### Response to Comments on the Draft NPDES Permit General No. ID-G91-0000 Groundwater Remediation Discharge Facilities in Idaho

U.S. EPA Region 10, March 2007

#### Background

On June 13, 2006, EPA issued a public notice advertising the availability of a draft NPDES general permit and fact sheet for groundwater remediation discharge facilities in Idaho (Idaho groundwater remediation GP). The draft permit provides Clean Water Act authorization for the discharge of treated groundwater to surface waters of the United States. The two month public comment period ended August 14, 2006, during which time comments were received from the following five entities: 1) Department of the Air Force, Regional Environmental Office; 2) Univar USA Inc.; 3) Idaho Mining Association; 4) PERco, a subsidiary of Pacificorp; and, 5) United States Department of the Interior, Office of Environmental Policy and Compliance. This document summarizes EPA's responses to the comments received, and identifies any changes to the final permit that may have resulted from these comments. Also included in this document are a description of other minor changes to the final permit that were incorporated since the end of the public comment period.

### 1. Clare Mendelsohn – Director, Air Force Western Region Office, DoD Regional Environmental Coordinator, Region X.

<u>Comment 1A:</u> With regard to Part I.D. of the permit, "Facilities Excluded From Permit coverage", the commenter noted that groundwater remediation discharges that occur as part of CERCLA response actions have a statutory [42 U.S.C. Section 9621(e)(1)] and regulatory [40 CFR 300.400(e)(1)] exclusion from federal, state or local permit requirements. Similarly, the commenter suggests deleting any reference to an "On-Scene Coordinator" in Part I.D.1 since neither the statutory or regulatory exclusion makes mention of this term.

<u>EPA Response:</u> EPA is in agreement with the first portion of this comment. Part I.D.1&2 of the permit have been changed accordingly to reflect the statutory [42 U.S.C. Section 9621(e)(1)] and regulatory [40 CFR 300.400(e)(1)] exemption noted in the comment. The statute reads that "no Federal, State or local permit shall be required for the portion of any removal or remedial action conducted entirely onsite, where such remedial action is selected and carried out in compliance with this section" Federal regulations at 40 CFR 300.400(e)(1) further define "onsite" to mean "the areal extent of contamination and all suitable areas in very close proximity to the contamination necessary for implementation of the response action". However, EPA feels that the exemption for discharges conducted at the direction of an On-Scene Coordinator should remain in the permit as these are explicitly provided for in the NPDES implementing regulations [40 CFR 122.3(d)], and such discharges may not always exempted under 40 CFR 300.

<u>Comment 1B:</u> With regard to Part I.D.1. of the permit, the commenter recommended that the second sentence of this paragraph ("Such exclusions are granted on a case-by-case basis, and are usually limited to an initial response as part of a removal action for contaminated groundwater or soil cleanup") be deleted. As noted in Comment 1A, CERCLA exclusions are granted to any response action, not just on a case by case basis, or limited to an initial response or removal action.

<u>EPA Response:</u> EPA agrees with this comment. The sentence has been removed from the permit. Part I.D.1 of the permit now reads as follows: "If a groundwater remediation discharge occurs in compliance with the instructions of an On-Scene Coordinator pursuant to the National Oil and Hazardous Substances Pollution Contingency Plan (40 CFR 300), then the discharge is excluded from NPDES requirements".

# 2. Michael Gaudette – Senior Project Manager, Univar USA Inc.

<u>Comment 2A:</u> Univar agrees that groundwater remediation facilities are more appropriately controlled under a general rather than an individual NPDES permit. A general permit will result in a less cumbersome and time consuming permitting process.

EPA Response: EPA agrees with this comment.

<u>Comment 2B:</u> Univar suggests that an electronic submittal of the Notice of Intent (NOI), as well as future submittals of discharge monitoring reports (DMRs), be an acceptable format thus eliminating the need to mail hard copies.

<u>EPA Response:</u> Currently, the NPDES General permit for Stormwater Discharges from Construction Activities (CGP) is the only EPA issued general permit that allows for electronic NOI and DMR submittals. In part, this due to the logistical considerations of issuing coverage to thousands of operators under a nation wide general permit. While the EPA regions are working towards electronic submittals for general permits such as the Idaho groundwater remediation permit, this is not likely to be available in the near future.

