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NAS SOUTH WEYMOUTH
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U S NAVY RESPONSES TO U S EPA REGION I COMMENTS DATED 21 OCTOBER 2015 ON
THE FINAL HANGAR I REMEDIAL INVESTIGATION WORK PLAN FORMER NAS SOUTH
WEYMOUTH MA
10/29/2015
RESOLUTION CONSULTANTS

**NAVY RESPONSES TO
U. S. ENVIRONMENTAL PROTECTION AGENCY
COMMENTS DATED OCTOBER 21, 2015
ON THE RLSO FINAL HANGAR 1 REMEDIAL INVESTIGATION WORK PLAN
(RIWP)
FORMER NAVAL AIR STATION SOUTH WEYMOUTH,
WEYMOUTH, MASSACHUSETTS DATED OCTOBER 15, 2015**

Navy responses to EPA's October 21, 2015 comments on the Navy's RLSO Final RIWP are presented below. The EPA comments are presented first (in italics) followed by Navy's responses.

EPA Specific Comments

EPA Specific Comment 1 – WS 11-4, DR#2: Please amend the paragraph to include a comparison of soil concentrations to respective PALs for purposes of assessing potential risk to human health. This is consistent with the last paragraph in Section 10.4.5 (WS 10-12). EPA cannot concur with a RI Report that does not adequately evaluate current and potential risks via all exposure pathways from all media.

Response: The paragraph was amended to include a comparison of soil concentrations to respective PALs.

EPA Specific Comment 2 – WS 11-4, DR#3: The replacement of “PFOS and PFOA project screening levels” with “soil to groundwater leaching screening levels” in this paragraph is unclear and unacceptable. (The Navy had agreed in response to EPA Comment #31 (5/29/15) to include reference to PFOS and/or PFOA Project Action Levels (PALs).) For consistency with Section 11.3, please use the original text or change it to reference both “PFOS and PFOA project screening levels and soil to groundwater leaching screening levels, if available.” Decisions regarding possible future actions for soil and/or groundwater at the site should be deferred until potential risks to human and ecological receptors have been presented and thoroughly evaluated.

Response: The original text will be used in Decision Rule #3.

EPA Specific Comment 3 – WS 14-3, 3rd Paragraph 3: No well screens should be longer than 10 feet. Regarding the last sentence, if bedrock is found to be less than 20 feet bgs, both shallow and deep wells should still be installed but with shorter (e.g. five-foot long) well screens. Please edit the text accordingly.

Response: Requested changes made.

EPA Specific Comment 4 – WS 15-1 and WS 15-2: Please amend the table to include detection limits for all PFCs (see comment 7 below).

Response: Requested changes made.

EPA Specific Comment 5 – WS 15-2: *For reasons discussed above, please amend the matrix heading to omit “for the protection of soil to groundwater leaching pathway”.*

Response: Requested change made.

EPA Specific Comment 6 – Page 17-3, Table 17-1: *The purpose of H1-MW-111 was to determine if PFCs at MW09-006 were migrating in groundwater or were present due to a spill that ran off across the pavement. Therefore, a shallow screen is also required at H1-MW-111 because contamination at MW09-006 was detected in shallow groundwater. It is also curious that PFOA was the predominant contaminant at wells MW05-302, 303, and 304 but at MW09-006 PFOS was the predominant contaminant as it was at MW05-306 and 308. It is recommended that both shallow and deep wells be installed at H1-MW-111.*

Response: Both shallow and deep wells will be installed at H1-MW-111.

EPA Specific Comment 7 – Figure 17-1: *Both shallow and deep well screens should be installed at H1-MW-111 for the reasons cited above. Please revise the figure.*

Response: Requested change made.

EPA Specific Comment 8 – WS 23-1: *Please amend the table to include all of the PFCs identified in EPA’s 10/8/15 email (i.e., Perfluorobutanesulfonic acid – PFBS, Perfluoroheptanoic acid – PFHpA, Perfluorohexanesulfonic acid – PFHxS, Perfluorooctanoic acid – PFOA, Perfluorononanoic acid – PFNA, Perfluorooctanesulfonic acid – PFOS, Perfluoro-n-decanoic acid C13, Perfluorohexanoic acid - C13, Perfluorohexane sulfonate - PFHxS C13, Perfluorooctanoic acid - PFOA C13, Perfluorononanoic acid - PFNA C13, Perfluorooctane sulfonate - PFOS C13, Perfluorododecanoic acid - C13, Perfluoroundecanoic acid - C13).*

Contrary to the Navy’s 10/14/15 response to comments, EPA is not requesting “sampling and analysis of additional PFCs”. The referenced lab SOP already includes analyses for the PFCs referenced above. EPA is simply requesting that the Navy provide results from the entire laboratory data package. While Navy’s current policy may be to “focus on PFCs with available Provisional Health Advisory (PHA) values” (i.e. PFOA and PFOS), EPA’s believes sampling and analysis for all poly- and perfluorinated alkyl substances should be performed at sites where a release or threatened release of PFCs is suspected or has been confirmed. While PFOA and PFOS may currently be the only PFCs for which risks can be quantitatively evaluated (due to the availability of provisional toxicity values), the other PFCs should be evaluated qualitatively in the baseline risk assessment. As stated in the aforementioned EPA comments, EPA will not be able to concur with statements regarding future risks without knowing if higher chain length PFCs are present in soils and groundwater (that have the potential to degrade into PFOA and PFOS).

Response: The table will be amended to include the PFCs listed in EPA’s 10/8/2015 email. Note that the compounds listed with a “C13” are surrogates used to calculate percent recovery in spikes, and are not included in the analyte list below.

| Analyte Description | CAS Number |
|--------------------------------------|------------|
| Perfluorobutanesulfonic acid (PFBS) | 375-73-5 |
| Perfluoroheptanoic acid (PFHpA) | 375-85-9 |
| Perfluorohexanesulfonic acid (PFHxS) | 355-46-4 |
| Perfluorononanoic acid (PFNA) | 375-95-1 |
| Perfluorooctanoic acid (PFOA) | 335-67-1 |
| Perfluorooctanesulfonic acid (PFOS) | 1763-23-1 |