

RF 1912

EG&G ROCKY FLATS

| | | |
|---------------|---|---|
| DIST. | | |
| OFF. FH | | |
| ZKE J.C. | | |
| LINGAME, A.H. | | |
| UCHER, D.W. | | |
| S. J.G. | | |
| RED, J.E. | | |
| RERA, D.W. | | |
| RERA, K.P. | | |
| RIS, L.R. | | |
| KOP, F.J. | | |
| NCIS, G.F. | | |
| DWIN, R. | | |
| LY, T.J. | | |
| ER, E.H. | | |
| S, J.P. | | |
| SH, J.M. | | |
| Y, W.A. | | |
| EBB, J.A. | | |
| E.M. | | |
| ESTIC, J.P. | | |
| ANIFI, M.G. | | |
| RENS, B.E. | | |
| TROSS, R.W. | | |
| GAN, R.V. | X | |
| TH, P. | | |
| VER, L.A. | | |
| NELL, B.F. | | |
| TER, G.I. | X | |
| LITO, V.M. | | |
| ADES, J.I. | X | |
| FELL, B.F. | | |
| YNON, W.M. | | |
| NSON, E.R. | | |
| BE, J.S. | | |
| KINSON, R.B. | | |
| SON, J.M. | | |
| NG, E.R. | | |
| E, J.O. | | |
| CK, L.T.O. | X | |
| CO, CD | X | X |
| SM, G.D. | X | |
| rch, J. | X | |
| eller, J.H. | X | |
| all, L.L. | X | |
| RES CONTROL | X | X |
| FFIC | | |
| M Tracking | X | X |

EG&G ROCKY FLATS, INC.
ROCKY FLATS PLANT, P.O. BOX 464, GOLDEN, COLORADO 80402-0464 • (303) 966-7000

April 12, 1991



91-RF-1912
18505

000017240

Robert M. Nelson, Jr.
Manager
DOE, RFO

Attn: R. J. Schassburger

NEPA ENVIRONMENTAL CHECKLISTS (ECs) AND EC REVIEW FORMS

Attached is an environmental checklist for a project in Building 889, Re-initiating Beryllium and LLMW Operations. This proposed project would allow low-level wastes (LLW) contaminated with beryllium or with uranium and minute amounts of plutonium to be handled and baled in Building 889. The NCC has recommended an Action Description Memorandum (ADM) be prepared, and NEPA Division has begun work on the ADM.

Building 889 is currently undergoing some minor modifications to allow the building to resume operations for baling and crushing LLW contaminated with depleted uranium and/or hazardous constituents. This current work consists of completing ventilation upgrades that were begun in prior years, and originally reviewed by the NCC in 1989 (Process Uranium-Building 889). The work was suspended due to funding problems, and reviewed by the NCC in a second EC, #395920 (HVAC Renovation, Building 889), when the plant was ready to continue the job. The NCC agreed with the original recommendation that no further NEPA documentation was required. While the specific work involved completing the ventilation system in the building, it was understood the improved ventilation will allow crushing and baling operations to resume on the uranium-contaminated LLW and mixed LLW. As the work proceeded, a ventilation hood to enhance worker protection and a charcoal filter to improve environmental control of emissions have been identified as required, but the additions do not appear to affect the NCC recommendation. The current project and the proposed action described in the attached EC are separate single actions (1508.25(a)), in that the current project will proceed independently of any decision on whether to pursue the action proposed in the attached EC.

CLASSIFICATION:
SECRET
CONFIDENTIAL
SECRET

J. M. Kersh
J. M. Kersh, Associate General Manager
Environmental Restoration & Waste Management

AUTHORIZED CLASSIFIER
SIGNATURE
[Signature]
DATE
4/12/91

CDR:bmb
Orig. and 1 cc - R. M. Nelson, Jr.

REPLY TO UNIT NO.
[Signature]

Attachments:
As Stated

APPROVALS
J.O.F. *[Signature]*
E.E. *[Signature]*
SIGNATURE & TYPE INITIALS

REVIEWED FOR CLASSIFICATION/UCNI
BY G. J. Usdiek *870*
DATE 4-17-95

EG&G ROCKY FLATS
NEPA COMPLIANCE COMMITTEE
ENVIRONMENTAL CHECKLIST REVIEW FOR

Project/Activity EC Date: February 1, 1991

Project/Activity Name : Re-initiate Building 889 Beryllium and LLMW Operations

Authorization or EJO #: EC-052-91 Project PA: J.M. Mueller

Initiating Line Manager : M.A. Martinez

NEPA Compliance Committee Review (Sign & date applicable space):

| | No ADM or Further Nepa Documentation Required | ADM Required |
|--------------------|--|----------------------------|
| NEPA : | _____ | <u>[Signature]</u> 3/31/91 |
| Fac. Proj. Mgmt. : | _____ | <u>[Signature]</u> 3/17/91 |
| Legal Department : | _____ | <u>[Signature]</u> |
| Fac. Safety Eng. : | _____ | <u>[Signature]</u> 3/13/91 |