<u>Comment 2C:</u> Univar commented that analytical results of the 55 chemicals of concern (COCs) expected to be present at groundwater remediation sites should not be a reporting requirement on the NOI provided sufficient operational and groundwater quality data are available to support the reduced list. At a site in question, a completed groundwater investigation, risk assessment, remedial action plan and remedial action implementation plan supports the understanding that only a pure product solvent and its degradation products are present in site groundwater. Requiring additional sampling and analysis for a site that has already been thoroughly characterized, and where remedial action has been underway for a number of years, represents an unnecessary requirement and expense.

<u>EPA Response</u>: EPA agrees with this comment. The following paragraph has been added to Part I.J.5 of the permit. "If a remediation discharger has sufficient historical groundwater monitoring and/or operational data to support a determination that certain COCs are believed absent in site groundwater, then a reduced list of chemical reporting

requirements is allowed on the NOI. Under these circumstances, the NOI should identify which of the 55 COCs are believed absent, and briefly describe the historical testing data and site characterization work that supports this determination."

<u>Comment 2D:</u> For the purposes of quarterly effluent monitoring, Univar commented that that if particular COCs are not present, or have never been present in site groundwater, then it should not be necessary to test for the entire list of chemicals in each subcategory as shown in Attachment B of the fact sheet, or Attachment A of the draft permit.

<u>EPA Response</u>: EPA agrees with this comment which is similar to comment 2C. However, the permit already provides for reduced routine monitoring if the facility has identified that particular COCs are "believed absent" in the NOI. As described in the permit and fact sheet, after a review of the NOI, EPA and the Idaho Department of Environmental Quality (IDEQ) will determine the final list of monitoring parameters for which the permittee will be responsible. In some cases, such as when certain pollutants are not present in the influent, the list of monitoring parameters will be reduced from what is shown on the table for each subcategory type. EPA anticipates that if the applicant certifies that a particular COC is believed absent on their NOI, then there will be no monitoring requirement for that pollutant in the permit.

<u>Comment 2E:</u> Univar commented that one of their pump and treat systems was designed to treat tetrachloroethylene (PCE) to the drinking water maximum contaminant level (MCL) at 5  $\mu$ g/l. This remedial action goal was based on the results of a risk assessment conducted to be protective of human health and the environment. However, the draft permit has a proposed PCE effluent limit of 0.8  $\mu$ g/l. Consequently, Univar believes that the EPA should grandfather the effluent limit (5  $\mu$ g/l) of this system.

<u>EPA Response:</u> The water quality-based effluent limit (WQBEL) for PCE in the draft permit (0.8  $\mu$ g/l) is a human health concentration based upon the consumption of both organisms and water (i.e., eating fish and drinking water). As described in the fact sheet, all WQBELs are set equal to the most stringent criteria; however, mixing zones are available at the discretion of IDEQ. As shown in Table 4 of the fact sheet, mixing zones are available for PCE up to concentrations not exceeding the MCL (5  $\mu$ g/l) which serves as the technology-based effluent ceiling for that COC. Univar can continue to discharge PCE at concentrations up to 5  $\mu$ g/l provided the receiving water maintains a dilution factor greater than 10. Accordingly, EPA does not agree with this comment. Univar should request a mixing zone for PCE in their NOI.

<u>Comment 2F:</u> Univar commented that the draft permit or fact sheet did not identify a situation where a Responsible Party (RP) operates a groundwater treatment system that discharges treated groundwater where contaminants unrelated to the RP's COCs are present in the effluent and exceed effluent limits. This comment was specifically referenced to Section V.D.8 of the fact sheet that requires applicants to identify all other chemicals compounds detected, or believed to be present at the site, and include them in the NOI.

<u>EPA Response:</u> This point was specifically addressed in Section V.D.8 of the fact sheet, "Chlorinated Volatile Organic Compounds", because there are many of these organic solvents and/or degradation products that are not identified on the list of 55 COCs. However, and as noted in Part I.J.4 of the permit, the applicant must identify any and all COCs on the NOI regardless of whether they are responsible for the pollution or not.

<u>Comment 2G:</u> Univar commented that requiring monthly monitoring for pH and TSS is excessive, especially for facilities that do not use chemical additives in the treatment process, or where some filtering process is utilized as is typically always done.

<u>EPA Response:</u> EPA agrees with this comment. For existing groundwater remediation facilities, the permit requires quarterly monitoring for pH, TSS and COCs. Flow monitoring remains continuous. This change is reflected in Part II.D of the permit.

<u>Comment 2H:</u> Similar to Comment 2B, Univar suggests that quarterly DMRs be submitted electronically rather than through the mail.

