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Author(s): Lyle D. Perrigo

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Responsible NRC Individual and NRC Office or Division

G. S. Lewis, Systems Performance Research Branch, SAFER:RES

Prepared by
Battelle Pacific Northwest Laboratories
Battelle Boulevard
Richland, Washington 99352

NRC Research and Technical Assistance Report

Prepared for
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

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DISTRIBUTION
G. Calkins
C. Feldman
R. Emch
L. Barrett
P. Erickson
A. Abriss
T. Johnson
R. Bangart
D. Solberg
G. Lewis

LETTER REPORT

8103060215

Battelle
Pacific Northwest Laboratories
Battelle Boulevard
Richland, Washington 99352
Telephone (509) 376-9024
Telex 32-6345

NRC Research and Technical Assistance Report

February 17, 1981

Mr. G.S. Lewis
Systems Performance Branch
U.S. Nuclear Regulatory Commission
Mail Stop 1130-SS
Washington, D.C. 20555

Dear Mr. Lewis:

DECONTAMINATION AS A PRECURSOR TO DECOMMISSIONING - JANUARY 1981 MONTHLY REPORT

PNL has continued programmatic work on the NRC project entitled "Decontamination as a Precursor to Decommissioning."

- Task 1 - Literature Review and Background Development

  Written or oral comments have been received from all reviewers of the draft of the report entitled Decontamination Processes for Restorative Operation and as a Precursor to Decommissioning: A Literature Review. Most of these comments have been of an editorial nature; revision is not expected to take too much time. Current plans call for the final typing to be completed in mid month and distribution on or before April 1, 1981.

- Task 2 - Process Evaluation

  Additional Pathfinder Reactor samples have been received from Dave Robertson, PNL. Process testing is expected to start in March 1981. Monticello Reactor is expected to have a scheduled outage in May. Samples will be acquired during that outage. We continue to seek additional samples; our search will be guided by the protocol we described in our September 1980 Monthly Report.

- Task 3 - Radwaste Facility Evaluation

  Work not scheduled to start until later in FY-1981.

- Task 4 - Safety and Radiation Exposure

  In January work was started on 1) identifying the number of personnel required for decontamination, 2) estimating the time to accomplish

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implementary tasks and 3) estimating the proximity of operating and cleanup staff to radiation sources for a decontamination. Additional work in these three areas is expected for the next several months so that the effects of decontamination before decommissioning can be thoroughly assessed. To be included in the future will be the impact of radwaste treatment and disposal. Work on the safety factors will be started in the third quarter of FY-1981.

- Task 5 - Cost Considerations

  To start later in FY-1981.

- Task 6 - Evaluation and Reporting

  Overall evaluation work on this project is to start in the third quarter, FY-1981. G.A. Halseth will play an important role in assessing the relevance and overall significance of the various efforts underway in other tasks on this project.

- Task 7 - Project Management

  J.R. Divine, L.G. Faust and Lyle D. Perrigo presented a project status report to the NRC on 1/8/81. Expenses through 1/25/81 were $121,606 out of $375,000 allocated for our work. Attached is a sheet giving specific information on schedules and milestones.

Kindest regards.

Sincerely,

Lyle D. Perrigo

Lyle D. Perrigo, Manager
Technology Transfer Section
Materials Department

LDP:sab

cc: R.L. Dillon, PNL
R.I. Smith, PNL

PNL SCHEDULE & PROGRESS SUMMARY - FY 1981

Task 1 LITERATURE REVIEW AND BACKGROUND DEVELOPMENT

1.1 State-of-Art-Review - scheduled completion for process review August 1980; percent completed 100%.

1.2 Definition of data needs - scheduled completion in FY-1980; percent completed 100%.

1.3 Develop contacts - scheduled completion in FY-1980; percent completed 100%.

1.4 Reporting and evaluation - scheduled completion for process review September 1980; percent completed 90%. Updated reports scheduled for December 1981 and December 1982; neither started.

Task 2 - PROCESS EVALUATION

2.1 Process definition - scheduled completion in FY-1980; percent completed 100%.

2.2 Surface definition - scheduled completion in FY-1980; percent completed 100%.

2.3 Contaminant definition - scheduled to be done as samples are acquired.

2.4 Application development - schedule dependent upont receipt of samples from Dave Robertson.

2.5 Residual effects - scheduled to follow proof of process.

Task 3 - RADWASTE FACILITY EVALUATION

Scheduled to start in October 1980 and be completed in December 1981; percent completed 0%.

Task 4 - SAFETY AND RADIATION EXPOSURE

4.1 Safety - start in April 1981 and complete in December 1981; percent completed 0%; expect completion in March 1982.

4.2 Radiation exposure - start in March 1980 and complete in December 1981; percent completed 10%; expect completion in December 1982.

Task 5 - COST CONSIDERATIONS

Scheduled to start in October 1980 and complete in July 1982; percent completed 0%; now to start in 4th Quarter of FY-1981.

Task 6 - EVALUATION AND REPORTING

Interim report scheduled for 3rd Quarter of FY-1981 and final report due 1981; rescheduled for 2nd Quarter of FY-1982 and September 1982.

Task 7 - PROJECT MANAGEMENT

Ongoing