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DOE/OR/21548-136

ADDENDUM TO ENGINEERING EVALUATION/COST ANALYSIS FOR THE PROPOSED MANAGEMENT OF 15 NONPROCESS BUILDINGS (15 SERIES) AT THE WELDON SPRING SITE CHEMICAL PLANT, WELDON SPRING, MISSOURI

by

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Environmental Assessment and Information Sciences Division

August 1990

work supported by

U.S. DEPARTMENT OF ENERGY
Oak Ridge Operations Office
Weldon Spring Site Remedial Action Project
Weldon Spring, Missouri

INTRODUCTION

An engineering evaluation/cost analysis (EE/CA) report was prepared in May 1989 to analyze alternatives for a proposed removal action to manage 15 nonprocess buildings, designated as the 15 Series buildings, at the chemical plant area of the Weldon Spring site (MacDonell and Peterson 1989). The alternative selected as a result of the analyses was to dismantle the buildings and to salvage or transport off-site for treatment or disposal all nonradioactively contaminated materials and to store on-site in a material staging area (MSA) all radioactively contaminated materials, pending a decision for disposal of all wastes resulting from remediation of the Weldon Spring site. Region VII of the U.S. Environmental Protection Agency (EPA) and the state of Missouri concurred with the selection of this alternative and provided comments on the EE/CA report. The proposed removal action was not initiated at that time due to funding constraints. This addendum has been prepared to (1) update information provided in the EE/CA report, (2) provide additional information on the MSA, and (3) respond to EPA Region VII and state of Missouri comments on the EE/CA. This addendum supports the close-out of the CERCLA review process for this action.

The 15 Series buildings addressed in the EE/CA report are Buildings 104, 302, 412, 413, 415, 417, 428, 433, 435, 436, 437, 438, 439, 441, and 443 (see MacDonell and Peterson 1989, Figure 2, for the locations of these buildings). Although none of these buildings was used for the direct processing of radioactive materials, some became radioactively contaminated during the operational period of the chemical plant or following plant closure. During the operational period, contamination may have occurred as a result of (1) routine plant operations (e.g., tracking of contaminants from process areas and temporary relocation of contaminated equipment for repair), (2) processing support activities (e.g., waste handling), and (3) surficial deposition of airborne particulates. Following plant closure, contamination may have occurred as a result of (1) relocation of some contaminated equipment from process buildings into nonprocess buildings during cleanup activities and (2) transport of contaminated materials by environmental factors (e.g., wind) and local biota (e.g., wasps that built nests with contaminated mud).

A general description of the 15 Series buildings is given in Table 1 of this addendum. Several corrections have been made in this table regarding the building dimensions given in the EE/CA report. An inventory of the contents of these buildings is currently being prepared. This information is being included in the Waste Inventory Tracking System (WITS). This data base, which will be continually updated as the project proceeds, provides a systematic mechanism for managing the contents of these buildings. The information given in the WITS data base and two characterization reports (MK-Ferguson Company and Jacobs Engineering Group 1990a, 1990b) provide a thorough description of the contamination associated with these buildings. This information is sufficient to thoroughly plan and implement the proposed removal action.

TABLE 1 General Description of the 15 Series Buildings

Building	Structure[a]	Past Use	Equipment Content
104	29-ft × 18-ft × 13-ft metal base with concrete floor; 10-ft diameter, 30-ft steel hopper; upper 15-ft × 15-ft × 20-ft prefabricated steel shed	Store and distribute lime as slurry for raffinate neutralization	Pump, motor, metal bin, and electrical/mechanical instruments
302	One-story structure with a 28-ft × 49-ft × 30-ft process area, 82-ft × 74-ft × 10-ft warehouse, 12-ft × 12-ft × 12-ft battery charging area, and 8-ft × 6-ft × 12-ft restroom; concrete floor and concrete block construction with steel frame and flat, built-up roof	Pelletize and store drums that contained magnesium chips and process and repackage the magnesium	Process hopper, magnetic separator beams and columns, sampler drums, carbon plates, iron cartridges, cabinets, lighting and heating equipment (e.g., water heater and steam pipes), and restroom fixtures
412	50-ft × 23-ft × 13-ft structure with concrete floor, concrete block construction with steel frame and built-up roof on poured concrete deck; contains small office and meter room	Electric substation to transform incoming power for distribution to secondary substations at the plant	Valves, pumps, motors, wooden boxes, and a fire hose

