Part I.A.3.r., as follows:

m. “New Source” dischargers, as defined in 40 CFR § 122.2.

n. Discharges listed in an individual NPDES permit unless:

i. The permit has expired;

ii. EPA has terminated the existing permit;

iii. The discharges are separate from the currently permitted discharges; or

- iv. The discharge is new and eligible for this permit (e.g., an industry where the primary process waste discharge is covered by an individual permit but the facility is conducting groundwater remediation with separate treatment and discharge).
- o. Discharges for which the Director makes a determination that an individual permit is required under 40 CFR § 122.28(b) (3). See Part I.B.8., below.
- p. Discharges of any commercial or industrial wastes to Ocean Sanctuaries in Massachusetts, as defined at 302 Part CMR 5.00.
- q. Discharges to territorial seas, as defined by Section 502 of the Clean Water Act.
- r. Discharges made from a CERCLA remediation site under a signed Record of Decision under 40 CFR § 300.400(e) (1).

### **Comments and Responses**

1. Jeffrey Andrews, Sanitary Engineer, Wastewater Engineering Bureau, New Hampshire Department of Environmental Services Comments on Draft Permit

Comment 1.a: Page 2, (of the permit) second line of footnote 2 at the bottom of the page. The date for the latest version of Env-Wq 1700 is May 2008.

Response 1.a: EPA agrees. The correct date has been substituted on Page 2. In the final permit. Footnote 2 at the bottom of Page 2 will read as follows:

50 RSA § 485-A: 8 and the N.H. Code of Administrative Rules, Chapter Env-Wq 1700 Surface Water Quality Regulations (May 2008).

Comment 1.b: Page 10, Part I.B.4.b.ii. Consider adding the deadline of 90 days to this section. Also, consider revising the last line to replace “changes of flow greater than 25%” to “changes of flow that would affect permit limits by lowering the dilution factor.”

Response 1.b: *The General Application Requirements* - Part I.B.4.b.ii on Page 10 was included in the 2010 RGP draft reissuance, reflecting a similar provision in the 2005 RGP. Part I.B.4.b.ii covers the possibility that a party that has applied for an individual permit now wants to be considered to be covered by the 2010 RGP. EPA expects this situation to be rare in 2010, however EPA has retained this provision in the final permit. That being said, EPA agrees that a 90 day deadline from the effective date of the permit for a facility operator to notify EPA is an appropriate requirement in the permit, and EPA is making this change in the final permit. Regarding the second suggested change, EPA agrees that “changes of flow that would affect permit limits by lowering the dilution factor” is an appropriate example of a significant change warranting submission of a new NOI. However, EPA also believes that “changes of flow greater than 25%” is another appropriate example and has included both examples of significant changes warranting

submission of a new NOI in the final permit. EPA also has clarified that Part I.B.4.b.ii applies to those facility operators who have previously filed a NPDES application for coverage under an individual permit and who now wish to be covered under the 2010 RGP. As a result, the new Part I.B.4.b.ii in Page 10 of 27 is as follows:

Part I.B.4.b.ii. If a facility owner or operator has made significant changes to the discharge operations since submission of the application, the operator must within 90 days file a NOI following the instructions in Appendix V. Significant changes include: discharges containing chemicals not reported in the original application, additional discharge locations, discharges to different receiving waters, changes of flow greater than 25%, or changes of flow that would affect permit limits by lowering the dilution factor.

Comment 1.c: Page 11, Part I.B.5. Should there be a reference to historic preservation requirements in this section similar to that for endangered species in Part I.B.5.?

Response 1.c: EPA agrees. Accordingly, Part I.B.5 in Page 10 of the permit has been revised as follows:

Part I.B.5. Consultation with Federal Services - All applicants must comply with the requirements of Appendix VII, Section I, regarding consultation pertaining to endangered species, and with Appendix VII. Section II, regarding historic preservation.

2. David G. Austin, Senior Project Manager at the firm AECOM Comments on Draft Permit

Comment 2.a: A review of the sampling requirements for specific sub-categories still indicates that total Iron is a compound that must be sampled for in all sub-categories. Furthermore, the discharge limit for Iron is 1,000 ppb, which leads to the need for cost prohibitive Iron removal from waste streams. When considering that in most cases, naturally occurring Iron is far greater than 1,000 ppb, it seems unreasonable that entities wishing to remediate sites should be required to treat to this standard. The US EPA should consider provisions for establishing that Iron and other metals are naturally present and therefore not necessary to be monitored for or removed from remedial discharges.

