



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

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NSWC CRANE
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June 13, 1997

REPLY TO THE ATTENTION OF:
DRP-85

Electronically and Hand Delivered

Mr. Jim Hunsicker, Director
Environmental Protection Department
Department of the Navy
Crane Division
Naval Surface Warfare Center
300 Highway 361
Crane, Indiana 47522-5000

RE: Operational Plan and QAPP
Bioremediation Facility
Naval Surface Warfare Center
Crane, Indiana
IN5 170 023 498

Dear Mr. Hunsicker:

The United States Environmental Protection Agency (U.S. EPA) hereby approves with modifications the final Pilot Scale Operational Plan and the final Quality Assurance Project Plan (QAPP) for the Bioremediation Facility. Enclosed is a final electronic and paper version of each of these documents. The U.S. EPA's modifications strikeout what is no longer applicable, and bolds and/or underlines text that was added. Please be aware that we expect the following from the U.S. Navy:

1. There must be compliance with this specific plan. If changes are anticipated or needed, they must be sent in writing to this office. The Contractor is not given any permission to deviate from the plan without both U.S. EPA and U.S. Navy approval. There are certain areas such as performance criteria in daily monitoring of the windrows that will require the Contractor's judgement. Documentation must support those actions.
2. The U.S. EPA must be notified verbally of the progress of the project on a weekly basis. We are requesting a three day notice prior to clean soil testing, and a two week notice prior to contaminated soil testing. Daily performance monitoring records shall be faxed by the next day.
3. The U.S. EPA Region 5 Office in conjunction with the Region 10 office will be on-site to take split samples on Day 0 of the contaminated soil portion of the test.

4. The U.S. Navy and the U.S. EPA must meet to discuss the clean soil testing results prior to beginning the contaminated soil testing.
5. Any explosive hazard analysis modifications to equipment or the operations must be in place prior to the contaminated soil testing. Any changes in the approved plan in order to allow for explosives safety must be submitted as an amendment request.
6. The U.S. EPA plans to perform a field inspection with record auditing sometime during the pilot scale test. This may be an announced or a surprise inspection.
7. We would encourage good photo documentation and video of the entire process to support the program.
8. The U.S. EPA believes that the yucca plants growing in the higher contaminated soil areas of Mine Fill A may provide some potential future research in phytoremediation technologies. We are asking that the U.S. Navy transplant these plants with some soil still surrounding the roots and maintain them until we can work on a joint effort into this research. We will begin discussing this with our Office of Research and Development in July.

Our Agency is happy to see the finalization and approval of these plans. We hope that the Pilot Scale Test will be a success. If you have any questions regarding this matter, or have any questions during testing, please contact me at (312) 886-6146.

Sincerely,



Carol Witt-Smith
Corrective Action Expert
WMB, IL/IN/MI Section

cc:

Tom Linson, IDEM
John Manley, IDEM
Chris Freeman, NSWC
Captain Carney, NSWC
Commander Smith, NSWC
Don Miller, MK
Dave Beall, MK at NSWC
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ACOE Waterways Experiment Station