TABLE 1 (Cont'd)

Building	Structure[a]	Past Use	Equipment Content
413	30-ft × 90-ft × 22-ft redwood cooling tower; 90-ft × 40-ft × 5-ft concrete collection basin, a 92-ft × 3-ft flume on the west side, and an adjacent 29-ft × 50-ft × 24-ft steel frame building with corrugated asbestos siding and concrete floor	Recirculate cooling water and house pumping/chemical treatment facilities	Water treatment equipment, steam heaters, gauges, valves, pumps, motors, an exhaust fan, and a fire hose
415	6-ft × 10-ft × 7-ft brick incinerator supported by a steel frame	Incinerate process wastes	None
417	67-ft × 32-ft one-story steel frame and concrete block structure with concrete floor and flat, poured gypsum concrete roof deck; three sections: general work area, spray painting booth, and flammable material storage area	Maintain and store equipment, conduct spray-painting operations, and store flammable materials and paint cans	Cabinets, lockers, work benches, tables, chairs, barrel stands, steam heaters, and a fire hose
428	24-ft × 14-ft × 16-ft structure with corrugated transite siding	Supply fuel gas (propane-air mixture) to various buildings for process heat	Electric pumps, compressors, and condensors

TABLE 1 (Cont'd)

Building	Structure[a]	Past Use	Equipment Content
433	40-ft × 182-ft × 24-ft one-story steel beam frame with prefabricated sheet metal panels and a concrete slab floor; attached 13-ft × 14-ft × 11-ft concrete structure	Store maintenance vehicles and smaller mechanical equipment	Tractors, forklifts, trucks, automotive parts, scaffolding, bricks, barrels, scales, work benches, shelves, hardware and plumbing supplies, hoses, buckets, tools, and small machine parts
435	150-ft × 40-ft × 20-ft Butler building with prefabricated sheet metal panels and concrete floor	Store water-treatment chemicals and miscellaneous mechanical parts	Cabinets, work benches, tables, shelves, pallets, space heater, fume hoods, ovens, map stand, and various pieces of furniture and electrical, sampling and safety equipment
436	200-ft × 40-ft × 23-ft Butler building with steel frame and prefabricated panels and concrete floor; small restroom and enclosed office at south end	Store general items	Freezers, motors and machine parts, lab fixtures, pipe fittings, crates of cast metal, bins of firebrick, ladders, and various pieces of furniture
437	70-ft × 33-ft × 15-ft one-story brick structure with concrete foundation and floor and flat, built-up roof; seven rooms	Store documents (originally an ordnance works building)	Furnace, file cabinets, boxes of rock core, broken furniture, and other debris

TABLE 1 (Cont'd)

Building	Structure[a]	Past Use	Equipment Content
438	102-ft × 40-ft × 16-ft structure, with 300-ft^2 × 10-ft office, steel beam frame construction with prefabricated steel panels and concrete foundation and floor	Store general items (originally a construction-support building)	Process hoppers, electrical equipment, boxed insulation, file cabinets, office furniture, and scale models of chemical plant buildings
439	14-ft × 14-ft × 15-ft steel beam frame structure with metal panels and a concrete floor	Train employees in safety and fire protection (classroom setting)	Various debris, including charred wood and tires
441	20-ft × 60-ft × 20-ft structure with steel support columns, corrugated aluminum roof, concrete floor, and 8-ft × 60-ft ramp to the loading dock	Store cylinders of compressed gas prior to their transport off-site	Fencing and steel/cinder-block cylinder racks
443	24-ft × 15-ft × 8-ft one-story wooden shed with shingled roof and wooden floor on a concrete slab	Store fire-protection equipment	Wood-burning stove and three desks

[a]Conversion factors: to convert feet (ft) to meters (m), multiply by 0.3048; to convert square feet (ft^2) to square meters (m^2), multiply by 0.0929.