Response 2.a: Prior to issuance of the 2005 RGP, EPA-NE reviewed many treatment system operational and monitoring reports which outlined common treatment system operation and maintenance problems which develop as a result of high levels of naturally occurring iron in groundwater in New England. Iron in groundwater (ferrous  $\text{Fe}^{+2}$ ) will oxidize to insoluble ferric hydroxide ( $\text{Fe}^{+3}$ ) upon mixing with and exposure to air. As  $\text{Fe}^{+3}$ , it can foul treatment units, cause growth of iron bacteria in the units, and discolor the effluent or cause localized sediment deposits in storm drains or receiving waters. Excessive amounts may cause or contribute to violations of water quality standards including those related to color, turbidity, solids, and odor, as well as fouling of the discharge treatment systems. These situations denote reasonable potential to violate water quality. Therefore, the final permit will continue to require iron monitoring for the NOI, and iron limits will be established if necessary and based on dilution, that will allow for

acceptable discharges of iron that will not violate water quality standards or foul the groundwater treatment system components.

To aid in the compliance with iron limits at sites with limited dilution, the 2010 RGP reissuance allows for an increase for the 1,000 ug/l limits for discharges to receiving streams with dilutions above zero. In the existing permit, the 1,000 ug/l was applicable to discharges within the 0-5 Dilution Rate Concentration (DRC) range, but for the 2010 reissuance, any dilution above zero can result in an increased iron limit. For example, if the DRC of the receiving stream is 1.5, the effluent limit will be established at 1,500 ug/L. See Appendix IV of the proposed RGP reissuance for the States of Massachusetts and New Hampshire for further information.

Note that in the 2010 Final RGP EPA has made the following related clarifications and use of terminology: (1) the Final RGP uses the term “dilution factor” (DF) consistently instead of the equivalent term “Dilution Ratio Concentration” (DRC); and (2) the Final RGP has been changed from the Draft RGP to clarify that the DF is always 1 or greater. Thus, zero dilution means that the DF=1, not zero. These clarifications are reflected in changes in the following sections in Appendix IV and in Appendix III:

Footnote 6. Appendix IV for Massachusetts and New Hampshire:

6. For a Dilution Factor Range from 1 to 5, metals limits are calculated using DF times the base limit for the metal. For example, iron limits for DF 1-5 are equal to the base limit of 1,000 ug/L times the DF. For example, if DF is 1.5, the iron limit will be 1,500 ug/L; DF 2, then iron limit =1,000 x 2 =2,000 ug/L., etc. not to exceed the DF=5.

Footnote 11. Appendix III, Page 15 of 15:

11. For a Dilution Factor (DF) from 1 to 5, metals limits are calculated using DF times the base limit for the metal. See Appendix IV. For example, iron limits are calculated using DF x 1,000ug/L (the iron base limit). Therefore, DF is 1.5, the iron limit will be 1,500 ug/L; DF 2, then iron limit =1,000 x 2 =2,000 ug/L., etc. not to exceed the DF=5.

Comment 2.b: As a follow up to the question or comment above, AECOM feels that it would be reasonable to add a provision allowing for monitoring of naturally occurring metals at a proposed discharge point, and the development of site-specific alternative limits based on results.

Response 2.b: In determining appropriate water quality-based effluent limits for a NPDES permit, the concentration of naturally occurring metals in groundwater is not a relevant factor in determining whether the discharge of that groundwater to the surface water meets or violates the state Surface Water Quality Standards (WQS) for that metal.

Regarding naturally occurring surface water concentrations, in certain cases where the MA or NH WQS allows for the background level of a parameter in the surface water to be considered in setting a water quality-based effluent limit, EPA has done so in the

RGP. For example, the RGP allows for the consideration of natural pH levels in the receiving waters in Parts I.C.5 (Page 13, footnote 5) of the Final RGP. To further consider site –specific factors, States may also consider the development of site-specific water quality criteria following petition and a thorough review of the fate, chemistry and toxicity of a particular pollutant in a particular surface water. If a potential RGP application is seeking such a site specific water quality criteria prior to NPDES permit coverage, the applicant should apply for an individual permit. No changes have been made in the final RGP.

Comment 2.c: Relative to the time frame for re-applying (Part I.b.4.c) for the permit, it is indicated that holders of the 2005 RGP will be required to re-apply within 90 days of the issuance of the 2010 RGP. Will all holders of 2005 RGP be notified in writing upon the issuance of the 2010 RGP? Will there be any provisions for carryover of requirements in the 2005 permit (i.e. compounds removed from sampling list, etc), or will the permittee essentially be required to start over in the permitting process? AECOM suggests that requirements of 2005 permits be allowed to carry over.