<u>EPA Response:</u> As noted in the response to Comment 2B above, EPA Region 10 is not yet prepared to handle electronic submittals for NPDES permitting requirements.

<u>Comment 2I:</u> Univar commented that the permit should be valid for the life of the remediation project, but if not, was unsure about the renewal process.

<u>EPA Response:</u> According to federal regulations at 40 CFR 122.46(a), "NPDES permits shall be valid for a fixed term not to exceed five years". As described in Part IV.D of the permit, a facility wishing to continue coverage beyond the expiration date of the permit must submit a new NOI at least 180 days before the expiration date. Under these circumstances, if the permit is not reissued by the expiration date, the terms and conditions of the permit continue in force under an administrative extension of the expired permit.

# 3. Jack Lyman - Executive Vice President, Idaho Mining Association

<u>Comment 3A:</u> The Idaho Mining Association (IMA) sought confirmation that the groundwater remediation general permit would be available to a mine facility choosing to treat groundwater and discharge it to surface water from a point source.

<u>EPA Response:</u> Yes, the Idaho groundwater remediation permit will be available to mine sites, or any other eligible facility that treats groundwater and discharges it to surface water in the State of Idaho. EPA agrees that the general permit could provide an incentive for a mine to address historical groundwater impacts at mine sites that might otherwise go unaddressed, and is consistent with the Good Samaritan legislation.

<u>Comment 3B:</u> IMA is concerned that the administration of the general permit, specifically the written authorization process from EPA, may involve lengthy delays in permit coverage.

<u>EPA Response</u>: Under most circumstances, EPA anticipates a relatively quick and efficient process for issuing coverages under the general permit. Delays can and likely will result for facilities seeking a waiver to discharge to excluded waters, or where a Biological Evaluation is necessary to show a *not likely to adversely affect* determination on listed species or critical habitat. However, EPA anticipates that coverage letters will typically be issued to the facility with two weeks of receipt of the NOI.

<u>Comment 3C:</u> IMA commented that eligibility for permit coverage should not depend upon whether treatment is "exsitu" or "insitu". The permit should clarify any type of groundwater treatment which is subsequently discharged into surface water from a point source is eligible for coverage.

<u>EPA Response:</u> The draft permit and fact sheet were intended to indicate that insitu groundwater treatment systems do not need a permit as there is no nexus to the NPDES program due to the lack of a surface water discharge. The final permit has been clarified to indicate insitu groundwater treatment systems are not affected by this permitting action unless there is a subsequent discharge of treated groundwater to surface water.

<u>Comment 3D:</u> IMA commented that the permit should be amended to clarify that uncontaminated groundwater and springs that are authorized under either the CGP or the Storm Water Multi-Sector General Permit (MSGP) for Industrial Activities, are not required to seek coverage under the Idaho groundwater remediation general permit.

<u>EPA Response:</u> EPA agrees with this comment. This point has been clarified in Part I.D.6 of the permit.

<u>Comment 3E:</u> For underground injection wells not subject to NPDES permitting authority, IMA commented that it is the Idaho Department of Water Resources that issues underground injection permits, not the IDEQ.

EPA Response: This correction has been made to the permit.

<u>Comment 3F:</u> IMA questions the establishment of a technology-based arsenic limit at 10  $\mu$ g/l, and sees no basis for this limit. The IMA believes that arsenic limits should be water quality-based, or technology limits consistent with 40 CFR Part 445 (Landfills Point Source Category) or 40 CFR Part 440 (Ore Mining and Dressing Point Source Category).

<u>EPA Response</u>: The CWA generally requires that the effluent limit for a particular pollutant be the more stringent of either the technology-based limit or the water quality-based limit. As described in Section V of the fact sheet, EPA established technology-based effluent limitations for certain pollutants in the general permit utilizing Best Professional Judgment (BPJ) to meet the requirements of Best Conventional Technology and Best Available Technology Economically Achievable (BCT/BAT). Section 402(a)(1) of the CWA provides EPA with this statutory authority where effluent

limitation guidelines (ELGs) have not yet been developed as is the case for groundwater remediation dischargers or substantially similar activities. Consistent with BPJ, EPA adopted ELGs from other point source categories (i.e., 40 CFR 445 and 440) for some pollutants, and adopted other standards and benchmarks historically used as clean-up action levels, or applicable or relevant and appropriate requirements (ARARs) at groundwater remediation Goals (PRGs) and Idaho's Ground Water Quality Rule (IDAPA 58.01.11). Since the MCL for arsenic is the lowest of these technology or water quality-based limits at 10  $\mu$ g/l, it was adopted as an effluent limit in the general permit to provide for an added measure of protectiveness. However, and as described in Section V.E of the fact sheet, a mixing zone is available for arsenic that can yield a ceiling effluent limit of 540  $\mu$ g/l where a dilution factor of greater than 100 is available (Table 5). This ceiling value is based on the arsenic ELG in 40 CFR Part 445.11.

