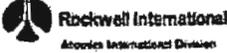


B724 + 723 pad

|  SUPPORTING DOCUMENT | | NUMBER N704ACR990021 | REV LTR/CHG NO. SEE SUMMARY OF CHG | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|-----------|--|---------------------------------------|------|---------------|------|---------------|------|---------------|------|-------------------|------|---------------|------|---------------|------|---------------|------|------------|------|-------------|------|-----------------|------|-----------------|------|--------------|------|--------------|------|-----------------|------|---|--|--|
| PROGRAM TITLE DECONTAMINATION & DISPOSITION OF FACILITIES PROGRAM | | DOCUMENT TYPE Activity Requirements | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| DOCUMENT TITLE SRE Activity Requirement No. 25. Decontamination & Dismantling of Building 724 and Pad 723 | | KEY NOUNS Building 724 and 723 D&D | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PREPARED BY/DATE B. F. Ureda B. Ureda 2-16-77 | | DEPT 713 | MAIL ADDR NB02 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| IR&D PROGRAM? YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> IF YES, ENTER TPA NO. _____ | | GO NO. 7704 | S/A NO. 30100 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| APPROVALS W.F. Heine W.F. Heine 2-16-77 A.W. Graves A.W. Graves 2-16-77 B.F. Ureda B.F. Ureda 2-16-77 | | SECURITY CLASSIFICATION (CHECK ONE BOX ONLY) ERDA DOD (CHECK ONE BOX ONLY) UNCL <input type="checkbox"/> <input type="checkbox"/> RESTRICTED DATA <input type="checkbox"/> CONF. <input type="checkbox"/> <input type="checkbox"/> DEFENSE INFO. <input type="checkbox"/> SECRET <input type="checkbox"/> <input type="checkbox"/> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| DISTRIBUTION | | ABSTRACT | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <table border="1"> <thead> <tr> <th>* NAME</th> <th>MAIL ADDR</th> </tr> </thead> <tbody> <tr><td>* E.G. Andrews</td><td>KB45</td></tr> <tr><td>* A.W. Graves</td><td>NB02</td></tr> <tr><td>* J.M. Harris</td><td>T020</td></tr> <tr><td>* C.R. Johler</td><td>LA38</td></tr> <tr><td>* W.F. Heine (10)</td><td>NB02</td></tr> <tr><td>* W. McCurnin</td><td>T020</td></tr> <tr><td>* M.E. Remley</td><td>NB08</td></tr> <tr><td>* R.J. Tuttle</td><td>NB13</td></tr> <tr><td>* B. Ureda</td><td>NB02</td></tr> <tr><td>* J. Walter</td><td>T009</td></tr> <tr><td>* R. G. Brengle</td><td>T143</td></tr> <tr><td>* E. C. Babcock</td><td>T020</td></tr> <tr><td>* J. P. Page</td><td>T009</td></tr> <tr><td>* R. K. Owen</td><td>T143</td></tr> <tr><td>* S. Cunha, Jr.</td><td>T040</td></tr> </tbody> </table> | * NAME | MAIL ADDR | * E.G. Andrews | KB45 | * A.W. Graves | NB02 | * J.M. Harris | T020 | * C.R. Johler | LA38 | * W.F. Heine (10) | NB02 | * W. McCurnin | T020 | * M.E. Remley | NB08 | * R.J. Tuttle | NB13 | * B. Ureda | NB02 | * J. Walter | T009 | * R. G. Brengle | T143 | * E. C. Babcock | T020 | * J. P. Page | T009 | * R. K. Owen | T143 | * S. Cunha, Jr. | T040 | <p>Building 724 and the sodium component cleaning Pad 723 will be decontaminated or removed so the area can be released for unrestricted use. The structures associated with Building 724 will be razed. The structures consist of a steel building 10 x 22 x 12 ft an oil heater, a drain sump and an oil storage pit. Facility 723 is a 25 x 28 ft concrete pad. Contaminated concrete will be removed, packaged and shipped to burial.</p> | | |
| * NAME | MAIL ADDR | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| * E.G. Andrews | KB45 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| * W. McCurnin | T020 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| * M.E. Remley | NB08 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| * R.J. Tuttle | NB13 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| * B. Ureda | NB02 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| * E. C. Babcock | T020 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| * J. P. Page | T009 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| * R. K. Owen | T143 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| * S. Cunha, Jr. | T040 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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1. OBJECTIVE

The objective of these Activity Requirements is to generally define the Facilities 724 and 723 removal sequence and to delineate the applicable documents, rules and regulations for safety dismantling and disposing of the radioactive components and materials.

2. FACILITY DESCRIPTION

Facilities 724 and 723 are located in the extreme east portion of the SRE complex about 250 ft northeast of Building 003. Facility 723 is a 25 x 28 ft concrete pad once used for steam cleaning sodium components. Facility 724 includes a 10 x 22 x 12 ft high steel enclosure in which radioactive sodium components were cleaned in an oil bath. A concrete pit that contains the oil heater and contained an oil supply tank is just to the south of the steel enclosure. A concrete sump designed to hold effluent from the facility is located to the west of the enclosure. The steel enclosure has a monorail crane that extends 222 ft beyond the enclosure entrance. The enclosure is vented through duct work, an air filter, and an exhaust stack. The interior of the facility is contaminated and is posted as a radiation area.

