

CORRES. CONTROL
INCOMING LTR NO.

United States Government

Department of Energy

Rocky Flats Field Office

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RFETS-CC

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Memorandum

DUE DATE

ACTION

AUG 27 1999

AMEI:ERWM:JCM:03465

Finding of No Significant Impact for Temporary Storage of Transuranic and Transuranic Mixed Waste

David Shelton, Vice President
Environmental Systems & Stewardship
Kaiser-Hill Corporation, L.L.C.

This memorandum transmits to your office the approved Finding of No Significant Impact for the Temporary Storage of Transuranic and Transuranic Mixed Waste Environmental Assessment, EA-1303.

Should you have any questions, please contact me at extension 5918 or John Morris of my staff at extension 7198.

Joseph A. Legare
Assistant Manager
for Environment and Infrastructure

Attachment

- cc w/Att:
- C. Borgstrom, EH-42, HQ
- R. Tyler, ERWM, RFFO
- L. O'Mary, ERWM, RFFO
- R. DiSalvo, OCC, RFFO
- S. Nesta, K-H
- T. Rehder, EPA
- S. Tarlton, CDPHE
- Administrative Record



DIST.	LTR	ENC
BENSUSSEN, S.J.		
BOGENBERGER, V.		
BRAILSFORD, M.D.		
CARD, R.G.	X	X
COSGROVE, M.M.		
COX, C.M.		
CRAWFORD, A.C.		
DEJONG, V.J.		
DERBY, S.		
DIETERLE, S.E.		
FERRERA, D.W.		
FERRERA, K.P.		
FULTON, J.C.		
GERMAIN, A.L.		
HARDING, W.A.		
HARROUN, W.P.		
HEDAHL, T.G.		
LEONARD, R.C.		
LEWIS, M.R.		
MARTINEZ, L.A.		
NORTH, K.		
PARKER, A.M.		
PHILLIPS, F.J.		
POLSTON, S.		
RODGERS, A.D.		
SANDLIN, N.B.		
SHELTON, D.C.	X	X
SPEARS, M.		
TUOR, N.R.		
VOORHEIS, G.M.		
WARTHER, R.F.		
<i>Nesta, S.</i>	X	X

COR. CONTROL	X	X
ADMN. RECORD	X	X
PATS/T130G		

Reviewed for Addressee
Corres. Control RFP

8/30/99
Date By *[Signature]*

Ref Ltr. #

DOE ORDER # *None*

1/6

ADMIN RECCRD

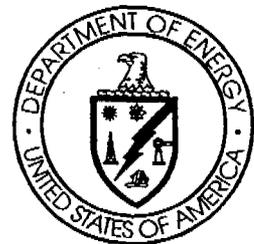
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IA-A-000222

DOE/EA - 1303

FINDING OF NO SIGNIFICANT IMPACT

Temporary Storage of Transuranic and Transuranic Mixed Waste

U.S. Department of Energy
Rocky Flats Field Office
Golden, Colorado



August 1999

U. S. DEPARTMENT OF ENERGY

FINDING OF NO SIGNIFICANT IMPACT

TEMPORARY STORAGE OF TRANSURANIC AND TRANSURANIC MIXED WASTE
ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE

SUMMARY: The Department of Energy (DOE) has prepared an environmental assessment (EA) (DOE/EA-1303) to evaluate the proposed development of additional on-site storage capacity for transuranic (TRU) and transuranic mixed (TRM) waste at the Rocky Flats Environmental Technology Site (Site). The purpose of the action is to provide for the continued safe storage of RFETS TRU/TRM wastes in the event that shipments of these wastes to WIPP for disposal cannot be made on a schedule that supports Site closure objectives.

The EA describes and analyzes the environmental effects of several alternatives for the proposed action, including refurbishing existing buildings, construction of a new storage facility, storage in existing tents, and the no action alternative. The EA was the subject of a public comment period from June 9 to July 23, 1999. Written comments regarding the EA were received from the American Federation of Government Employees, AFL-CIO, Local 1103; the Rocky Flats Citizens Advisory Board; the Rocky Flats Coalition of Local Governments; the City of Westminster; and the City of Broomfield.

