

SO 963

AUG 17 1983

NE-24

University of Chicago Remedial Action Plan

E. L. Keller, Director
Technical Services Division
Oak Ridge Operations Office

In response to your memorandum dated July 29, 1983, the Field Task Proposal/Agreement (FTP/A) received from Argonne National Laboratory (ANL) appears to be satisfactory, and this office concurs in the use of ANL to provide the decontamination effort as noted in the FTP/A. The final decontamination report should include the data needed for certification of the cleanup and any contamination left in place, e.g., sewer lines should be so documented in the permanent records of the University as well as the certification documents and reports. The remedial action to be conducted appears to be clearly insignificant from an environmental viewpoint; therefore, no further NEPA assessment is needed.

If there are any questions, please call Arthur J. Whitman on FTS 233-5439.

Original signed by
J. E. Baublitz

John E. Baublitz, Director
Division of Remedial Action Projects
Office of Terminal Waste Disposal
and Remedial Action
Office of Nuclear Energy

cc:
E. Jascewsky, CH
R. Wynveen, ANL

bcc:
~~XXXXXXXXXXXXXXXXXXXX~~
~~XXXXXXXXXXXXXXXXXXXX~~
J. Alexander, OR
A. Whitman, NE-24
Aerospace

NE-73 (4)
NE-24 RF
Whitman RF

NE-24: A Whitman: ph: 353-5439: 8/15/83: V-6-A-10: 3.13.6

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8/17/83

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| RTG SYMBOL | |
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| INITIALS/SIG | |
| DeLaney | |
| DATE | |
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Department of Energy
 Oak Ridge Operations
 P.O. Box E
 Oak Ridge, Tennessee 37830

JUL 29 1983

J. E. Baublitz, Director, DRAP, NE-24

UNIVERSITY OF CHICAGO REMEDIAL ACTION PLAN

The attached FTP/A received from Argonne would appear to be the most direct and cost effective approach for the subject work. Accordingly, OR plans to budget the \$300K in Argonne's FY84 financial plan.

Please contact me or Jake Alexander of my staff if you have any suggestions or need additional information on this matter.

E. L. Keller

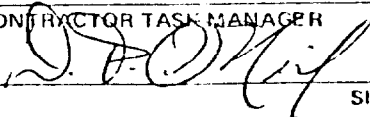
E. L. Keller, Director
 Technical Services Division

CE-53:JKA

Attachment:
 As Stated

Handwritten note:
 Please prepare a letter concerning in 'R' to use ARSL to accomplish this remedial action. The letter provide... the letter... any... left in... do... 1983... Staff... remaining act... on... need.