Response 2.c: Dischargers with active RGP permits will be notified in writing with reapplication instructions around the effective date of the 2010 permit reissuance. All the pollutants for which limits were established in the 2005 RGP will remain (with no reductions or additional pollutants) unless the reapplication (NOI) indicates the presence of new pollutants not authorized in the previous permit. However, the reapplication for the new RGP requires operator, owners, or consultants working on behalf of the owner, to reapply using the respective new subcategory(s) and this action may also result in the deletion or addition of compounds to the site’s existing parameters list. New laboratory results or existing results not older than two years can be used for the NOI application.

It is important to mention that beginning with the new RGP reissuance, the list of permittees will consist of new RGP applicants and applicants for existing sites which have reapplied for a new permit within the prescribed 90 days after the permit is reissued. All other permittees which have sent a notice of termination within the 90 day period or did not reapply will be deleted from the existing list of sites with an authorized permit. Sites found discharging without a newly reissued permit may be subject to penalties established in Part II of the RGP regulations. No changes have been made in the final RGP.

Comment 2.d: AECOM suggests that the new procedures allow a site’s designation be changed to “VOCs only” if it is currently a VOC site and covered under a 2005 RGP, and has had effluent exceedences for what are believed to be naturally occurring metals.

Response 2.d: It is the responsibility of the site owner to meet the effluent metal limits established in the RGP. Not all metals are naturally occurring and in many cases metals are present in groundwater excavation from former industrial activity. Our experience with sites containing VOCs and metals during the past 4.5 years has shown that systems designed for the removal of VOCs have not always effectively treated for metals. VOC sites which have improved metal filtration can typically meet the effluent limits for

VOCs and metals. Therefore, permittees are required to treat and monitor all metals compounds established in the permit authorization or, in the new permit reissuance. No changes have been made in the final RGP.

3. Joseph Callahan, Project Manager at Environmental Strategies and Management, Inc. Comments received via email dated May 25, 2010.

Comment 3.a:

A large number of sites in Massachusetts have active remediation systems that discharge to surface waters which operate under the Massachusetts Contingency Plans (310 CMR 40.000) most of them are gasoline and fuel oil disposal sites. The new RGP effluent limits will have significant implications on the continued operations of the clean up and the mobility of current technology to ensure compliance with these standards may cause some responsible parties to terminate operations of ground water systems. Specifically, we are concerned that limits for iron and the group I poly-aromatic hydrocarbons (PAHs) are not technology based and will be near impossible to achieve. Most of these MCP remediation sites fall under the Petroleum Remediation Sites Category I, either Subcategory A or B. Both of the subcategories show iron limits of 1,000 micrograms per liter (ug/L).

Most of the ground water in Massachusetts is high in naturally occurring iron. At freshwater discharges sites, dilution factors are frequently used (based on the surface water body). However with the new permit the use of dilution factors to a saline water body appears to require a case by case analysis based on flow modeling. Frequently the boundary of between a freshwater body (in the case of a tidal river) or one that is saline is unclear. We believe EPA should clarify use of flow modeling data or provide information on documenting dilution.

Response 3.a: For EPA's response relative to iron and iron limits please see Response 2.d above.

Regarding flow modeling for saline water, EPA allows discharges to saline waters. However, there is no dilution afforded for these discharges to calculate certain metals limits, unless a dilution factor has been approved by the State prior to submission of NOIs. In order to allow for a dilution calculation for discharges to saltwater bodies, applicants will need to prepare new or produce existing site-specific data, e.g., flow modeling, which will be reviewed by EPA and the State. If the State does not approve of the dilution factor prior to the NOI process, the applicant will be asked to submit an individual permit application or will not be allowed any dilution when establishing limits for some metals.

Flow modeling information may be found by contacting the State contacts or at EPA's supported flow models website:

<http://www.epa.gov/waterscience/standards/mixingzone/files/compendium.pdf> and:  
<http://www.epa.gov/waterscience/models/index.html>

Flow models have been mostly used for multiple submerged discharges but could also be used for single discharges on a case by case basis. The flow model CORMIX is mostly used, see website: <http://www.cormix.info>. No changes have been made in the final RGP.