DESCRIPTION OF THE PROPOSED ACTION

The alternative selected in the EE/CA report was to dismantle the 15 nonprocess buildings and to salvage or transport off-site for treatment or disposal all nonradioactively contaminated materials and to store on-site in the MSA all radioactively contaminated materials. This action is being modified to include temporary storage on-site of all nonsalvageable or contaminated materials associated with dismantling these buildings; most of these materials will be stored in the MSA. The materials will be sorted into potentially releasable and nonreleasable materials at the MSA. (Releasable materials are those that can be managed or utilized without restrictions due to radioactive or chemical contamination.) This will allow for efficient characterization to be performed prior to a decision on their ultimate disposition. The only materials that will be transported off-site as a part of this action are uncontaminated salvageable materials. This action includes the following sequence of activities:

- Manual decontamination of all radioactively contaminated surfaces (e.g., by aggressively vacuuming/wiping equipment exteriors and building interiors/exteriors), with containment and storage on-site of all radioactively contaminated materials at the MSA;

- Removal of all materials contaminated with polychlorinated biphenyls (PCBs) (e.g., using a solvent wipe procedure), with temporary storage in Building 434 along with the site's containerized chemicals, pending subsequent transport off-site of all nonradioactively contaminated materials to an approved treatment/disposal facility and containment and continued storage on-site of any radioactively contaminated materials;

- Isolation of all asbestos-containing materials (e.g., in plastic bags), with containment and storage on-site;

- Follow-on decontamination of structural surfaces, as appropriate, to remove radioactive contamination;

- Dismantlement of all structures, with further decontamination of previously inaccessible surfaces during dismantlement;

- Removal of underground storage and septic tanks;

- Placement of all nonsalvageable or contaminated materials in the MSA; and

- Transport off-site of all uncontaminated salvageable materials.

The proposed activities are similar to those previously conducted at the chemical plant for dismantlement of the steam plant and administration buildings (Buildings 401 and 409, respectively). These buildings were dismantled in accordance with all applicable

or relevant and appropriate requirements and procedures. Likewise, the 15 Series buildings will be dismantled in accordance with all such requirements and procedures. Dust-control measures, such as wetting and covering surfaces, will be employed to minimize particulate emissions during all activities associated with dismantlement. Air in the work area will be monitored for asbestos and radioactive particulates as part of a comprehensive detection and mitigation system. Asbestos- and PCB-handling activities will comply with safe practices and regulatory requirements. This compliance will ensure the protection of workers on-site and will limit the potential for contaminant releases off-site. In addition, the proposed dismantlement will preclude the adverse impacts on human health and the environment that could result from further building deterioration.

Airborne gross alpha activity was measured in the work area during dismantlement of Buildings 401 and 409 as well as during removal of overhead piping. The measured concentration was generally less than 1×10^{-13} μCi/mL, whereas the derived air concentration (DAC) for controlling radiation exposures to workers at DOE facilities is 2×10^{-11} μCi/mL for uranium isotopes. This demonstrates the effectiveness of procedures used to control airborne emissions. Similar controls will be used for the 15 Series buildings.

The 15 Series buildings will be dismantled following cleanup of the removable contamination from building surfaces. All activities and results associated with the radiological characterization, decontamination, and dismantlement of the buildings will be subjected to independent verification. In addition to reviewing sampling procedures and results, the independent verification contractor (Oak Ridge Associated Universities) will visit the site both during and after the dismantling effort to ensure that all activities are conducted in a safe and effective manner.

At-grade or below-grade materials that remain following building dismantlement will either be decontaminated and removed or left in place pending future decisions for remediation of the chemical plant area. In general, the floors of the buildings that are radioactively contaminated contain (1) loose dust deposits, which could be removed by aggressive vacuuming and/or (2) limited, fixed contamination, which could be removed by scarifying (measured radioactivity is at background levels within 2 cm [1 in.] of the surface [MK-Ferguson Company and Jacobs Engineering Group 1989]). Materials that remain in place will be surface-sealed or otherwise protected, as necessary, to limit the potential for any contaminant release to, or exposure to contaminants from, the local environment.