<u>Comment 3G</u>: IMA commented that the upper bound pH limit of 9.0 is too restrictive, especially considering that lime treatment is a common treatment technology used by mining operations to precipitate metals. IMA believes that IDEQ should be able to authorize a mixing zone for pH.

<u>EPA Response</u>: EPA established a water quality-based pH limitation in the general permit of 6.5 to 9.0 standard units [IDAPA 58.01.02.250.01(a)]. While mixing zones for a pH WQBEL are allowable, they are somewhat difficult to implement as pH is not a conservative pollutant. Nevertheless, if EPA were going to establish a technology-based pH limitation for the mining industry, a 6.0 to 9.0 limit would result based upon the ELGs in 40 CFR 440 Subpart J. In this case, a pH of 9.0 would be the ceiling limit anyway.

<u>Comment 3H:</u> The IMA commented that effluent limitations for metals should be expressed as dissolved concentrations rather than total recoverable.

<u>EPA Response</u>: As described in 40 CFR 122.45(c), metals limits must be expressed as a total recoverable concentration in NPDES permits unless otherwise necessary. In the case of the Idaho groundwater remediation permit, it is not necessary to express metals limits as dissolved concentrations so they will remain as total recoverable. However, it is anticipated that most treated groundwater will have such low turbidity that the practical difference between total recoverable and dissolved concentrations should be very small.

<u>Comment 31</u>: The IMA believes that mixing zone decisions are strictly questions of state law, and EPA is not authorized to disapprove a state mixing zone decision that is otherwise consistent with Idaho Water Quality Standards.

<u>EPA Response:</u> This is a correct statement. As described in the permit and fact sheet, a facility must specifically request that IDEQ consider a mixing zone in their application NOI. Although this information is submitted to both EPA and IDEQ, the decision on whether or not to grant a mixing zone is entirely up to the state. As the NPDES permitting authority in Idaho, EPA must have access to this information to assure that the

permit meets federal regulations, and that WQBELs do not exceed technology-based limits. The information requested on the NOI is the minimum amount deemed necessary to support a mixing zone determination by both EPA and IDEQ. The purpose of the mixing/dilution factor tables in the permit is to reduce the time necessary for the state to make a mixing zone determination, and to accelerate the issuance of permit coverages in a timely fashion.

<u>Comment 3J</u>: Similar to Comment 3I above, the IMA believes that whether a discharge to a Special Resource Water or a 303(d) listed water is allowed is strictly a state decision that can be addressed in the state's certification. IMA also commented that it was not clear when or if a Biological Evaluation (BE) is necessary.

EPA Response: EPA partially agrees with this comment, and has clarified the permit accordingly. Part I.E of the general permit identifies receiving waters that are excluded from permit coverage. Among these are Special Resource Waters, Outstanding Resource Waters, and 303(d) listed waters where the discharge can have a negative effect on the listed pollutant. Obtaining a waiver to discharge into these excluded waters is strictly a matter of state concern, and IDEQ will issue individual certifications for any waivers to these excluded areas. Such individual certifications will be attached to EPA's authorization to discharge letter which will also identify the facility's individual coverage number under the general permit. However, and as described in Section VIII.A of the fact sheet, EPA has made the determination that the general permit will have no effect on any threatened or endangered species. As a consequence of this determination, consultation between EPA and the U.S. Fish and Wildlife Service or the National Marine Fisheries Service (collectively referred to as the Services) was not required. However, if a facility requested a waiver to discharge to excluded receiving waters based on the presence of threatened, endangered, or candidate species (or their critical habitat), then consultation with the Services would be required and the facility will have to prepare a BE to form the basis of that consultation. To be eligible for coverage under the general permit, the BE will generally have to render a no effect or a not likely to adversely affect determination. If the BE or the Services determine that the discharge may adversely affect any listed threatened, endangered or candidate species, the facility shall provide a description of mitigation or conditions proposed to reduce the likelihood of an adverse affect. EPA will initiate formal consultation with the Services, and will seek a nojeopardy Biological Opinion (BO) with an incidental take statement along with reasonable and prudent measures. If the BO renders a jeopardy conclusion, the facility may have to apply for and obtain an individual NPDES permit. This has been clarified the general permit.

