RESPONSE TO COMMENTS
ILLINOIS EPA REVIEW
September 24, 2009
SITE 9 DRAFT UFP-SAP
NAVAL STATION GREAT LAKES

1. Comment (July 24, 2009): SAP Worksheet #10 – The sampling and analysis plan includes no evaluation of surface soils. From an environmental risk perspective, this is a major omission. Typically, it is the surface stratum that is the most risky in hazard determinations for current receptors. The report fails to discuss the rationale for exempting the surface soils and provides no evidence that this stratum is uncontaminated or that it has been previously evaluated. It is understood that the vast majority of the site is currently overlain by buildings or paved parking areas, but there should still be at least a few surface soil samples collected to address that exposure route.

   Response to Comment: During the June 2009 and November 2009 DQO meetings investigation of the surface soil at the site was considered and it was agreed at that time that surface soil was not a media of concern. It was agreed that the surface soil media would not be evaluated for the anticipated receptors. Numerous construction activities have taken place at the site. The surface soil would not be representative of the ravine conditions.

   Comment (September 24, 2009): The original comment was concerned with the absence of surface soil samples and a subsequent risk evaluation of the surficial soil level. As stated, a decision was made to exclude surface soil from the investigation, which has since been revised to be a Site Inspection rather than a Remedial Investigation. This decision should be presented and discussed in the Sampling and Analysis Plan. Without such discussion and proper justification, the absence of a surface soil assessment appears to be a major oversight.

   Response: Text will be added to WS #10 to discuss the decision made to remove surface soil from the investigation. The added text is "During the June 2009 and November 2009 DQO meetings investigation of the surface soil at the site was considered and it was agreed at that time that surface soil was not a media of concern. It was agreed that the surface soil media would not be evaluated for the anticipated receptors. Numerous construction activities have taken place at the site and surface soil would not be representative of the ravine conditions."

2. Comment (July 24, 2009): SAP Worksheet #15 – The TACO-based Project Action Limits were checked for accuracy and several discrepancies were noted. These discrepancies are based on new and revised screening values from the Agency's proposed amendments to TACO. The internet citation for the amendments is given in the later comment for Appendix B. In addition, footnote #3 is incorrect. It should state that the value is based on chromium VI. Finally, please explain the entries in the column titled "Project Quantitation Limit Goal" and explain why these project goals apparently cannot be achieved.

   Response to Comment: The Worksheet was reviewed and corrected based on the new and revised screening vales. Footnote #3 was corrected.

   The Project Quantitation Limit Goal is 1/3rd of (three times lower than) the Project Action Limit on Worksheet #15. This Project Quantitation Limit Goal is included in the Intergovernmental Data Quality Task Force Workbook for Uniform Federal Policy for Quality Assurance Project Plans and is a number that the Navy Chemist has requested. It is used for the procurement of the laboratory that will conduct this work.

   Comment (September 24, 2009): The State understands the Navy's hesitancy to revise the Worksheet #15 "action limits" to confrom to the proposed TACO objectives. We concur with the added footnote explaining that revised values will be used upon finalization of the TACO proposal. However, an explanation is needed for the solitary Worksheet #15 revision; the soil action limit for mercury was changed from 0.1 mg/kg to 3.1 mg/kg. The lowest current TACO value for mercury (the Consturction Worker inhalation objective) is 0.1 mg/kg. If it can be demonstrated that there is no

elemental mercury contamination (see 742.Appendix B Table B, footnote "s"), the inhalation pathway can be excluded and the mercury screening level could then be increased to 23 mg/kg, the current residential ingestion value. Please revise accordingly.

Response: The mercury criteria was revised according to the comment and changed to 0.1 mg/kg in Worksheet #15.

3. Comment (July 24, 2009): SAP Worksheet #15 – Another source for determining the Project Action Limits for groundwater should be the regulations found at 35 Illinois Administrative Code (IAC) 620. These are State of Illinois regulations for groundwater quality and are considered to be Applicable or Relevant and Appropriate Regulations (ARAR).

   Response to Comment: The Worksheet was reviewed and corrected based on the new and revised screening value.

   Comment (September 24, 2009): The response states the worksheet was corrected based on the revised screening values. However, the footnote at the bottom of the worksheet noting the applicable screening values should include the specified ARAR even if none of the values listed there have been used.

   Response: Footnote 4 has been amended to include the State of Illinois regulations for groundwater quality.

4. Comment (July 24, 2009): Appendix B, Section 1.2.1 – Please explain the difference between the Section 1.2.1 screening criteria and the Worksheet #15 project action levels.

   Response to Comment: The screening concentrations are based on risk-based cleanup objectives developed by Illinois EPA (Illinois EPA, online August 2007) and risk-based concentrations developed by Oak Ridge National Laboratory (ORNL) and recommended by the U.S. Environmental Protection Agency (USEPA). Worksheet #15 project action levels are the lower of the respective criteria (TACO criteria or USEPA ORNL concentrations).

   Comment (September 24, 2009): The original comment asked that the distinction between the Worksheet #15 "action limits" and Appendix B Section 1.2.2 "screening criteria" be explained. The response provides that explanation. However, we cannot find the explanation within the revised document.

   Response: A footnote to Worksheet #15 and text to Appendix B Section 1.2.1 was added for this explanation. The footnote and text says "The screening concentrations are based on risk-based cleanup objectives developed by Illinois EPA (Illinois EPA, online August 2007) and risk-based concentrations developed by Oak Ridge National Laboratory (ORNL) and recommended by the U.S. Environmental Protection Agency (USEPA). Worksheet #15 project action levels are the lower of the respective criteria (TACO criteria or USEPA ORNL concentrations)."

5. Comment (July 24, 2009): Appendix B, Tables 3 and 4 – Section 2.1.3 suggests that the future occupational worker receptor should fit the industrial/commercial exposure regimen. Some of the Table 3 and 4, RME and CME, exposure parameters are inconsistent with this premise, e.g., exposure frequency of 24 and 12 days, RME and CME, respectively. This receptor needs to be more fully described and defined.

   Response to Comment: The Maintenance/Occupational worker includes personnel working on the site handing out uniforms to recruits, restocking military uniforms/equipment, landscaping work, and completing paperwork. The exposure frequency was corrected to reflect this.

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Comment (September 24, 2009): The original comment requested details regarding the "Occupational Worker" exposure input parameters presented in Appendix B, Table 3 and 4. Appendix B, Section 2.1.3, Bullet #2, indicated that the occupational worker is included in the risk assessment to account for possible future commercial/industrial land use. In answer to an earlier comment (Agency Comment #28), it appears this receptor now encompasses future and current workers. The Tables 3 and 4 exposure parameters are inconsistent with these receptors. Additionally, the Construction Worker PEF was recalculated per Agency Comment #34 and should be included in the subject tables. Tables 3 and 4 should be revised and provided to the Agency for review.

Response: The PEF calculation is included in the tables. Tables 3 and 4 have been revised to include the updated parameters. The PEF calculation and the tables are attached.