Four of the 15 Series buildings (i.e., Buildings 435, 436, 437 and 438) are located within the area that will be used to construct the temporary storage area (TSA) to support the quarry bulk waste remedial action (see Argonne National Laboratory 1990, Figure 8.8). These buildings and their foundations will be removed to allow construction of the TSA. In addition, drawings have recently been discovered indicating the presence of several underground storage and septic tanks in this area. The existence and location of all tanks in the chemical plant area have not been verified. The proposed action is being expanded to include removal of underground tanks in the chemical plant area along with removal of the foundations of the four buildings.

A work plan will be prepared to define the procedures used to remove the underground storage tanks. This plan will include the locations and descriptions of all known tanks and describe the approach that will be used to characterize and excavate the tanks. The soil near suspected tank locations will be excavated to expose any buried tanks; soil in contact with the tanks will be sampled for contamination. This will allow for a visual inspection of the tanks and preparation of detailed sampling plans for the tank contents. The contents of the tanks will be removed, containerized, and transferred to Building 434 for temporary storage. The tanks themselves will then be removed, rendered inert, and transferred to the MSA for temporary storage. Any remaining contaminated soil will be remediated, if required, in the future when other contaminated soil at the chemical plant area is remediated.

The tanks will be removed in compliance with EPA technical requirements for management of underground storage tanks (40 CFR 280). All plans for removing the tanks will be sent to EPA Region VII and the state of Missouri for review and comment prior to initiating tank removal activities.

DESCRIPTION OF THE MATERIAL STAGING AREA

The MSA will be located in the northern portion of the chemical plant area (see MacDonell and Peterson 1989, Figure 2). This area has been studied extensively and has been determined to be relatively free of hazardous contaminants. A characterization report for this area is currently being prepared. Design criteria for the MSA have been developed to ensure the safe storage of waste materials associated with response actions at the chemical plant area prior to their final disposal. As originally envisioned, the MSA would be designed to store materials potentially subject to the Solid Waste Disposal Act, as amended (commonly referred to as the Resource Conservation and Recovery Act [RCRA]). However, based on updated characterization data and waste management planning, no RCRA wastes will be stored at the MSA. Thus, design criteria for the MSA have been modified such that a RCRA-type liner is not required.

The MSA will consist of three sections: one for known contaminated materials, one for known uncontaminated materials, and one for materials that must be analyzed further to determine if they are contaminated. Materials to be stored in the MSA include structural metal, equipment, concrete rubble, debris, and possibly soil. As currently envisioned, the MSA will be constructed in three phases, with the first phase initiated in 1990. The first portion of the MSA will be used for storage of materials associated with this action. The second and third phases of the MSA will be constructed in the future, if needed, to provide additional storage capacity for dismantlement of the remaining chemical plant buildings. The MSA is being designed to store a total of 72,800 m^3 (95,160 yd^3) of materials. However, the total volume of materials associated with this action is only a small fraction of the total design capacity.

The MSA will be designed to safely store these materials pending a decision on their ultimate disposition. A foundation will be prepared to ensure the structural stability of the MSA. The foundation must be able to support the wastes, cover

materials, and any equipment used on the MSA. The MSA will be underlain by recompacted fine-grained soil to minimize the migration of contaminants into the nearby environment during the active life of the facility. The recompacted soil will cover all surrounding areas that could come into contact with contaminated materials and will be located above the seasonal high water table.

The MSA will be designed to minimize infiltration and encourage runoff. A runoff collection system will be installed immediately above the recompacted soil to collect and remove water from the MSA. Any collected water would be stored in a tank or surface impoundment prior to discharge or treatment in the water treatment plant planned for the chemical plant area, as appropriate. Any direct discharge would be through an existing permitted outfall; the existing permit would be amended, as required. A dike will be constructed around the active portion of the MSA to serve as both a surface water runon/runoff control system and a retaining wall. The dike will be designed to prevent surface water flow onto the active portion of the MSA resulting from a 25-year storm. Any materials subject to wind dispersal will be covered while in storage at the MSA.

The design of the MSA will be finalized during the detailed engineering phase. The MSA design will incorporate comments from EPA Region VII and the state of Missouri and will be constructed in compliance with all pertinent requirements.

