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July 21, 2003

U.S. Environmental Protection Agency – Region II
290 Broadway – 22nd Floor
New York, New York 10007-1866

Attn: Mr. Adolph Everett, P.E.
Chief, RCRA Programs Branch

Re: Contract N62470-95-D-6007
Navy CLEAN, District III
Contract Task Order (CTO) 0269
U.S. Naval Station Roosevelt Roads (NSRR), Puerto Rico
RCRA/HSWA Permit No. PR2170027203
Final Recharacterization Work Plan for SWMU 11
Interim Measures Plan for SWMU 11

Dear Mr. Everett:

Baker Environmental, Inc. (Baker), on behalf of the Navy, is providing you with two copies of the Final Recharacterization Work Plan for SWMU 11, as well as the Interim Measures Plan for SWMU 11 separately bound as requested. The work plan reflects the modifications requested in Mr. Timothy Gordon's letter dated June 3, 2003, as well as subsequent comments received in e-mails from Vivian Chin of the EPA on June 30, 2003 and July 8, 2003. This submittal is in accordance with the letter from your office dated June 3, 2003.

Attached please find the Navy Responses to EPA's comments dated June 3, 2003, June 30, 2003, and July 8, 2003, on the Draft Recharacterization Work Plan for SWMU 11 dated March 18, 2003. The Final Recharacterization Work Plan has been modified as outlined in the attached response to comments.

The Navy is planning on consolidating the implementation of this work plan with the semi-annual landfill groundwater-monitoring event in September of this year. Therefore, the Navy would like to receive EPA approval on this work plan by the end of August to facilitate this mobilization effort.

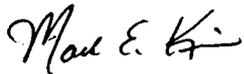
Baker

Mr. Adolph Everett, P.E.
July 21, 2003
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If you have questions regarding this submittal, please contact Mr. Kevin Cloe, P.E. at (757) 322-4736. Additional distribution has been made as indicated below.

Sincerely,

BAKER ENVIRONMENTAL, INC.



Mark E. Kimes, P.E.
Activity Manager

MEK/lp
Attachments

cc: Mr. Kevin R. Cloe, LANTDIV - Code EV23KC (2 copies)
Ms. Bonnie Capito, LANTDIV - Code EV32BC (1 copy)
Ms. Madeline Rivera, NSRR (4 copies)
Mr. Tim Gordon, US EPA, Region II (2 copies)
Ms. Kathy Rogovin, Booz Allen & Hamilton (1 copy)
Mr. Carl Soderberg, US EPA, Caribbean Office (1 copy)
Mr. Carmelo Vazquez, PR EQB (1 copy)
Mr. John Tomik, CH2M Hill, Virginia Beach (1 copy)

**NAVY RESPONSE TO EPA COMMENTS DATED JUNE 3, 2003 ON THE DRAFT
RECHARACTERIZATION WORK PLAN FOR SWMU 11 DATED MARCH 18, 2003
NAVAL STATION ROOSEVELT ROADS
CEIBA, PUERTO RICO**

EPA Comment No. 1

1. *Since polychlorinated biphenyls (PCBs) are the primary constituent of concern [as addressed pursuant to the facility's 1994 RCRA Permit] at SWMU 11, the interior areas of the old power plant, EPA requested that our Pesticides and Toxic Substances Branch (PTSB) review the March 18, 2003 Draft Recharacterization Work Plan for SWMU 11. Due to certain inconsistencies and other issues discussed in the enclosed May 8, 2003 memo developed by PTSB, EPA cannot approve the Draft Recharacterization Work Plan as submitted. It should also be noted that asbestos, which is likely present at SWMU #11, is not addressed under the Draft Recharacterization Work Plan. Remedial measures for asbestos are not generally implemented pursuant to RCRA corrective action requirements, as given at 40 C.F.R. § 264.101.*

Navy Response to EPA Comment No. 1

The asbestos that is likely present inside Building 38 was addressed in Section 3.1.5 of the Draft Recharacterization Work Plan for SWMU 11. As presented in this section, a site condition assessment will be performed to investigate and document the current condition and integrity of the assumed asbestos-containing pipe insulation in the building. The pipe insulation will be grouped into distinct homogenous materials. Based on the findings of the investigation, specific recommendations for overall management of the individual homogenous pipe insulation will be made.

EPA Comment No. 2

2. *As discussed during our May 6, 2003 meeting at EPA's New York offices, EPA also recommends that the SWMU 11 Draft Recharacterization Work Plan be expanded to also include a proposed Interim Measures (IM) Plan to establish [if not already established] and maintain engineering controls to prevent site access by workers and/or trespassers to the interior areas of the old power plant (SWMU 11). Within 45 days of your receipt of this letter, please submit a revised Draft Recharacterization Work Plan for SWMU 11 to comply with all applicable comment given in the enclosed May 8, 2003 memo, and also an IM Plan as described above. The two plans may be submitted as one document.*

Navy Response to EPA Comment No. 2

The Navy has already implemented engineering controls at SWMU 11 to prevent site access by workers and/or trespassers to the interior areas of Building 38. An Interim Measures Plan has been developed in conjunction with the Final Recharacterization Work Plan, to present the current engineering controls in place at SWMU 11 (Building 38). This plan is being submitted as a separate document along with the Final Recharacterization Work Plan.