Comment 3.b: In the case of Subcategory B fuel oil sites, PAH limits for Group I isomers are not achievable under any existing approved method. No known method can currently achieve the 0.0038 ug/L limit which is 3.8 parts per trillion. The limits are not technology based and therefore should not be arbitrarily applied until an approved method can achieve these limits. Most of the MCP remediation fuel oils sites discharging under the 2005 permit do not currently require Group I PAHs and therefore have not been analyzed or expected. EPA should provide explanation of their requirements under the new permit or further clarify specific remediation sites where they would be required.

Response 3.b: EPA disagrees with the commenter regarding PAH monitoring requirements. These have been required in Individual and Environmental Emergency Exclusion permits long before the RGP was issued in 2005. Furthermore, owners and/or operators of sites during the last 4.5 years have been successfully treating and reporting effluent limits under the RGP with minimal violations. We believe this is due to our determination that (as indicated on Footnote 9 of Appendix III), “although the maximum value for the individual PAH compounds is 0.0038 ug/l, the compliance limits are equal to the minimum level (ML) of the test method used” which range from 0.05-10 ug/L.

Additionally, a technology based total limit of 100ug/L has been established for the Group II PAH isomers due to the variability of the water quality criteria for the individual isomers as well as the ability of current treatment technology to consistently meet this limit.

With regards to permittees terminating operation as a result of this requirement, EPA for the past four and half years has issued over 300 authorizations for remediation of petroleum contaminated sites containing PAH monitoring and has experienced (based on our records of compliance) no difficulties with this issue for any permittee. In addition, no permittee to our knowledge has terminated operations of a groundwater treatment system because of their inability to meet the established limits. Therefore, PAHs compounds will be maintained. No changes have been made in the final RGP.

Comment 3.c: Finally, for a discharge currently operating under the 2005 RGP, further clarification is needed for sampling of data submitted with the NOI under the 2010 permit. Part I.D.2.f states that existing data can be substituted with MCP and /or 2005 testing. Therefore, can I assume that no new data would be required with the NOI with the exception of the Group I PAHs, hexavalent, and trivalent chromium, nickel, and zinc under the petroleum remediation sites Category I, subcategory B. We don't believe existing systems operating under the 2005 permit continuously through the transition period should be required to meet the new data requirements under Part I.D.2.

Response 3.c: In order to obtain authorization for a reissuance or a new RGP discharge, all applicants will be required to submit with the notice of intent (NOI) the necessary laboratory records of the influent requiring remediation. EPA will review these records and authorize the RGP with the appropriate list of parameters for which effluent limits are required. Permittees have the option of requesting removal of compound(s) during the initial 6-12 months of operation.

The existing permit and proposed permit reissuance allow the applicant to submit laboratory results of the influent, field monitoring or effluent monitoring as long as these results have been conducted within the last 2 years. Most site owners subject to Massachusetts Contingency Plans (MCP) mitigation, or New Hampshire's Title 50 RSA 485-A (Water Pollution and Waste Disposal) or Title 50 RSA 485-C (Groundwater Protection Act) can use existing data in the NOI when applying for an RGP. However, if permittees do not have data because they did not monitor certain pollutants at their sites under the 2005 permit, they need to provide EPA with new data in order for EPA to determine the appropriate monitoring requirements and effluent limits for their permit reissuance. No changes have been made in the final RGP.

4. Thomas Sylvia, President Environmental Strategies and Management, Inc.

Comment 4.a: As the owner of a small environmental firm with fifteen employees, I am concerned that the proposed limits for the Remediation General Permit will result in the loss of good-paying jobs for licensed industrial wastewater treatment plant operators. To their credit, two of our largest clients (both major oil companies) implemented zero-tolerance policies for non-compliance with environmental permit conditions. Of greatest concern are the proposed limits for Category one PAHs – 0.0038 ug/l (3.8 parts per trillion) because there is no technology that we can employ, at any cost that we can ensure that this effluent limit is met. Any detection of Group I PAHs in the treated water effluent will be considered by our customers a violation of the RGP. The consultant would be replaced and the proposed project manager for the oil company would lose compensation and be placed on probation. Furthermore, a second offense would result in dismissal of the project manager.

Unless we can guarantee permit compliance, which we cannot, the proposed limits in the RGP will likely result in the deactivation of all groundwater extraction system that we operate. Said systems are primarily used to enhance the recovery of separate phase floating petroleum. These systems will transition to a passive skimming mode and as a consequence, product recovery will be significantly reduced. While less than a gram of PAH will not enter surface waters, many gallons of separate phase product will remain in the subsurface. The net effect of this program will actually proved to negatively impact the environment. In addition two licensed operators that maintain our water treatment systems will be without work.