PROPOSED ACTION: The proposed action is to provide additional storage capacity for up to 15,000 cubic meters (57,600 drums) of TRU/TRM by refurbishing one or more existing buildings. This alternative provides the most effective strategy for providing storage because it allows for selective addition of storage capacity as needs are identified. Buildings 444, 460, 551, 865, 883, and 906 have been identified as candidates for TRU/TRM storage refurbishment. Building modifications would be required before TRU/TRM waste storage could be allowed; the scope of the necessary actions would depend on the design and existing condition of each building. Activities which could be required as part of the proposed action could include general cleanup (e.g., removal of furniture and equipment), architectural modifications (e.g., remove or install walls/partitions, install berms and/or shielding, improve access, modify utilities), and equipment modifications and upgrades (e.g., fire protection, ventilation, security and safeguards). These activities would occur primarily in building interiors.

ALTERNATIVES CONSIDERED:

As alternatives to the proposed action, DOE considered TRU/TRM storage in a new facility built specifically for this purpose and storage in existing tents at RFETS.

The new facility alternative would involve construction of up to two new 100,000 square foot buildings, at a site between existing Buildings 131 and 460 that was previously designated for construction of a Corrective Action Management Unit (CAMU). Depending on TRU/TRM waste shipment and generation rates, only one of the two modules may be required; however, in order to bound the impacts of this alternative, the EA analyzed impacts of construction and

operation of both. Infrastructure improvements would also be made to the existing Trailer 124A to provide administrative offices for operation of the new facility. Each module would be nominally 200 feet wide by 500 feet long and about 32 feet high at the roof peak. Modules would be of steel-support/steel wall design with concrete slab-on-grade foundations designed to accommodate loads associated with waste drums stacked 5 high.

Under the second of these alternatives, existing tents would be utilized to provide some of the required additional TRU/TRM waste storage in a configuration similar to that in which Tents 2 and 12 at 750 Pad are being developed for storage of pipe overpack containers (POCs). A maximum of nine existing tents (with a potential maximum storage capacity of about 50,000 DE) on the 750 (Tents 3, 4, 5, and 6) and 904 Pad (Tents 7, 8, 9, 10, and 11) Waste Storage Facilities in the Industrial Area were examined for TRU/TRM waste storage. As with refurbishment of buildings, the scope of the necessary actions at existing tents would depend on the design and current condition of each tent; these activities would be similar to those listed for the proposed action.

DOE also considered a No Action Alternative, under which DOE would develop no additional TRU/TRM waste storage capacity at RFETS beyond existing storage now in use. Existing storage includes the following:

- Continued use of existing storage buildings (A total of 32 buildings at the Site are used and/or permitted for TRU and/or TRM storage; most of the TRU/TRM wastes have been stored in Buildings 371, 440, 664, 707, 771, 776, 777, 779, 991, and 998.), and
- Recent storage upgrades at Building 440 and Tents 2 and 12 at Pad 750.

Based on the current Site TRU/TRM waste inventory and estimates of TRU/TRM waste generation from Site closure activities, available RFETS storage would be exhausted by mid-2000. After this time, if shipments to WIPP cannot be made on a schedule consistent with RFETS closure activities, the Site would be unable to continue activities that generate TRU/TRM wastes, including those associated with plutonium stabilization and Site closure. With this restriction, work towards most closure actions at the Site (e.g., building demolition, cleanup of contaminated sites) would be halted or severely curtailed.