PESTICIDES AND TOXIC SUBSTANCES BRANCH COMMENTS DATED MAY 08 2003

Pesticides and Toxic Substances Branch Comment No. 1

Original investigation results are presented, as well as plans for Recharacterization following both a fire in the building and the amendments to the PCB regulations. We have concerns with the data presented in the original characterization. Section 2.1 discusses the range of PCB concentrations detected in 126 wipe samples. However, the data is presented in micrograms per liter ($\mu\text{g/L}$). The corresponding Table 2-1 summarizing all wipe sample results expresses the same results discussed in Section 2.1 in $\mu\text{g/wipe}$. Besides the conflicting units of measure for the same data, neither is appropriate for a standard wipe sample.

Navy Response to Pesticides and Toxic Substances Branch Comment No. 1

The units presented in Section 2.1, as well as in Table 2-1 were presented incorrectly. The units identified in this section and table as well as the entire work plan have been adjusted to reflect the appropriate units as $\mu\text{g}/100\text{ cm}^2$.

Pesticides and Toxic Substances Branch Comment No. 2

The $\mu\text{g/L}$ unit of measure is appropriate for liquid samples. Wipe samples should be expressed in $\mu\text{g}/100\text{ cm}^2$. Of additional concern is Figure 2-1 which depicts a color coded illustration of the contamination codes with the points based on ranges expressed in parts per billion (ppb). The representation translates the results in Table 2-1 (listed in $\mu\text{g/wipe}$) as being equal to the same value in ppb (i.e., 550 $\mu\text{g/wipe}$ at 11WS44 corresponding to 550 ppb shown in green for the range of 100 - 1000 ppb). As noted above, the appropriate unit of measure for a wipe sample is $\mu\text{g}/100\text{ cm}^2$. If the values in Table 2-1 expressed in $\mu\text{g/wipe}$ are in fact $\mu\text{g}/100\text{ cm}^2$, this does not translate to the same numerical value in ppb. The unit $\mu\text{g/L}$ does correlate to ppb, however, as stated above, $\mu\text{g/L}$ is not an appropriate unit of measure for wipe samples.

40 C.F.R. § 761.1(b)(3) specifies that PCB provisions for concentrations of less than 50 parts per million (ppm) correspond to PCB concentrations of less than or equal to 10 $\mu\text{g}/100\text{ cm}^2$. Provisions applying to PCB concentrations between 50 and 500 ppm correspond to between 10 and 100 $\mu\text{g}/100\text{ cm}^2$. Provisions applying to concentrations over 500 ppm apply to contaminated surfaces at PCB concentrations over 100 $\mu\text{g}/100\text{ cm}^2$. While recharacterization is pending, it is only planned for recollection of a portion of the original samples. Therefore, we would like clarification of the original values with appropriate units of measure, also bearing appropriate and consistent units of measure in mind for the recharacterization samples.

Navy Response to Pesticides and Toxic Substances Branch Comment No. 2

The wipe sample units presented in the work plan were presented incorrectly. The units have been adjusted to reflect the appropriate units as $\mu\text{g}/100\text{ cm}^2$. The units of the color coding system within Figure 2-1 is representative of $\mu\text{g}/100\text{ cm}^2$ not parts per billion (ppb), this figure has been modified accordingly.

Comment noted.

Pesticides and Toxic Substances Branch Comment No. 3

Approximately one third of the original number of wipe samples, as well as a limited number of concrete chip samples will be conducted. The original sample results have been relied upon to target specific

areas for additional wipe sampling essentially to gauge the impact of the fire. Chip sampling primarily encompasses less than a quarter of the floor area.

Until the inconsistencies identified above for the original sampling are clarified we can not evaluate whether the bulk sampling proposed is sufficient to fully characterize contamination in the floor. EPA's March 2002 letter recommended that in the new sampling plan some wipe samples should be obtained from floor areas where PCB contamination was less than $10 \text{ ug}/100 \text{ cm}^2$ to assess if the extent of contamination has been substantially changed by the fire. For the same reason, some wipe samples should be taken in the most contaminated areas and on the walls (at the same height as previously sampled). These wipe samples are intended to evaluate if the impact of the fire on contamination was substantial. The letter also recommended that bulk samples should be taken in the most highly contaminated areas to determine PCB contamination within the concrete. The bulk sample results would be the primary information used to evaluate further actions. In the absence of reliable wipe sample data to focus the bulk sampling, we would recommend 40 C.F.R. §761 Subpart N be utilized for characterization. Subpart N provides a method for collecting new data for characterizing a PCB remediation waste cleanup site or for assessing the sufficiency of existing site characterization data, as required by §761.61(a)(2).