Response 4.a: As indicated previously, PAHs have been successfully treated for by private industry during the last 4.5 years under the existing RGP. Appendix III of the RGP notes that although the maximum value for the individual PAH compounds is 0.0038 ug/l, the compliance limit is equal to the minimum level (ML) of the test method

used, which ranges from 0.05-10 ug/L. This compliance limit has made it possible to comply with the permit. As indicated above, the PAH requirements are not new for this reissuance and PAH limits have been in effect in RGP permits for the last 4.5 years with the majority of discharges complying with these limits and we expect the next 5 years will be no different. EPA expects operators to implement best available treatment technology and continue to successfully meet these limits. No changes have been made in the final RGP.

5. The LSP Association, Inc. J. Andrew Irwin, PE, LSP President 2009-2010

Comment 5.a: The draft RGP allows for reduction in the list of parameters for established gasoline only and residential fuel only sites. The RGP should apply the same approach for other applicable release sites such as commercial heating oil releases, dry cleaning releases, transportation accident releases, electrical sub station, or similar locations where sufficient assessment has identified the contaminants of concern (COCs) are limited.

Response 5.a: EPA disagrees with the commenter's assertion that the draft RGP allows for a reduction in the list of parameters for gasoline and residential discharges. The draft RGP allows no reduction of parameters to be sampled for gasoline or for residential discharges. Residential discharges and gasoline sites have been placed under the Petroleum Related Site Remediation – Sub-Category A and B, respectively, and as such are required to provide treatment of pollutants for each individual sub-category. Owners of residential sites, like owners of sites with any other discharges from petroleum groundwater contamination, must report (in the NOI) the presence or the absence of all the parameters in that subcategory plus laboratory information before they obtain permit authorization with a specific list of parameters to monitor. This approach is similar to that required for commercial heating oil releases which are also classified under the Oils and Fuel Oils subcategory.

If the commenter takes a closer look at the other release sites such as: commercial heating oil releases, it can be treated by one of the subcategories for Petroleum Related Site Remediation subcategories. Similarly, dry cleaning releases can be classified under the VOC's mitigation subcategory, etc. EPA believes that the RGP can be used for the treatment of almost all sites with specific contamination like PCBs for electrical substation discharges or for general contamination in the treatment of miscellaneous related discharges such as from: Aquifer Pump Testing, Hydrostatic Testing, Long Term Remediation of contaminated sump and dikes and others. No changes have been made in the final RGP.

Comment 5.b: Part I.C.8 - The duration of the process required to remove monitoring parameters has doubled. Previously, 6 months of acceptable influent and 12 months of acceptable effluent data were required to remove parameters from monitoring. Now, 12 consecutive months of influent and 24 consecutive months of effluent data are required to remove parameters from monitoring. This allows reduced sampling only for dewatering systems that will run for extended periods of years and no relief for those only operating a few years. We suggest that considering the burden, EPA should return to the prior 6

month and 12 month monitoring data requirements for monitoring reduction. This will be a problem if the treatment system has downtime for more than a month during the one/two year period. We suggest clarifying this requirement as “consecutive operating months”.

Response 5.b: EPA disagrees with the commenter that the duration for the removal of parameters has doubled. As stated in the draft RGP, the length of time for any site to request removal of parameters continues to be six months, and as a matter of preference now, any site can request removal up to twelve months.

This change is a result of concerns expressed by operators that the six month recertification reporting was required too soon after permit issuance, and was costly and time consuming for the purposes of information collecting and processing. Therefore, we have determined that the “recertification” and/or the removal of the pollutants believed present can be processed from the original six months to any time within the period of 6-12 months.

With regards to the commenter’s concern that short term discharges will not benefit from the effluent reduction under the proposed 24 month time period, EPA agrees with your concern and will be considering effluent reduction requests starting with a 12-24 month effluent reduction period. Therefore, the requirement is left as follows: For the removal of pollutants reported present in the original NOI, the permittee can request changes starting within the 6 – 12 month period. For a monitoring reduction for effluent parameters, the permittee can request it after 12- 24 months of operations. Therefore, Appendix V. Part II –Notice of Change (Page 1 of 8), will be changed as follows:

1. Reduction in certain monitoring requirements - Certain monitoring requirements may be reduced upon demonstration by ongoing sampling and analytical data.
  - i. To be eligible for a reduction in influent monitoring, the permittee must provide a minimum of 6-12 consecutive months of data. This data must be submitted with the NOC.
  - ii. To be eligible for a reduction in effluent monitoring, the permittee must provide 12- 24 consecutive months of data demonstrating compliance with the applicable parameter limits, applicable ML (see Part I.D.1.d), or demonstrating no toxicity, in the case where whole effluent toxicity testing is required. This type of change requires written approval by the Director. Prior to receiving written approval, the permittee must continue to monitor at the frequency specified in the RGP. This data must be submitted with the NOC.