FIELD TASK PROPOSAL/AGREEMENT

| | | | | | |
|---|--|---|---|--|-------------------------------|
| 1. WORK PACKAGE NUMBER ANL 018 00 84 | 2. TASK NO. | 3. REV. NO. 00 | 4. PROJECT NO. 3P01B | 5. DATE PREPARED July 5, 1983 | 6. CONTRACTOR NUMBER 3P01B |
| 7. TASK TITLE Remedial Action/Decontamination University of Chicago | | | 8. WORK PACKAGE TITLE Remedial Action for Former DOE Contractor Installation MED/AEC Sites (FUSRAP) | | |
| 9. BUDGET & REPORTING CODE AH10-05 | 10. TASK TERM Begin: 10/01/83 End: 09/30/84 | | 11. CONTRACTOR NAME Argonne National Laboratory | | 12. CODE ANL |
| 13. CONTRACTOR TASK MANAGER (Name, FTS No.) O'NEIL, D. P. 972-3315 | | | 14. PRINCIPAL INVESTIGATORS WYNVEEN, Robert A. CHEEVER, C. L. SMITH, Walter H. | | |
| 15. WORK LOCATION: Name of facility, City, State, Zip Code Argonne National Laboratory Argonne, Illinois 60439 | | | 16. IS THIS TASK INCLUDED IN THE INSTITUTIONAL PLAN? <input type="checkbox"/> YES <input checked="" type="checkbox"/> No | 17. DOES THIS TASK INCLUDE ANY MANAGEMENT SERVICES EFFORTS? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO | |
| 18. TASK DESCRIPTION (Approach, relation to work package, in 200 words or less) | | | | | |
| <p>As a part of the DOE's Formerly Utilized Sites Remedial Action Program, MED/AEC sites having above-guideline levels of radioactive material contamination are designated and scheduled for remedial action. Three sites which have been so designated include the Jones Chemical Laboratory, Eckhart Hall and Ryerson Physical Laboratory of the University of Chicago. Radiological surveys performed in these buildings by the Argonne National Laboratory Radiological Survey Group delineated areas where contamination exceeds current criteria. The results of these surveys have been reported in the following reports; DOE/EV-0005/26, DOE/EV-0005/24 and DOE/EV-0005/23.</p> <p>ANL proposes to provide the remedial action service for these facilities during FY '84. Radioactive material contamination will be removed from the three aforementioned structures such that current criteria are met. Restoration will be accomplished as necessary. This effort will be carefully coordinated with the University of Chicago and will be accomplished primarily by the Health Physics and Waste Management Operation groups of ANL. While this proposal is not intended to address any remedial action related to sewer lines, it does provide for the radiological assessment of same.</p> | | | | | |
| 19. CONTRACTOR TASK MANAGER | | | 7/25/83 | | |
|  | | | DATE | | |
| SIGNATURE | | | | | |
| 20. DETAIL ATTACHMENTS: | | | | | |
| <input type="checkbox"/> a. Facility requirements | <input type="checkbox"/> d. Background | <input type="checkbox"/> g. Future accomplishments | <input type="checkbox"/> j. Explanation of milestones | | |
| <input type="checkbox"/> b. Publications | <input type="checkbox"/> e. Approach | <input type="checkbox"/> h. Relationships to other projects | <input type="checkbox"/> k. ZBB detail | | |
| <input type="checkbox"/> c. Purpose | <input type="checkbox"/> f. Technical progress | <input type="checkbox"/> i. Environmental assessment | <input checked="" type="checkbox"/> l. Other (specify). | | |

TASK REQUIREMENTS FOR OPERATIONAL COMMITMENT
OBLIGATIONS AND COSTS

| | | | | | | | |
|--|-------------|----------------|-------------------------------|---------|----------------------------|---------|-------------------|
| CONTRACTOR NAME Argonne National Laboratory | | | | | | | |
| WORK PACKAGE NUMBER ANL 018 00 84 | TASK NO. | REV. NO. 00 | DATE PREPARED July 5, 1983 | | CONTRACTOR NUMBER 3P01B | | |
| 21. STAFFING (in staff years) | PRIOR YEARS | FY 1983 | FY 1984 | | | FY 1985 | |
| | | | PRESIDENT'S | REVISED | AUTHORIZED | | |
| | | | | 1.2 | | | |
| | | | | 0.8 | | | |
| a. SCIENTIFIC | | | | 2.0 | | | |
| b. OTHER DIRECT | | | | | | | |
| c. TOTAL DIRECT | | | | | | | |
| 22. OBLIGATIONS AND COSTS (in thousands) | | | | | | | |
| a. TOTAL OBLIGATIONS | | | | \$300 | | | |
| b. TOTAL COSTS | | | | \$300 | | | |
| 23. EQUIPMENT (in thousands) | | | | | | | |
| a. EQUIPMENT OBLIGATIONS | | | | | | | |
| b. EQUIPMENT COSTS | | | | | | | |
| 24. OTHER COSTS (specify) | | | | | | | |
| a. | | | | | | | |
| b. | | | | | | | |
| c. | | | | | | | |
| d. | | | | | | | |
| 25. OPTIONAL FIVE-YEAR PLAN (in thousands) Constant FY 1985 dollars | | | FY 1986 | FY 1987 | FY 1988 | FY 1989 | TOTAL TO COMPLETE |
| a. TOTAL OPERATING OBLIGATIONS | | | | | | | |
| b. TOTAL OPERATING COSTS | | | | | | | |
| c. TOTAL EQUIPMENT OBLIGATIONS | | | | | | | |
| d. TOTAL EQUIPMENT COSTS | | | | | | | |
| 26. MILESTONE SCHEDULE | | | PROPOSED SCHEDULE | | AUTHORIZED SCHEDULE | | |
| | | | | | | | |