Navy Response to Pesticides and Toxic Substances Branch Comment No. 3

The inconsistencies that EPA is referring to have been corrected as mentioned in the previous Navy response to comments. The SWMU 11 Recharacterization Work Plan has been revised to include additional wipe and concrete chip samples to further evaluate and delineate the contamination present within Building 38. These additional samples are located in areas where the previous PCB contamination was both less than as well as greater than $10 \text{ ug}/100 \text{ cm}^2$. This will help to determine whether the fire's impact was substantial as requested.

NAVY RESPONSE TO EPA COMMENTS E-MAILED BY VIVIAN CHIN ON JUNE 30, 2003 ON
THE DRAFT RECHARACTERIZATION WORK PLAN FOR SWMU 11
DATED MARCH 18, 2003
NAVAL STATION ROOSEVELT ROADS
CEIBA, PUERTO RICO

EPA Comments

Wall sampling - Among the wipe sampling proposed for the wall, there are no additional wipe sample points planned along the southern side of the building perimeter. We would recommend additional wipes along the south wall where lower level contamination was previously identified to gauge if the fire substantially changed the extent of contamination. As previously recommended, bulk sampling should be done at the most highly contaminated areas to determine PCB contamination within the concrete. Therefore, we would recommend additional bulk sampling at wipe sample points where contamination was greater than or equal to 10 :g/100 cm², such as 11WS120(W), 11WS47(W)/11WS52(W), 11WS29(W). Delineation of contamination greater than or equal to 50 parts per million (ppm) will be necessary to evaluate disposal options.

Floor sampling - Similarly for the floor, delineation of contamination greater than or equal to 50 parts per million (ppm) would be necessary for evaluating disposal options. While the majority of the bulk sampling is proposed in the northwest quadrant of the building where the highest wipe results were encountered, sampling about the two highest hits (i.e., 330,000 :g/100 cm² and 4,700 :g/100 cm²) were not proposed. We recommend an additional bulk sample in this vicinity. Also, contamination greater than or equal to 10 :g/100 cm² is more widespread than this one area where proposed sampling is focused. While there is one outlying sample point proposed (11CC03), we recommend additional bulk sampling extend around this areas where there were numerous wipe results greater than 10 :g/100 cm². We also recommend additional bulk samples in the compressor area where wipe samples showed 96 and 52 :g/100 cm²; in the area surrounding the lavatory where wipe samples are 35, 41 and 24 :g/100 cm²; and in the area south of the furnace where wipe samples are 16, 15 and 21 :g/100 cm².

The plan should reflect that sampling to a depth greater than ½ inch may be necessary to sufficiently delineate the extent of contamination within the concrete. Also note, if cleanup will be done under 40 C.F.R. §761.61(a), delineation to 1 ppm may be necessary.

Navy Response to EPA Comments

Wall Sampling - An additional two wipe samples have been added to the wall sampling program on the southern wall at previous sample locations 11WS82(W) and 11WS110(W). In addition, four concrete chip samples have been added to the sampling program in the areas of previous sample locations 11WS29(W), 11WS47(W), 11WS52(W), and 11WS120(W) to further evaluate and delineate the contamination found within Building 38.

Floor Sampling - Additional concrete chip samples have been added to the floor sampling program from areas where previous wipe results were greater than 10 µg/100 cm², including: 11WS41(F) in the northwest quadrant, 11WS06(F) in the northeast quadrant, 11WS119(F) found in the compressor area, 11WS96(F) found south of the furnace, and 11WS76(F) found in the area surrounding the lavatory.

The work plan has been modified to reflect that additional samples may be required at depths greater than ½ inch. If the field sampling team has an indication that additional samples are required at depths below ½ inch are required than they will be obtained.

NAVY RESPONSE TO EPA COMMENTS E-MAILED BY VIVIAN CHIN ON JULY 8, 2003 ON
THE DRAFT RECHARACTERIZATION WORK PLAN FOR SWMU 11
DATED MARCH 18, 2003
NAVAL STATION ROOSEVELT ROADS
CEIBA, PUERTO RICO

EPA Comments

The additional sampling locations are fine with one exception. In one instance you may have misunderstood where I thought an added sample was needed. You proposed a chip sample at 11WS98(F) I believe in response to my comment requesting a sample south of the furnace where prior wipe results were 16, 15 and 21 ug/100cm². The point 11WS98(F) is actually north of the furnace and very close to another chip sample location 11CC10. If you could please change the proposed sample from 11WS98(F) to a location closer to 11WS90(F), 11WS96(F) or 11WS104(F) then that should be sufficient (barring the need to go deeper than 1/2" as I previously mentioned).

Navy Response to EPA Comments

The two proposed concrete chip sample locations north of the furnace (11CC15 and 11CC16) were proposed by the Navy in the March 18, 2003 Draft Recharacterization Work Plan for SWMU 11. The concrete chip sample that was added due to your June 30, 2003 comment letter was concrete chip sample 11CC18(F) located in the area of 11WS96(F). This chip sample is south of the furnace in the area you requested. Based on your July 8, 2003 comment, the Navy will remove concrete chip sample 11CC15 due to its proximity to 11CC16, and add this sample to the area of 11WS104(F) south of the furnace. The concrete samples will be renumbered to reflect the sample relocation.