Comment 5.c: For sites that have a dilution factor from 0 to 5, under the revised RGP a higher effluent limit can now be calculated for a site that has a dilution factor above 1. This is an improvement to the existing permit requirements. The LSPA supports this change.

Response 5.c: EPA acknowledges this comment and no further response is needed.

Comment 5.d: Under the revised RGP, re-start sampling only needs two sets of samples collected in the first week of restart, and then sampling can be monthly thereafter. This is an improvement to the existing permit requirements. The LSPA supports this change.

Response 5.d: EPA acknowledges this comment and no further response is needed.

Comment 5.e: Under the 2005 RGP we could analyze 1,4-dioxane by EPA Method 8260 and phenols by EPA Method 8270, both of which methods we were already using to analyze BTEX and PAHs, respectively. For the 2010 RGP, EPA is proposing Methods 522 or 1624C for 1,4-dioxane and Method 420 for phenols. This requires us to add 2 new methods, which will increase the cost to test samples for the NOI application. In the reissued RGP Method 8260 should still be allowed for analysis of 1,4-dioxane and Method 8270 should still be allowed for analysis of phenols.

Please clarify the technical justification from EPA why the prior allowed methods should not also be acceptable for the revised RGP.

Response 5.e: Methods 8260C and 8270D will be incorporated back into Appendix VI for 1, 4 dioxane and phenols, respectively. These were left off the draft by mistake. The draft RGP continues to require that all samples be tested using the analytical methods found in 40 CFR §136, or alternative methods approved by EPA in accordance with the procedures in 40 CFR §136. As provided for in EPA's Model Permit for Discharges Resulting from the Cleanup of Gasoline from Underground Storage Tanks (June 1989), Method 8260C, or an equivalent, may be used as a substitute for CWA Methods 602, 624, or 1624 for measuring volatile compounds. Likewise, Method 8270D continues to be allowed for testing semi-volatile organics such as phenols. In preparing the final permit, EPA reviewed and corrected Appendix VI with the appropriate list of required methods. In Appendix VI of the final Permit the rows for compounds 30 and 31 will be changed as follows:

30. 1, 4 Dioxane (123-91-1): Method 522(0.1 ug/L), 5 ug/L, Method 8260C, 50 ug/L, Method 1624C.

31. Total Phenols (108-95-2): 5 ug/L, Methods 8260C and 8270D, 2ug/L, Methods 420.1, 420.2, 50 ug/L, 420.4.

Comment 5.f: The Draft Fact Sheet states that "EPA has added a new sampling requirement for chloride that must be submitted for each discharge with the NOI. EPA will use this information to determine if a reasonable potential exists to exceed water quality standards (taking into account the dilution and the existing levels of chloride in the receiving water). If such a reasonable potential exists, EPA will include a permit limit for chloride in Page 3 of 4 its authorization letter." We request that EPA explain the methodology that will be used for imposing and calculating the chloride permit limit.

Response 5.f: The draft permit requires permittees to test and report Chloride limits using EPA Methods: 325.1, or 325.2, or 325.3. This monitoring requirement is retained in the final permit. Based on discharge monitoring results, EPA anticipates determining if there is a reasonable potential for the discharge to cause or contribute to violations of State water quality standards. Similar to the analogous analysis for metals, this analysis would consider the effects of dilution and whether the receiving water is impaired. If there is a reasonable potential for the discharge to cause or contribute to violations of State water quality standards, the calculation of the chloride permit limit would consider dilution, the State water quality standards, and the nature of the discharge.

Comment 5.g: According to past EPA guidance, it has been required that reporting limits for individual constituents be added to determine the ND-related reporting limit for a “total” parameter listing. This causes “total” parameters to be listed at a reporting limit that is substantially higher than individual reporting limits and above the permit limit. Even though individual constituents may not be detected at acceptable reporting limits, the summation of reporting limits always affects management of PCBs and total phthalates, because according to the permit and EPA guidance it is not possible to conclusively state that these “total” constituents are not present. We request that EPA consider revising the guidance approach to “total” constituent evaluations.

