



DEPARTMENT OF THE NAVY  
CRANE DIVISION  
NAVAL SURFACE WARFARE CENTER  
CRANE, INDIANA 47522-5000

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IN REPLY REFER TO:

5090/ADM 143  
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**25 AUG 1993**

Naval Facilities Engineering Command  
Attn: Ms. Adrienne Townsel Wilson  
2155 Eagle Drive  
P.O. Box 10068  
Code 185 ND  
Charleston, SC 29411-0068

Dear Ms. Wilson:

Enclosure (1) details the results of the July 27-28, 1993, meeting held at Region V USEPA offices in Chicago to discuss modifying the Crane Division, Naval Surface Warfare Center (NAVSURFWARCENDIV) corrective action schedule in light of recent funding cuts. NAVSURFWARCENDIV hopes to gain funding to continue corrective action activities by accelerating actual cleanup projects.

2. NAVSURFWARCENDIV Crane point of contact is Mr. Thomas J. Brent, Code 09510, telephone 812-854-1132.

LONNIE JACKSON  
Acting Director, Public Works Directorate  
By direction of the Commander

Encl:  
(1) Results of EPA Meeting

Copy to:  
USAE-WES, BILL MURPHY (GG-YH)  
USEPA, CAROL WIT (HRP-8J)

**EPA MEETING OF JULY 27-28 1993  
CORRECTIVE ACTION SCHEDULE MODIFICATIONS**

**1. ATTENDEES**

| NAME              | AGENCY               | TELEPHONE #    |
|-------------------|----------------------|----------------|
| Jim Hunsicker     | NAVSURFWARCENDIV     | (812) 854-3233 |
| Thomas J. Brent   | NAVSURFWARCENDIV     | (812) 854-1132 |
| Christine Freeman | NAVSURFWARCENDIV     | (812) 854-3114 |
| Pedro DeJesus     | NAVSURFWARCENDIV     | (812) 854-1130 |
| Adrienne Wilson   | NAVFACENGCOM<br>SDIV | (803) 743-0582 |
| Dr. James May     | USAE WES             | (601) 634-3395 |
| Bill Murphy       | USCEC WES            | (601) 634-3322 |
| Hak Cho           | USEPA                | (312) 886-0988 |
| Carol Witt-Smith  | USEPA                | (312) 886-6146 |
| Don Heller        | USEPA                | (312) 353-1248 |

**2. PROPOSED BUDGET**

Adrienne Townsel Wilson briefly discussed the current status of the Installation Restoration budget. The emphasis is on remedial action instead of studies. Remedial actions can include treatability and feasibility studies. The current proposed FY94 budget is \$3 million, and the FY95 proposed budget is \$12.5 million for RD/RA (similar to a CMS - includes bench scale studies and designs) but no money for RIs or SIs.

**3. ACTION LEVELS**

In order to determine what remedial actions to take, Bill Murphy had made the point that action levels needed to be clarified. Carol Witt-Smith explained that the approach EPA uses is to assume "Eat the Soil and Drink the Water" for cleanup standards. We should use Background (for metals), MCLs, ACLs, and IRIS Data (health based) when MCLs don't exist for action levels. Basically assume worst case scenario unless you can demonstrate that at the receptor the contaminant concentrations are <MCLs. The proposed new rules will however, give EPA more leeway in setting action and cleanup levels.

#### 4. SITE DISCUSSIONS

Sites were reviewed for current activities and possible remedial actions. Often the goal is to cap the site and/or do an interim removal and, in the case of known groundwater contamination, to set up a groundwater monitoring program. Statistics will determine how often groundwater monitoring must take place. If nothing new shows up then semi-annual, or even annual, samples are appropriate. If a contaminant is found, then quarterly sampling for those parameters is in order.

- a. MGBG - Remediation of the site is not feasible without further study. May be able to tie in an interim removal with the geophysical screening including removal of any surficial debris.
- b. DBG - Some metals were above MCLs in the groundwater. Groundwater flows towards the center of the base (towards Little Sulphur Creek Valley). Proposal is to clear vegetation, level the site, and use a clay cap with a controlled vegetative cover. This should prevent further vertical water movement through the site. A groundwater monitoring program should demonstrate a decrease in contaminant levels. If levels do not decrease, then a slurry wall may be required. Current groundwater monitoring system is adequate.
- c. ABG - Groundwater contaminants include TCE, RDX, and Ba. Soils contain organics, explosives, and metals. Questions were raised concerning the jeep trail. Carol Witt-Smith said the jeep trail area should be treated as a different unit at the ABG. Bill Murphy stated that the primary means of reducing contaminants at the ABG is to improve site management. Source control may reduce spring contaminants. An example of this would be to re-police the stream bed to remove more metallic debris.
  - i. SOILS - Investigate bioremediation of hot spots, particularly for explosives. Incineration was suggested which would require the use of a Temporary Unit under the CAMU rules. Thermal treatment of explosives contaminated soils could potentially cause problems with metals emissions whereas bioremediation can use lime to stabilize metals. May also want to do further removal and/or capping at the old ash pile site. Carol Witt-Smith noted that cleaned soils increases the possibility of obtaining the Subpart X permit and is cheaper than putting down a concrete pad around the burn pans. A discussion ensued as to whether or not the proposed erosion control project counted as remediation. Carol Witt-Smith argued that it did since it minimized contaminant transport.
  - ii. SEDIMENT - Interim cleanup by routine debris removal. Potential sediment removal.