<u>Comment 3K:</u> IMA commented that it is unreasonable to analyze groundwater samples for all 55 COCs for the purposes of the NOI when there is no likelihood that some contaminants will be present in site groundwater. For example, at most mine sites, many of the organic contaminants listed are rarely, if ever present.

EPA Response: EPA agrees with this comment. See response to Comment 2C above.

<u>Comment 3L</u>: The IMA commented that the permit language in Part I.C, "Requirement for an Individual Permit", be changed to read verbatim the language in 40 CFR 122.28(b)(3) from which this section of the permit is derived.

<u>EPA Response</u>: To describe circumstances under which an individual permit may be required, EPA used federal regulation at 40 CFR 122.28(b)(3), but modified the language slightly to more accurately reflect actual circumstances that may be encountered. For example, the phrase "Water Quality Management plan" in part 122.28(b)(3)(D) was replaced with "Total Maximum Daily Load (TMDL)".

# 4. Jon Cowley – Project Manager, PERCo, A subsidiary of PacificCorp.

<u>Comment 4A:</u> PERCo commented that it is unreasonable to require the analysis of all 55 COCs on the NOI when there is a long history of groundwater monitoring at a site, and certain pollutants have never been detected.

EPA Response: EPA agrees with this comment. See response to Comment 2C above.

<u>Comment 4B:</u> PERCo commented that the permit language in Part II.D.1 that requires monitoring to be performed *after the last treatment unit and prior to discharge* is not clear.

<u>EPA Response</u>: This is standard language, however the word "and" has been replaced with "but" for additional clarification. The permit now reads as follows: *samples shall be collected from a location after the last treatment unit but prior to discharge*. The intent of this phrase is that samples can not be collected after discharge to the receiving water due to the dilution, nor would a facility want to collect a sample that has been only partially treated. The purpose of this requirement is to ensure that the facility obtains representative samples of the effluent, or in some cases, influent.

# 5. Preston Sleeger – Regional Environmental Officer, United States Department of the Interior, Office of the Secretary, Office of Environmental Policy and Compliance.

<u>Comment 5A:</u> The Department of the Interior, Office of Environmental Policy and Compliance (the Department) is concerned that the Idaho Water Quality Standards may not be sufficiently protective of aquatic life.

<u>EPA Response</u>: EPA consults with the Services during revisions to state water quality standards. In Idaho, this process has been on going for a number of years. The National Marine Fisheries Service is currently preparing a Biological Opinion as part of the Idaho Water Quality Standards consultation, but this document is not yet complete. Since the general permit is based on Idaho water quality standards that have been approved by EPA, EPA can not change the water quality standards through the permit. Instead, the Department should provide comments during any revision process that occurs on the Idaho water quality standards.

<u>Comment 5B:</u> The Department notes that removing groundwater for treatment reduces water quantity at natural points of discharge which may have adverse ecological effects in hyporheic zones and riparian communities. The general permit should consider these possible effects, and weigh them against the benefits of removing pollutants. Where reduced natural discharge may harm animals, plants, or their habitat; an individual permit should be required so that EPA can assure adequate mitigation measures are implemented.

<u>EPA Response:</u> In general, EPA encourages insitu groundwater treatment for the reasons cited in this comment, in addition to the preservation of the groundwater resource itself. Furthermore, operation and maintenance costs of insitu systems are often more favorable than traditional pump and treat systems thus adding an additional incentive for a responsible party. In other situations, injection of treated effluent back into the aquifer helps preserve the groundwater resource. The pros and cons of these alternatives (and many more) are typically evaluated during a feasibility study or an engineering evaluation/cost analysis. Nevertheless, EPA recognizes that such alternatives are not always effective or practical, and sometimes surface water discharges become necessary in which case an NPDES permit is required. The circumstances under which EPA would issue an individual permit to a groundwater removal may have adverse ecological consequences at natural points of discharge, the Director may determine that such a discharge is more appropriately controlled through an individual permit as noted in part I.C.f.5.

<u>Comment 5C:</u> The Department is unclear about the permit requirements to discharge to an impaired waterbody identified on the section 303(d) list of the CWA. Furthermore, the Department supports the issuance of individual permits into 303(d) waters where the effects can be more thoroughly evaluated.

<u>EPA Response:</u> See response to Comment 3J above. In addition, Part I.C of the permit identifies circumstances under which an individual permit may be required.