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|--|-------------------------------|----------------------------|-----------------------|
| CONTRACTOR NAME Argonne National Laboratory | CONTRACTOR CODE ANL | CONTRACTOR NUMBER 3P01B | |
| WORK PACKAGE NUMBER ANL 018 00 84 | DATE PREPARED July 5, 1983 | TASK NUMBER | REVISION NUMBER 00 |

20 DETAIL ATTACHMENTS

- | | | | |
|---|---|---|---|
| <input type="checkbox"/> a. Facility Requirements | <input checked="" type="checkbox"/> d. Background | <input type="checkbox"/> g. Future accomplishments | <input type="checkbox"/> j. Explanation of milestones |
| <input type="checkbox"/> b. Publications | <input checked="" type="checkbox"/> e. Approach | <input type="checkbox"/> h. Relationships to other projects | <input type="checkbox"/> k. Zbb detail |
| <input checked="" type="checkbox"/> c. Purpose | <input type="checkbox"/> f. Technical progress | <input type="checkbox"/> i. Environmental assessment | <input type="checkbox"/> l. Other (specify): |

PURPOSE, BACKGROUND AND APPROACH

In an effort to assist the Department of Energy's Formerly Utilized Sites Remedial Action Program in accomplishing its remedial action efforts for the University of Chicago facilities that have been designated for such action, ANL proposes to conduct the necessary decontamination and related restoration efforts so as to return the structures to the condition of unrestricted release. This activity will be scheduled for FY '84 and will be coordinated with the University in such a manner as to minimize interference with ongoing University operations.

The ANL Health Physics Radiological Survey Group performed a radiological assessment of University of Chicago facilities during the latter part of the 1970's. This activity revealed that four structures utilized during MED/AEC days contain several small areas of radioactive material contamination that exceed current criteria for accepted unrestricted use. The specific structures of concern include the following; Kent Chemical Laboratory, Ryerson Physical Laboratory, George Herbert Jones Chemical Laboratory and Eckhart Hall. As a part of a major renovation project, the University has conducted decontamination of Kent Hall. A survey for certification purposes was conducted by ANL. The other three structures remain for decontamination with some necessary followup restoration since sections of floors and walls will require defacing or removal during the decontamination effort. The University of Chicago desires to have these remaining structures decontaminated in a timely manner but with minimal interference to University activities. Additionally, some renovation of these facilities has been planned.

Since ANL has gained considerable familiarity with the structures during the radiological characterization activities and since ANL is in close proximity to the University of Chicago, the further required remedial action could be accomplished in a most cost effective and quality manner by ANL with minimization of interference to the University of Chicago classes and ongoing activities. ANL's Waste Management Operations and Health Physics Groups have years of experience at ANL in decontamination/remedial action activities. In addition, these groups have been most successfully involved in the management and execution of the D&D activities for the old New Brunswick Laboratory in New Brunswick, New Jersey. Thus, a proven track record of capability exists. ANL has support groups such as the Engineering Division which can be called upon for assistance if and when necessary. Subcontractor work for any necessary restoration required as a result of the decontamination effort would be coordinated with the University so as to assure the use of an approved subcontractor.

Standard proven decontamination techniques commonly utilized at ANL will be

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| WORK PACKAGE NUMBER ANL 018 00 84 | DATE PREPARED July 5, 1983 | TASK NUMBER | REVISION NUMBER 00 |

20. DETAIL ATTACHMENTS

- | | | | |
|--|---|---|---|
| <input type="checkbox"/> a. Facility Description | <input checked="" type="checkbox"/> d. Background | <input type="checkbox"/> g. Future commitments | <input type="checkbox"/> j. Exploration of milestones |
| <input type="checkbox"/> b. Publications | <input checked="" type="checkbox"/> e. Approach | <input type="checkbox"/> h. Relationships to other projects | <input type="checkbox"/> k. Z&S detail |
| <input checked="" type="checkbox"/> c. Purpose | <input type="checkbox"/> f. Technical progress | <input type="checkbox"/> i. Environmental assessment | <input type="checkbox"/> l. Other (specify): |

PURPOSE, BACKGROUND AND APPROACH (Continued)

applied. This will include the use of specialized cleaners and actual removal of surface material by brushing, scabbling, sawing, etc., as necessary. ANL's Waste Management Operations group has provided reclamation services for some thirty years. Standard ANL Health and Safety procedures will be followed.