- iii. **GROUNDWATER** - Possibility for setting up a pump and treat system at wells 03C03P2, 03C20, 03C11, and 03C08AP2. These are wells in the Big Clifty Sandstone and Beech Creek Limestone which contains a slow moving pocket of contamination probably near the contaminant source. Pump and treat would require a 4-inch well. May also need an NPDES permit to discharge to Little Sulphur Creek. ReInjection would require a UIC permit.
- iv. **SPRINGS** - Springs A and C are definitely connected to the ABC. Remediation measures for consideration include a trickling filter for the springs and an artificial wetland near the boundary. Wetlands are easy to build, but may pose a problem if you need to remove or clean. Once again, source control is probably the best solution to reducing contamination in the springs.
- v. **JEEP TRAIL** - Well 03-07 has been sampled 11 times from 1989-1992. There are 13 other wells in the jeep trail area with little sample data. Carol Witt-Smith recommended treating this area as a source. Should consider pumping 03-07 and sample the other wells to confirm whether or not contaminants are confined to 03-07. A small pond near 03-07 should be investigated as a possible source of contamination into the well.
- d. **OBP** - Jim Hunsicker recommended clearing vegetation on top of the site, removing the stream face fill material on the north side of the site, contouring the face, placing the removed material on top, and capping. Carol Witt-Smith recommended the use of sediment traps downstream during slope cutting. Further recommendations included paving the truck parking area, which will act as a cap. After capping, monitor groundwater for changes.
- e. **DEMO** - Well near EOD area high in metals indicating an isolated source. Identify and remove source.
- f. **ORR** - Need wells to intercept groundwater across Highway 8. Consider remediating soils around burn pans.
- g. **RKI** - Remove drainageway sediments and/or remediate. Do soils remediation (e.g., soils on berm behind B-2734). Remove sumps which appear to be acting as contaminant sources. Possibly do surface water sampling as part of the CMS. Possibly create a runoff collection system (trench?) and pipe back to carbon treatment plant.
- h. **SLF&LB** - Perform a geophysical investigation to locate the buried lithium batteries, remove the batteries, collect samples from the open trench, and install wells.

- i. B-146 - Potential for doing some removal work in the area of the old ash piles. Possibly cap the site.
- j. PCB-PY - Perform a geophysical investigation to locate the buried lithium batteries, remove the capacitors, and collect samples from the open trench.
- k. H-58 A&B - Interim measures debris removal. Carol Witt-Smith said to inspect the debris material and determine potential for contamination. Could possibly delist the site if no further contamination evident. May want to use a simple cap, especially if we are unable to remove all of the material.
- l. MFA&B - Enough information at MFA concerning thermol boilers and explosives at both sites (e.g., box houses) to attempt some soils remediation.
- m. SDB A&B - Pull the sites using station forces. May want to obtain some soil borings as part of a CMS.
- n. B-38 - Interim measures debris removal.
- o. B-1820 - Need to review as to why this site was listed as a SWMU. Jim Hunsicker felt it might have been due to waste oil tanks, which may already have been pulled. Carol Witt-Smith said to submit as a remediation if the tanks are gone.
- p. LDFM - Due to the application of F006 (which regulatorily remains in a waste stream unless delisted), we have to look for metals contamination. Need to install groundwater monitoring system.
- q. CGC - Site to be closed by permit modification.

##### 5. SITES FOR WHICH INFORMATION LACKING

- a. McG - Information on this site is lacking. The Phase III groundwater work is needed, as is work to delineate the extent of the site since background soil boring 1A came back contaminated.
- b. PCA-R150 - Not enough information. Continue monitoring.
- c. B-106 Pond - No work, studies needed.
- d. L&FA Bldgs - No work, studies needed.

- e. B-225 - No work, studies needed.
- f. R&GA - No work, studies needed.
- g. PTA - No work, studies needed.
- h. CAAA QA/QC - No work, studies needed.
- i. DRMO Lot - No work, studies needed.
- j. Pb-Az - No work, studies needed.
- k. B-126 - No work, studies needed.
- l. B-56 PCP - No work, studies needed.
- m. Tank Farm - No work, studies needed.

## 6. MISCELLANEOUS DISCUSSIONS

- a. CAMU Request - Proposal will tie to agency Class 3 modification. Sites should be grouped primarily based upon location, and then by remedial measures. Agency will initiate modification. Explain why (e.g., geologic benefit to using CAMU concepts, cost effective to do one treatment unit setup, quicker, fewer NPDES permits required, etc.). Note that if the action only involves solid waste, as may be the case with the H-58 dumpsites or Sludge Drying Beds, then a CAMU is not needed.
  
- b. Proposal Submission - NAVSURFWARCENDIV can take the initiative to do certain actions to take advantage of funding. Removals are straight-forward and no approval is needed. Therefore, we simply state what we will do and why. Caps however, require design approval as would bioremediation projects. Carol Witt-Smith pointed out that it is important that we don't make our proposals too tight, especially the timelines. Photos should be taken of the projects. For removals, the site should be gridded and sampled.