3. APPLICABLE DOCUMENTS

- | | |
|---|------------------|
| 3.1 SRE Dismantling Plan | FDP-704-990-003 |
| 3.2 Operational Safety Plan | SRR-704-990-001 |
| 3.3 Quality Assurance Plan | PP-704-990-001 |
| 3.4 D&D Program Plan | PP-704-990-002 |
| 3.5 D&D Training Plan | N704-TNR-990-001 |
| D&D Document Status Report (Configuration Summary) | N704-CS-990-001 |
| 3.6 Radiological Survey Records | |
| 3.7 Facility Drawings | |
| Facility Oil Cleaning Site Plan | 303-724-C1 |
| Contaminated Sodium Cleaning Electrical Plan | 303-724-E6 |

| | |
|---------------------------------------|------------|
| Sodium Oil Cleaning Exhaust Fan Plan: | 303-724-M1 |
| Sodium Oil Cleaning Plot Plan | 303-724-E5 |
| Sodium Oil Cleaning Concrete Plan | 303-724-S2 |
| Sodium Oil Cleaning Steel Plan | 303-724-S3 |

4. WORK SCOPE

Before beginning any dismantling or decontamination activities, a radiological survey of the 724 and 723 facilities will be conducted and documented by Health, Safety, and Radiation Services Department. Survey results will establish specific needs for safety techniques to be used during the D&D activities. All personnel directly associated with the D&D will be made aware of the 724 and 723 facilities installation, their operating history, and its present radiological status.

Cleaning pad 723 apparently is not contaminated. However a survey of the pad will be made. The steam generator located at the edge of the pad will be removed and sent to the salvage yard.

The sodium oil cleaning facility 224, will be decontaminated to radiation levels as low as reasonably achievable but below those of Table 1.

Table 1
Contamination Limits for Decontamination and Disposition

| | Total | Removable |
|---------------------|--|-----------------------------|
| Beta Gamma Emitters | 0.1 mrad/h at 1 cm with 7 mg/cm ² absorber | 100 dpm/100 cm ² |
| Alpha Emitters | 100 dpm/100 cm ² | 20 dpm/100 cm ² |

The exhaust system: duct work, filters, blowers and stack will be dismantled, surveyed for contamination, disposed of as salvage or as radioactive waste. The steel enclosure will be decontaminated. The dismantling and disposal of the structure will be by a salvage contractor. The steel floor of the enclosure will be removed and the concrete pad, the trench and the drain sump will be surveyed for radiation. If contamination is present the concrete will be removed, packaged and shipped to burial. The oil heating furnace will be removed and sent to salvage. The oil heat exchanger and the oil system piping may be contaminated and will be disposed of as salvage or as radioactive waste. The oil supply pit will be surveyed for contamination, and if contaminated, it will be removed.

The oil drums, oil tank, pipe, and other debris will be removed from the site. The water, gas, and electrical supply systems need not be removed from the site.

5. PROCEDURES

Detailed Work Procedures will be prepared, describing facility preparations, radiological and other safety requirements, personnel indoctrinations or training requirements, tools, equipment and materials, detailed dismantling steps, cleanup, and waste disposal. Hoisting and rigging procedures will be written to conform to the requirements of the Operational Safety Manual, Section V.W.1, "Hoisting and Rigging."

The Detailed Working Procedures (DWP) will contain the following statement: "A single designated working copy of the DWP may be changed in red ink (red lines) by the authorized Development and Test representative as procedural changes dictate. A Health and Safety representative must approve and sign those changes affecting health or safety; the Program Office Project Manager must approve and sign those changes affecting the scope of task, i.e., cost or schedule; and Quality Assurance must approve and sign those changes affecting quality. At the completion of the task covered by the DWP, the marked-up working copy will be incorporated into the DWP as an appendix, reviewed by Quality Assurance, and rereleased through Engineering Data for vault storage."

6. OPERATIONS

6.1 ORGANIZATION

The work will be directed and performed by the Remote Technology Unit 731-540. Support, as needed, will be provided by Industrial Engineering who will coordinate all contractor activities. HSRS will provide Health Physic coverages specified in the Operational Safety Plan. The fire department will provide support as needed and issue permits whenever burning is necessary. The D&D Program Office will monitor progress of the work, arrange for photography, interface with Purchasing and Industrial Engineering for outside services, and assist in resolution of problems.

6.2 RECORDS

A daily log of the progress is to be kept. A work copy of the procedure is to be available at the site and upon completion of blocks of work, the procedures are to be dated and initialed. HSRS will keep records of all radiological surveys and any unusual activities. RMDF personnel will record the quantities of radioactive waste boxed and shipped.

6.3 WASTE HANDLING

Radioactive waste will be transferred to the RMDF as soon as boxes are filled. Boxes and other containers will be provided in advance of need.

7. SCHEDULE

This phase of the SRE dismantling will begin December 1, 1977, and be completed before March 1, 1978