COMMENT LETTERS FROM U.S. ENVIRONMENTAL PROTECTION AGENCY REGION VII AND MISSOURI DEPARTMENT OF NATURAL RESOURCES AND RESPONSES TO COMMENTS

Comments on the EE/CA report were received from EPA Region VII (June 16, 1989) and the state of Missouri (June 30, 1989). Both organizations agreed on the need for conducting this action but requested additional information on the procedures to be used to implement it. Some of the information requested by EPA has recently been published, e.g., building-specific characterization data are provided in MK-Ferguson Company and Jacobs Engineering Group (1990a, 1990b) and design criteria for the MSA are currently being developed. A copy of the comment letters and responses to specific comments are provided on the following pages.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION VII
726 MINNESOTA AVENUE
KANSAS CITY, KANSAS 66101

JUN 16 1989

Mr. Rodney R. Nelson
U.S. Department of Energy
Weldon Spring Site Remedial
Action Project
Route 2, Highway 94, South
St. Charles, Missouri 63303

Dear Mr. Nelson:

The Environmental Protection Agency (EPA) has reviewed the Engineering Evaluation/Cost Analysis for the Proposed Management of 15 Nonprocess Buildings (15 Series) at the Weldon Spring Site Chemical Plant dated May 1989. We are in agreement with the Department of Energy on the need for the proposed action; however, the following comments should be considered prior to implementation of the proposed action and/or in the development of plans for future interim response actions.

1. The subject document allows for general comment on the advisability of the proposed action; however, the document does not allow for a complete evaluation of whether the work will be performed effectively and in compliance with applicable guidelines.

EPA-1 A work plan should be developed that will reference building-specific monitoring data, and identify specific actions planned for each building. The work plan should describe the sequence of proposed activities so as to minimize cross-contamination where possible (e.g., radioactive contamination of asbestos that could result from improper sequencing). Reasonable planning may reduce the amount of mixed waste generated by the cleanup activities.

The description of the proposed action does not include any procedures to be followed, but only an assurance that the action will conform to requirements. However, no specific commitment is

Response to EPA-1. The EE/CA report for the proposed management of the 15 Series buildings describes alternative strategies for managing these buildings, the anticipated environmental impacts associated with the alternatives, and the rationale for selection of the preferred alternative. The report documents the selection of the alternative and provides justification necessary for proceeding with the proposed removal action. This action will be performed consistent with DOE Orders for protection of workers, the general public, and the environment. These Orders have been developed to ensure compliance with all pertinent federal regulations.

As for previous building dismantlement activities, detailed work plans will be prepared for all phases of this action. These work plans will define the procedures to be used to dismantle the 15 Series buildings, including requirements for monitoring, worker protection, and management of contaminated and uncontaminated materials. Details on the various buildings and their existing levels of contamination are provided in supporting radiological and chemical characterization reports (MK-Ferguson Company and Jacobs Engineering Group 1990a, 1990b). An inventory of the contents of these buildings is included in the WITS data base. On the basis of these data and information currently being collected for the buildings and structures at the site, work plans can be prepared with sufficient detail to estimate the effort required and prepare for unanticipated occurrences.

The general sequence of activities to be followed was provided on page 21 of the EE/CA report; specific actions will be developed for each building based on the physical characteristics of the structure and the type of contamination present. Every attempt will be made to avoid cross contamination by separately and sequentially decontaminating radioactively contaminated surfaces, removing all PCB-contaminated materials, and isolating and removing all asbestos-containing materials. If necessary, follow-on decontamination of structural surfaces will be performed to remove radioactive contamination. The activities will be performed in a manner to minimize the amount of mixed waste that may be generated.

The DOE has developed health and safety plans for the Weldon Spring project to ensure the health and safety of on-site personnel during the performance of response action activities. The plans include safety standards that must be met by all personnel and subcontractors. Key elements of these plans are the use of appropriate protective equipment and safeguards and the performance of specific tasks under the supervision of trained technicians and safety specialists. The DOE has also prepared an emergency response plan and a spill prevention control and countermeasures plan to specify procedures to be followed if accidents or emergencies do occur. These and other related plans provide a sound basis for conducting this action.