Response 5g: EPA agrees with the commenter that adding the “reporting limits” or minimum levels (ML) for all constituents of PCBs and phthalates may result in values at or exceeding the effluent limit and compliance limit (because the limit is less than the ML). It was not EPA’s intent that “total” values for PCBs and phthalates be reported in this manner. We have included revised language (in footnotes) that clarifies the manner in which “total” values for PCBs and phthalates are to be calculated for DMR reporting. Using the described method, any “total” values reported on the discharge monitoring report will represent measured exceedances of the limit. Note that the revised language also requires that the raw data for these parameters be attached to the DMR, and that it include the ML and the MDL for each constituent.

The revised language in Appendix III, Footnotes 6 and 8, is as follows:

Total values calculated for reporting on NOIs and discharge monitoring reports shall be calculated by adding the measured concentration of each constituent. If the measurement of a constituent is less than the ML, the permittee shall use a value of zero for that constituent. For each test, the permittee shall also attach the raw data for each constituent to the discharge monitoring report, including the minimum level and minimum detection level for the analysis.

Comment 5.h: The requirement to apply 14 days in advance of commencing discharge does not allow for emergency situations. We suggest that there be a mechanism for obtaining authorization of emergency discharges such as for Immediate Response Actions under the MCP during the 14 days while the NOI filing is being reviewed.

Response 5.h: During emergency cleanup activities, EPA recognizes that there may necessarily be remediation activities and discharges which will not allow for this 14 day period. In the case of such emergencies, e.g., for the clean up of oil spills or toxic materials, EPA-NE's Office of Site Remediation and Restoration (OSRR) will have the lead on all requests for emergency NPDES discharges as provided by 40 CFR Section 122.3(d) and 40 CFR Part 300. In cases of emergency spills, applicants should contact EPA at: National Response Center (NRC) (800-4248802) or EPA-NE at: 617-918-1224 or 1236. Further, EPA-NE understands that during the 14 day NOI processing period, unplanned circumstances may arise that could necessitate a discharge. In such cases, EPA-NE will make an attempt to notify the applicant as soon as possible after the minimum seven day (typically within 8-10 days) NOI posting period of the EPA's decision regarding coverage under the permit. No changes will be made in the final permit.

Comment 5.i: The new date for annual certification of the BMPP is the date of authorization for discharge under the new RGP. This certification needs to be submitted to EPA and Mass DEP by the anniversary date each year for the first two years. For years after that, the certification needs to be completed annually but instead is to be kept on site for inspection. If the certification is NOT submitted to EPA during the first two years, the RGP authorization will be subject to termination and penalties may be applied. While we agree that the first annual certification of the BMPP should get submitted to EPA and MassDEP on the anniversary of the initial date of authorization, all subsequent years BMPP certifications should be completed and available on site for inspection but not have to be submitted.

Response 5.i: EPA believes that the BMPP is important for the proper operation and maintenance of the control equipment and the required elements are typical components of a well-run treatment system. EPA feels that submitting two (2) annual reports is necessary. During the past 4.5 years managing the RGP program, this office has processed numerous Notice of Change (NOC) requests during the first and second year of RGP activities. These changes have included but are not limited to: the modification of the treatment system (adding or subtracting) components, the relocation of the effluent discharge within the site, the request for additional treatment systems, etc. All these activities have been for treatment systems improvements which typically cannot be identified and adjustments made to their treatment systems in time to fully reflect these in the first annual report. The submittal of the first two (2) annual reports would assure EPA that all adjustments and deficiencies have been addressed and that during the second year all aspects of the BMPP have been implemented for the duration of the site remediation. Therefore, EPA will maintain the proposed requirement and no changes will be made in the final RGP.

Comment 5.j: In addition to posting the individual NOI applications, the actual EPA Letter of Authorization under the RGP permit to discharge should also be posted on the EPA website as a matter of public record.

Response 5.j: EPA appreciates the suggestion and will consider adopting the step of posting authorization letters in its procedures for processing NOIs received under the 2010 RGP.

Comment 5.k: Part I.A.3.k specifies that “*Short-term discharges from sumps or other similar water collection structures, e.g., discharges lasting less than one week (7 days) at residential properties.*” Please clarify whether such short term discharges must get an individual permit or they are exempt. Where one example is provided, please provide further guidance on what types of discharges are excluded from coverage. Specifically, address whether Page 4 of 4 short term discharges from sumps at non-residential properties are also excluded.