In order to accommodate the University's request for minimum disruption of ongoing activities, ANL will utilize a flexible work schedule such that weekends and holiday periods as well as class breaks will be utilized for certain work activities. In view of ANL's proximity to the University, it is possible to maintain this flexibility while satisfying cost-effectiveness parameters. Existing manpower would be utilized for other activities at ANL when not required at the University.

It is expected that decontamination activities would be initiated during the month of December 1983, starting with Eckhart Hall. This facility should be completed by February 1, 1984. Work on the Ryerson Physical Laboratory will be expected to begin in February 1984 with completion by April 1984. Jones Chemical Laboratory will be the final structure scheduled for decontamination. This structure will present the major challenge since there is a rather large area of cement floor in the attic which requires decontamination. A substantial amount of equipment will have to be moved during the progress of the decontamination effort. All decontamination effort is expected to be finished by the end of September 1984. Documentation for the remedial action effort will be patterned after that developed by ANL for the D&D of New Brunswick Laboratory in New Jersey. A final decontamination activities report with radiological survey data will be provided. Prior to initiation of the onsite work effort, a brief decontamination plan will be made available. Criteria and guidelines to be applied in assuring satisfactory cleanup will include those commonly applied in the past such as Draft ANSI N13.12. "Radiological Guidelines for Application to DOE's Formerly Utilized Sites Remedial Action Program," ORO-831, will certainly serve as a major document for this purpose.

It is expected that approximately 600 ft³ of low-level radioactive waste will be generated during the decontamination effort. All radioactive waste will be placed in approved M-3 bins or 55 gallon containers for shipment and disposal. The waste will be handled either through the routine ANL and/or University of Chicago radioactive waste handling stream. Again, cost-effectiveness, as well as waste disposal site acceptance criteria will be major considerations. Due to the relatively low volume of radioactive waste to be generated as well as its low radioactivity content, both waste streams remain as viable options. Non-radioactive waste will be disposed of through the normal landfill disposal process. Again, the volume of such waste is expected to be rather small.

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| WORK PACKAGE NUMBER ANL 018 00 84 | DATE PREPARED July 5, 1983 | TASK NUMBER | REVISION NUMBER 00 |

00 DETAIL ATTACHMENTS

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|---|---|---|--|
| <input type="checkbox"/> a. Facility Requirements | <input checked="" type="checkbox"/> d. Background | <input type="checkbox"/> g. Future accomplishments | <input checked="" type="checkbox"/> j. Explanation of milestones |
| <input type="checkbox"/> b. Publications | <input checked="" type="checkbox"/> e. Approach | <input type="checkbox"/> h. Relationships to other projects | <input type="checkbox"/> k. Zbb detail |
| <input checked="" type="checkbox"/> c. Purpose | <input type="checkbox"/> f. Technical progress | <input checked="" type="checkbox"/> i. Environmental assessment | <input type="checkbox"/> l. Other (specify): |

PURPOSE, BACKGROUND AND APPROACH (Continued)

As a part of this decontamination activity, radiological assessment of the facilities' sewer systems will be accomplished. No sewer line excavation will, however, be conducted without further direction.

ENVIRONMENTAL ASSESSMENT

Through the use of standard health and safety practices, it can be stated that there will be no significant adverse environmental impact resulting from the conduct of these activities. In fact, the local working environment will be improved upon completion of the activity. A small amount of low-level waste will be generated for shallow land burial.

EXPLANATION OF MILESTONES

| | |
|---|-------------------|
| Completion of Decontamination Plan | December 15, 1983 |
| Initiation of Action at Eckhart Hall | December 1983 |
| Completion of Action at Eckhart Hall | February 1984 |
| Initiation of Action at Ryerson Physical Laboratory | February 1984 |
| Completion of Action at Ryerson Physical Laboratory | April 1984 |
| Initiation of Action at Jones Chemical Laboratory | April 1984 |
| Completion of Action at Jones Chemical Laboratory | August 1984 |
| Completion of Draft Decontamination Report | September 1984 |

The above tentative milestone schedule is dependent upon early notification of funding and is subject to the coordination effort which is to take place with the University of Chicago. Monthly activities reports will be provided to the program office to assure communication of program status.