All reports associated with this action — including the EE/CA, this addendum, the characterization reports, and the work plans — will be available for EPA Region VII and state of Missouri review. In addition, all documents related to this action will be available for public review in the public reading room at the Weldon Spring site and the nearby information repositories.

made to conform with any specific requirements. The last paragraph on page 21 references dismantlement activities being conducted at the steam plant, Building 401. If applicable, the specific procedures and criteria controlling that work should be provided or referenced. If applicable procedures do not exist, they should be developed. The sequencing of cleanup activities, the criteria for cleanup, and the procedures to be used are essential elements to a complete estimate of the impact (occupational and environmental) and costs of the proposed action.

EPA-1 The proposed action does not identify contingency plans for use if contamination levels significantly in excess of the anticipated levels are encountered.

It is our understanding that the detailed work plan, containing the elements described above, will be developed by the selected subcontractor. We would appreciate the opportunity to review the plan prior to implementation of the proposed action.

Furthermore, we believe that in order to satisfy the public participation requirements of the EE/CA documentation process, the detailed work plan, as well as the subject document, should be made available for public comment prior to implementation of the work plan.

2. The intent of the document, in accordance with the EE/CA process, is to present and analyze alternatives to accomplish stated objectives. However, comparison of the stated alternatives does not appear to facilitate selection of a response action since there is no fundamental difference between the two alternatives (timing is the only difference). It appears that the criteria by which the alternatives are assessed are biased and implicitly favor the selection of the "preferred" alternative. In EPA-2 fact, the document is simply a statement of the proposed action (Alternative 1). In this case, we suggest that it would have been better to recognize upfront that due to the nature of the proposed action, certain aspects of the generic EE/CA documentation process cannot be logically applied. We believe that the needs to stabilize the site and allow for efficient performance of overall remedial actions are sufficient justifications for expedited dismantlement.

3. Four of the buildings to be addressed (No. 417, 433, 435, and 436) either show above background levels of external EPA-3 radiation, or lie close to other buildings or open areas that show such levels (see Figure 16, RI/FS Work Plan). It is not clear why it would not be appropriate to include these four

Response to EPA-2. The DOE agrees that there is sufficient justification for expediting dismantlement of the 15 Series buildings based on the need to stabilize the site and allow for efficient performance of overall remedial actions. The alternative of delaying the implementation of this action was included for completeness. Future EE/CAs of a similar nature will focus on the basic need for expediting the action (e.g., protect worker safety, improve environmental conditions, reduce or eliminate off-site releases, and stabilize portions of the site). Development and analysis of alternatives will not be emphasized in instances where it is not necessary to do so.

Response to EPA-3. All of the buildings addressed in the EE/CA are radioactively contaminated. An overview of the characterization activities conducted to date, and the results of the characterization activities for each building, are provided in the radiological and chemical characterization reports (MK-Ferguson Company and Jacobs Engineering Group 1990a, 1990b). These reports provide a good summary of the radioactive and chemical contamination associated with the buildings at the chemical plant.

The levels of radioactive contamination in Buildings 417, 433, 435, and 436 are generally low (although higher than the other 15 Series buildings); the levels in nearby soils are also low. The grouping of buildings for this evaluation was only partially based on contamination levels. Other parameters considered include physical location, estimated cost for dismantling, and building type.

EPA-3 buildings in subsequent cleanup activities, as they appear to be more logically grouped with more contaminated buildings. Specific contamination data regarding these buildings were not provided. Such data may indicate a clear difference in contamination levels between these four buildings and the buildings not included in this plan.

EPA-4 The following should be added to Table A.2:

Requirement	Citation
Radiation Protection Guidance to Federal Agencies for Occupational Exposure	52 FR 2822

Content	Relationship to Proposed Action
Provides recommended limits and methods of calculations for occupational exposure to radiation for federal agency workers	Augments previous guidance on occupational exposures

Sincerely yours,

Michael J. Sanderson
Chief, Superfund Branch
Waste Management Division

cc: David Bedan, MDNR

Response to EPA-4. Radiation protection requirements for occupationally exposed workers are provided in DOE Order 5480.11. The limits and methods for calculating occupational doses given in this Order are consistent with the cited guidance. In fact, this guidance is referenced in DOE Order 5480.11. Since all actions at the Weldon Spring site are conducted in compliance with DOE Orders, compliance with the requirements given in this guidance is implicit.

