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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

REPLY TO THE ATTENTION OF:

JAN 29 1996

CERTIFIED MAIL Z 075 011 028
RETURN RECEIPT REQUESTED

DRP-8J

Mr. G. K. Hill, Deputy Director
Public Works Directorate
Department of the Navy
Naval Surface Warfare Center
300 Highway 361
Crane, Indiana 47522-5001

RE: Specifications and Plans
Bioremediation Facility
Naval Surface Warfare Center
Crane, Indiana
IN5 170 023 498

Dear Mr. Hill:

The United States Environmental Protection Agency (U.S. EPA) has reviewed the Specifications and Plans for the Bioremediation Facility, dated December 4, 1995, revised December 5, 1995 (SOUTH DIV ERAC Contract N62467-93-D-1106, transmittal No. 94-4324-693 and 94-4324-690), and the January 1996 Revision 0 plans. Conceptually we agree with the basic design of the Bioremediation Buildings, for the use in treating Solid Waste or Contaminated Media, with the exception of the items identified in Attachment I (this attachment also includes deficiencies on the other components for operation). If these deficiencies are addressed, final construction plans shall be approved.

The current unit design can strictly be used for composting soils contaminated with hazardous constituents for the purposes of Corrective Action cleanup (i.e., managing the materials as a solid waste). If any cleanup materials exhibit a hazardous characteristic or contain a listed hazardous waste, the unit must be retrofitted, or initially designed, approved and constructed to meet the requirements of one of the following Resource Conservation and Recovery Act (RCRA) regulated units: a containment building; a Subpart X unit; or a Corrective Action Management Unit (CAMU). At this time, the current design needs some modifications to meet the current regulatory standards for permitting as a hazardous waste management unit. Attachment II explains some changes that would be necessary to the design of the unit. It is possible that out of the three bioremediation buildings, one could be modified to handle the hazardous wastes. We would appreciate discussing this aspect with you to determine your long-term operation and compliance for the unit.

It has come to our attention within these plans that the location of the Bioremediation Facility was changed, and after discussions with Morrison Knudsen staff on January 19, 1996, that there may be some changes in your disposal options (i.e., sending treated material to the on-site solid waste landfill to be used as daily cover). Upon this discovery, the current CAMU proposal will need to be revised if the Navy still wishes to move forward with that request. The Agency is reviewing your current CAMU package, and will send you comments under separate cover in the near future.

The Agency requires an operational plan for the pilot-scale test prior to implementation, and must approve the test method before it begins. Please submit the Operational Plan as soon as possible and the revised Bioremediation Construction Plans within 30 days of the date of this letter. We would like to approve the construction with the new revision in order to speed the work towards our goal of initiating the pilot-scale test.

Please notify the Indiana Department of Environmental Management of any changes proposed during construction that may affect your current solid waste landfill permit (i.e., moving leachate/sewer lines and daily cover options). If you have any questions regarding this matter, please contact me at (312) 886-6146.

Sincerely,



Carol Ann Witt-Smith
Corrective Action Expert
RPB, IN Section

cc: Tom Linson, IDEM
Mike Sickels, IDEM
Brian Von Gunten, IDEM BRAC
Jim Hunsicker, NSWC
Tom Brent, NSWC
Adrienne Wilson, SOUTHDIV
Robert Hlavacek, Morrison Knudsen Corp.
Steve Downing, Morrison Knudsen Corp. at NSWC

ATTACHMENT I
BIOREMEDIATION FACILITY DESIGN ISSUES FOR CONTAMINATED MEDIA TREATMENT

1. Fabric Mesh

- a. Submit a manufacturing brochure on the Heavy Duty Shading Fabric.
- b. Describe how the fabric will be attached to the building. Show on the blueprints details of the components to be used.
- c. How will the mesh be anchored on the bottom?

2. Girts

A detail of the girts should be included in the building blueprints.

3. Alternative Materials

Alternative materials are subject to Navy and Agency approval, since certain construction requirements might not be substituted.

4. Fire Safety

OSHA building safety requirements are applicable for providing safety exits, etc. Make sure these regulations are considered in the design and the Operational Plan.

5. Sumps

- a. Sketches SK-1 and SK-2 need to be finalized and included in the final blueprint package.
- b. The sumps are not designed to prevent rain accumulation and backup. Grating is not sufficient. The Navy may consider the following changes to alleviate this problem:
 - 1) Adding a solid cover;
 - 2) Moving the sump inside the building; or
 - 3) Adding a rain barrier or extending the roof over the sump.
- c. The sumps for the "Solid Waste" materials may be constructed of coated concrete instead of having HDPE liners.
- d. A detail of the floor to sump grating connection must be included in the blueprints.

6. Building Floors

- a. There should be a minimum of two (2) cross-sections of the building floor (lengthwise and width).

12. Amendment (i.e. manure, wood chips, alfalfa) Storage Area

- a. Diagram C-001 (December 1995 submittal), dated 10/23/95, shows all amendment storage areas as asphalt. Diagram C-101 (January 1996 submittal), dated 12/6/95, shows the southwest pad as gravel. Which is correct? Make sure all of the final blueprints are consistent.
- b. If a portion of the storage area is gravel near the unloading area, how will trackout and spillage be prevented or minimized? The Operations Plan must address this.
- c. A blueprint detail of the Bin Wall is needed.
- d. A blueprint detail of the Retaining Wall is needed.
- e. The Navy may want to consider a pole roof structure over the Amendments Storage Area, to prevent run-on and limiting the amount of contact water for the storm water discharge permit.

13. Paved Areas

A blueprint detail showing the height of the asphalt curbing is needed.

14. Storm Water (Drainage) Ponds

- a. On drawing No. C-112, the ponds are designed with an HDPE double liner system. But, there is no leak detection monitoring device shown. Will there be one? More details are needed.
- b. Show a detail of the sump/pipe outfall at the Storm Water Ponds.
- c. An alternative design may be used such as coated concrete, if hazardous wastes are not managed in the Storm Water Ponds.
- d. A storm water discharge permit will have to be obtained for the two ponds.

15. Waste Water Treatment Plant (by the Truck Wash)

Is a packaged Waste Water Treatment Plant really necessary if the water is going to an on-site sewer? Wouldn't the main Waste Water Treatment Plant's pretreatment discharge areas have to be assessed with the State instead?

16. Truck Wash

- a. The exact type of washing mechanism should be described and shown on the blueprints or other design detail method.

- g. Emergency Preparedness
 - h. Contingency Plan
 - i. Unloading and Loading, Storage and Handling of Materials
 - j. Layout of the Piles
 - k. Windrow Treatment Operational Plan
 - l. Sampling and Quality Assurance
 - m. NPDES and/or Storm Water Discharge Permits
 - n. Other Permits Required
24. Cleanup Standards for Full-scale Cleanup

If the Contained-In Policy is applied to contaminated media, health-based levels will need to be established as remediation goals for the full-scale project.

4. Operations Plan

An Operational Plan for the pilot scale test, and eventually for the full scale operations, are needed.