DOE dismissed four alternatives without detailed evaluation in the EA: off-site storage, alternative sites for the new facility, hardened-building design for the new facility, and refurbishing alternative buildings. These alternatives were dismissed for the following reasons. First, only facilities at other DOE sites are available for off-site storage of TRU/TRM, and DOE, in its Record of Decision for the Waste Management Programmatic EIS, decided to treat and store TRU/TRM at RFETS. Second, a site study was conducted to evaluate alternative locations for the potential new facility; no other sites were found which have the same favorable characteristics as the site considered in the EA. Third, DOE determined that costs to construct a hardened facility could be up to an order of magnitude (e.g., at least ten times) higher than the alternatives considered in the EA and would provide only marginal additional health and safety advantages. Fourth, some buildings previously considered in the 1996 Waste Storage EA are either no longer available or their refurbishment costs and operational difficulties are too high.

ENVIRONMENTAL EFFECTS: Activities associated with the proposed action would occur primarily in building interiors, no adverse impacts on the natural environment are expected. Chemical and radiological human health impacts from on-site waste transportation and storage operations are expected to be very small; doses from activities associated with the proposed action are estimated to result in less than one latent cancer fatality (LCF) in either the worker population or the public. Similarly, accidents are estimated to result in less than one LCF over the duration of the proposed action. Minor visual and socioeconomic impacts could occur if waste shipments to WIPP cannot be completed prior to site closure and the storage building(s) remain after the balance of the Site has been shut down. Minority populations are not expected to receive a disproportionate share of the impacts.

Operational impacts of the new waste storage building alternative are expected to be essentially the same as those for the proposed action. Additional small, short term impacts on land use, geology and soils, water resources, air quality, and noise would occur as a result of building construction; however, because of mitigation methods applied and the limited construction time period, these impacts are expected to be insignificant.

With the potential exception of human health impacts from operations, impacts of the tent storage alternative are expected to be essentially the same as those for the proposed action. Depending on the specific facility design adopted, the tents may offer less containment of material escaping from stored drums than steel fabricated buildings. However, the drums themselves are categorized as zero-emissions, and the likelihood of significant releases to the building (or tent) atmosphere is expected to be remote. Even considering their fabric wall construction, estimated human health impacts of the tent storage alternative yielded a predicted LCF of less than 1.

Under the No Action Alternative, potential environmental effects to air quality, human health and safety, water resources, and cultural resources would be minor. The No Action Alternative would not modify the current environmental baseline at RFETS, and impacts of ongoing cleanup operations would remain small. However, this alternative would limit future uses of portions of the Site, and impede progress toward achieving the Site's mission of cleanup and closure.

Overall, the impacts of the proposed action and the alternatives on air quality, human health and safety, traffic, and environmental justice would be minimal. The cumulative impacts of any of the alternatives, taken together with impacts of other ongoing and reasonably foreseeable future actions, are expected to be minor.

**FOR FURTHER INFORMATION
ABOUT THIS ACTION, CONTACT:**

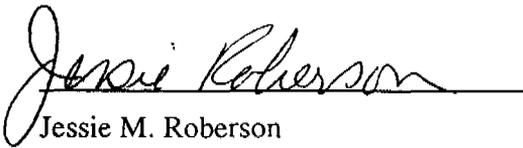
David Maxwell
U. S. Department of Energy
Rocky Flats Field Office
10808 Highway 93, Unit A
Golden, CO 80403-8200
Telephone: (303) 966-4107

**FOR COPIES OF THE EA,
CONTACT:**

John Morris
NEPA Compliance Officer
U. S. Department of Energy
Rocky Flats Field Office
10808 Highway 93, Unit A
Golden, CO 80403-8200
Telephone: (303) 966-7198

DETERMINATION: Based on the information and analyses in the EA, DOE has determined that the proposed action and alternatives to develop additional on-site temporary storage capacity for TRU/TRM waste at the Rocky Flats Environmental Technology Site does not constitute a major Federal action significantly affecting the quality of the human environment within the meaning of the National Environmental Policy Act of 1969, as amended. Therefore, an environmental impact statement is not required, and DOE is issuing this Finding of No Significant Impact for the proposed action.

Signed at Golden, Colorado, this 27 day of August, 1999.



Jessie M. Roberson
Rocky Flats Field Office
U. S. Department of Energy