Response 5.k: As described in the Fact Sheet, EPA’s NPDES program has received numerous inquiries regarding the appropriate permit mechanism for discharges from sumps or other structures utilized for collecting miscellaneous sources of water. Such discharges may be from residential or non-residential properties, and may or may not be contaminated. Due to the significant number, variety, and often brief duration of potential sump discharges, EPA considers it impracticable to routinely authorize these discharges under the RGP. Instead, when coverage is required, EPA typically, considers it appropriate to cover these discharges under one of several other available permitting options based on geographical location of the discharge, the duration of the discharge, and whether or not the discharge represents a significant contribution of pollutants.

Short-term sump discharges, whether from a residential or non-residential source, are not categorically exempt or excluded from NPDES permitting. Short-term sump discharges may be eligible for coverage under EPA's DGP if the discharge meets the DGP's definition of "uncontaminated". However, if such a discharge does not represent a significant contribution of pollutants and it is to a Municipal Separate Storm Sewer System (MS4) in a community authorized under an EPA Permit for stormwater discharges from its MS4s, then the discharge may be authorized under that community’s MS4 permit. If such a discharge does not represent a source of pollutants and it is not in a community authorized under an MS4 permit, no NPDES permit coverage is required. Notwithstanding authorization under an NPDES permit or a determination by EPA that an NPDES permit is not required, a municipality may still impose its own restrictions or disallow discharges pursuant to local law.

In the event that EPA determines that a sump discharge represents a significant contribution of pollutants, the discharge to surface water must be eliminated or must be covered under an individual permit, or it may be permitted under the RGP on a case-by-case basis.

In summary, short-term sump discharges from residential and non-residential sources are not necessarily excluded from NPDES permitting requirements. The commenter is directed to EPA's Stormwater Webpage (<http://www.epa.gov/region1/npdes/stormwater/assets/pdfs/CGP-DGP-RGP-Flow-Chart.pdf>) that includes decision-tree guidance for operators of such discharges related to

permitting requirements and available permits. To clarify which sump discharges are eligible for coverage under the RGP, EPA has modified the Final RGP language as follows:

1. Table I (Page 5 of 29): Activity Category IV – Miscellaneous Related Discharges. On Activity Sub-Category D. We have eliminated the phrase “Non residential” and leaved: The “Long-Term Remediation of Contaminated Sumps and Dikes” language. The language in the permit will look as follows:

Activity Category –

IV - Miscellaneous Related Discharges Activity Sub-Category

A. Aquifer Pump Testing to Evaluate Formerly contaminated Sites

B. Well Development/Rehabilitation at Contaminated/Formerly Contaminated Sites

C. Hydrostatic Testing of Pipelines and Tanks

D. Long-Term Remediation of Contaminated Sumps and Dikes.

E. Short-term Contaminated Dredging Drain Back Waters (if not covered by 401/404 permit)

2. Part I.A.3 - Specific Discharges Excluded From Coverage. Paragraph k. (Page 7 of 29) replaces Part I.A.3.k language with new final permit language as follows:

k. Uncontaminated pumped groundwater discharges authorized under the EPA Region I's General Permit for Stormwater Dischargers from Small Municipal Separate Storm Sewer Systems effective May 1, 2003, any subsequent reissuance of this permit, or any other EPA Region 1 permit for stormwater dischargers from a Municipal Separate Storm Sewer System.

3. Re-number Part I.A.3.k. (Page 7 of 27) to Part I.A.3.l and modify language with Final permit language as follows:

l. Short-term discharges (typically lasting less than 7 days or as determined by EPA on a case-by-case basis) from sumps or other similar water collection structures.

4. Re-number Part I.A.3.l into Part I.A.3.m, and Part I.A.3.m into Part I.A.3.n, etc, to end with Part I.A.3.r., as follows:

m. “New Source” dischargers, as defined in 40 CFR § 122.2.

n. Discharges listed in an individual NPDES permit unless:

i. The permit has expired;

ii. EPA has terminated the existing permit;

iii. The discharges are separate from the currently permitted discharges; or

iv. The discharge is new and eligible for this permit (e.g., an industry where the primary process waste discharge is covered by an individual permit but the facility is conducting groundwater remediation with separate treatment and discharge).

o. Discharges for which the Director makes a determination that an individual permit is required under 40 CFR § 122.28(b) (3). See Part I.B.8., below.

p. Discharges of any commercial or industrial wastes to Ocean Sanctuaries in Massachusetts, as defined at 302 Part CMR 5.00.

q. Discharges to territorial seas, as defined by Section 502 of the Clean Water Act.

r. Discharges made from a CERCLA remediation site under a signed Record of Decision under 40 CFR § 300.400(e) (1).