<u>Comment 5D:</u> With regard to receiving waters excluded from permit coverage where threatened or endangered species are present, the Department is not clear what listing this refers to, or how the discharger would obtain this list. The Department suggests the following language in Part I.E.5 of the permit: *waters where threatened, endangered, proposed, or candidate species, or designated or proposed critical habitat may be affected.* 

<u>EPA Response:</u> EPA agrees with this comment. The permit language has been modified to exclude discharge *into waters where Federally listed threatened, endangered, or candidate species, or designated or proposed critical habitat are present*. In addition, the fact sheet notes that listings may be found at <u>http://www.fws.gov/idahoes/</u>, or by contacting the Snake River Fish and Wildlife Office in Boise, Idaho, at (208) 378-5243.

<u>Comment 5E:</u> With regard to the waiver provision allowing discharge to waters containing listed species, the Department is not clear what criteria would be used to determine whether a discharge is protective. In addition, the Department recommends that this waiver provision be eliminated, and that that facilities seeking to discharge into receiving waters containing listed species be required to obtain an individual NPDES permit.

<u>EPA Response:</u> See response to Comment 3J above. EPA believes that these waiver provisions are sufficiently protective of threatened, endangered or candidate species, and that a total exclusion of these receiving waters is not necessary.

<u>Comment 5F:</u> The Department does feel there is sufficient information in the fact sheet to justify a *no effect* determination. In addition, the waiver provision leaves open the potential for discharges to occur within areas where listed species and critical habitat occur, but the permit does not provide assurance that the discharges would have no impact on them.

<u>EPA Response:</u> EPA agrees with this comment. The permit language has been as noted in the response to Comment 5D.

### Other Changes to the Final Permit and Fact Sheet

The public noticed version of the draft Idaho groundwater remediation GP contained a narrative effluent limitation that read as follows: "Discharges shall be free from floating solids, visible foam in other than trace amounts, or oily wastes that produce a sheen on the surface of the water body". This effluent limitation was an expression of several narrative water quality standards that apply to all waters of the state (IDAPA 58.01.02.200), and has been replaced by five separate narrative limits in the final permit that accurately reflect the precise wording of the standard itself. These revised narrative effluent limits read as follows:

- 1. The permittee must not discharge hazardous materials in concentrations that pose a threat to public health or impair the beneficial uses of the receiving water (IDAPA 58.01.02.200.01).
- 2. The permittee must not discharge chemicals or toxic pollutants in concentrations that impair the beneficial uses of the receiving water (IDAPA 58.01.02.200.02).
- 3. The permittee must not discharge deleterious materials in concentrations that impair the beneficial uses of the receiving water (IDAPA 58.01.02.200.03).
- 4. The permittee must not discharge floating, suspended or submerged matter of any kind in concentrations causing nuisance or objectionable conditions or that may impair the beneficial uses of the receiving water (IDAPA 58.01.02.200.05).
- 5. The permittee must not discharge excess nutrients that can cause visible slime

growths or other nuisance aquatic growths impairing beneficial uses of the receiving water (IDAPA 58.01.02.200.06).

An additional change to the final permit that resulted from conditions contained within the IDEQ final CWA section 401 certification (dated April 13, 2007), is the consideration of receiving water hardness when establishing effluent limits for some metals. Water quality criteria for some of the metals limited by the GP (including cadmium, chromium III, copper, lead, nickel, silver, and zinc) are hardness dependent. In the Idaho Water Quality Standards, lookup criteria values for hardness dependent metals are presented at a default hardness of 100 mg/l as CaCO<sub>3</sub> (IDAPA 58.01.02.210.01), and the draft permit simply used these values as end-of-pipe effluent limits. The final GP allows for the consideration of hardness in establishing effluent limits for these seven metals. A facility simply reports a representative receiving water hardness on the NOI, and EPA calculates the appropriate metals limits as described in the permit and fact sheet. Final effluent limits will be provided to each facility in their authorization to discharge letter.

It is standard EPA procedure not to revise fact sheets after the beginning of the public comment period. Typically, Response to Comment documents serve to identify changes to the final permit, and to provide the technical and regulatory basis for such changes. In the case of the Idaho groundwater remediation GP, EPA has determined that there is sufficient cause to modify the fact sheet to accurate reflect the changes made to the final permit. EPA believes that this will eliminate potential confusion to an already somewhat complex and unusual general NPDES permit which provides CWA authorization to a universe of owners/operators that are unaccustomed to the NPDES program.