JOHN ASHCROFT
Governor

G. TRACY MEHAN III
Director

STATE OF MISSOURI
DEPARTMENT OF NATURAL RESOURCES

P.O. Box 176
Jefferson City, MO 65102

Division of Energy
Division of Environmental Quality
Division of Geology and Land Survey
Division of Management Services
Division of Parks, Recreation, and Historic Preservation

June 30, 1989

Mr. Rodney R. Nelson
Project Manager
U.S. Department of Energy
Weldon Spring Remedial
Action Project
Route 2, Highway 94 South
St. Charles, Missouri 63303

Dear Mr. Nelson:

The Missouri Department of Natural Resources (MDNR) has reviewed the Engineering Evaluation/Cost Analysis for the Proposed Management of 15 Nonprocess Buildings (15 series) at the Weldon Spring Site Chemical Plant, Weldon Spring, Missouri (DOE/OR/21548-071), May 1989. The MDNR agrees that the proposed action is needed.

However, the MDNR concurs with the comments made by the U.S. Environmental Protection Agency in the letter of June 16, 1989, to you from Mr. Michael Sanderson. I also reiterate the MDNR policy that all waste (including asbestos) from the Weldon Spring Site that is disposed of in a Missouri sanitary or demolition landfill must be considered to be a special waste. Therefore, such disposal would require approval from MDNR's Waste Management Program.

MDNR-1

Sincerely yours,

DIVISION OF ENVIRONMENTAL QUALITY

David E. Bedan

David E. Bedan
Radioactive Waste Cleanup Coordinator

cc: Mr. Ron Kucera, MDNR
Mr. William Ford, MDNR
Mr. Nick Di Pasquale, MDNR
Mr. Randy Raymond, MDNR
Mr. Don Maddox, MDNR
Mr. Dan Wall, U.S. EPA, Region VII

DEB/cjj

Response to MDNR-1. A disposal facility for uncontaminated wastes resulting from this action has not yet been identified. However, the DOE will comply with this requirement if wastes are disposed of in a Missouri sanitary or demolition landfill.

REFERENCES

Argonne National Laboratory, 1990, *Feasibility Study for Management of the Bulk Wastes at the Weldon Spring Quarry, Weldon Spring, Missouri*, DOE/OR/21548-104, prepared by Environmental Assessment and Information Sciences Division, Argonne, Ill., for U.S. Department of Energy, Oak Ridge Operations Office, Weldon Spring Site Remedial Action Project, Weldon Spring, Mo., Feb.

MacDonell, M.M., and J.M. Peterson, 1989, *Engineering Evaluation/Cost Analysis for the Proposed Management of 15 Nonprocess Buildings (15 Series) at the Weldon Spring Site Chemical Plant, Weldon Spring, Missouri*, DOE/OR/21548-071, prepared for U.S. Department of Energy, Oak Ridge Operations Office, Weldon Spring Site Remedial Action Project, Weldon Spring, Mo., May.

MK-Ferguson Company and Jacobs Engineering Group, Inc., 1989, *Radiological Sampling and Measurement Results for the Non-Process Related Buildings and Equipment*, prepared for U.S. Department of Energy, Oak Ridge Operations Office, Weldon Spring Site Remedial Action Project, Weldon Spring, Mo., May.

MK-Ferguson Company and Jacobs Engineering Group, 1990a, *Buildings Radiological Characterization Report*, DOE/OR/21548-120, prepared for U.S. Department of Energy, Oak Ridge Operations Office, Weldon Spring Site Remedial Action Project, Weldon Spring, Mo., April.

MK-Ferguson Company and Jacobs Engineering Group, 1990b, *Asbestos and Chemical Characterization Report for Non-Process Related Buildings and Equipment*, DOE/OR/21548-070, Rev. E, prepared for U.S. Department of Energy, Oak Ridge Operations Office, Weldon Spring Site Remedial Action Project, Weldon Spring, Mo., April.