Comments:

This activity will re-initiate beryllium and all other non-PSZ generated low-level mixed waste operations in the 889 Building. This will involve equipment upgrades, rearrangement of equipment, and minor ventilation and building modifications.

| | | |
|--|------------|-----------|
| CEQ Section 1506.1(c) Review: | <u>Yes</u> | <u>No</u> |
| 1. Project justified independently | X | |
| 2. Project will prejudice program decision | | X |

10 CFR 1022 Review (wetlands issue) needed: X

NCC Recommendation: No ADM or further NEPA documentation.

ADM required.

NEPA Mgr. Approval/Date: Stephen M. Rust 3/20/91

Copies to: Project Administrator/Initiating Line Manager
NCC Committee Chairman
DOE-RFO

REVIEWED FOR CLASSIFICATION/UCHI
BY G. T. Ostdiek
DATE 4-24-95

OK For PUBLIC Release
"REVIEWED FOR CLASSIFICATION"
By [Signature]
Date 3/14/91 2/6

ROCKY FLATS PLANT

NATIONAL ENVIRONMENTAL POLICY ACT DOCUMENTATION

ENVIRONMENTAL CHECKLIST

1. Date: 02/01/91
2. Activity/Project Name: Re-Initiate Bldg. 889 Beryllium and other LLMW Operations
3. Authorization or EJO #: TBD
4. Project PA: J. M. Mueller
5. Initiating Line Manager: M. A. Martinez

6. Project/Activity Description (Include justification, location with figures and maps if appropriate, schedule, cost, etc. Use additional pages if necessary):

The purpose of this activity is to re-initiate Beryllium and all other non-psz generated Low Level Mixed Waste (LLMW) operations in the 889 Building on or before February 1994, as reflected on the long range plan and schedule, see enclosure (sheet 3 of 3, Beryllium and LLMW schedule). The necessary equipment upgrades, rearrangement of equipment, and minor ventilation and/or building modifications required to meet safety requirements for Beryllium and other LLMW contaminants and for improved operational efficiency are being evaluated within two Scope and Estimates #395920 and #411040. It is expected that the results of these two scope and estimates will support Rocky Flats decision to request the necessary funding to bring 889 Bldg. into full compliance as a Class B Ventilation controlled facility. At this time a new and separate EJO will be submitted for request of funding and the development of the necessary construction package.

The primary reasons for re-initiating this work are to: a) abide by prior agreements to perform waste minimization on all waste streams; b) prolong allocated storage space capacities by compacting wastes currently in storage; c) maintain compliance with all laws by staying within authorized storage limits; d) support all other non-psz buildings by performing waste volume minimization processes on their waste streams in an effort to either re-initiate and/or maintain their operations; and e) minimize costs by using fewer waste drums/crates.

889 Building operations are administered and controlled by the following documents: Code of Federal Regulations, i.e. applicable sections of 10 and 40 CFR, DOE Order 5400.1 General Environmental Protection Program and DOE Order 5820.2A Management of Waste, E.G.&G. Rocky Flats Policy Manual, Radioactive Waste Packaging Requirements WO-4034, Radioactive Waste Packaging Outside Protected Area WO-1101, Health and Safety Practices Manual, 889 Building Mission Statement, 889 Building Operational Safety Analysis (OSA) and Operating Procedures pertaining to specific operations within 889 Building.

889 Building is set up, controlled and operated as a Low Hazard Facility to perform the following four basic functions: 1) performing LLW and LLMW waste minimization on material currently being stored in drums and crates, i.e. compaction by either baling or crushing; 2) decontaminating, dismantling, and packaging of oversized equipment or components, i.e. could include building strip-outs, building modifications, etc., 3) re-packaging of damaged waste containers and/or the re-packing of drums/crates which have failed RTR analysis, and 4) maintaining permitted RCRA storage areas within 889 Building, rooms 106 and 112.

ROCKY FLATS PLANT
NATIONAL ENVIRONMENTAL POLICY ACT NEPA DOCUMENTATION
ENVIRONMENTAL CHECKLIST (CONTINUED)

Currently, the 889 Building is only capable of processing LLW (depleted Uranium). The singular safety concern identified as a prerequisite for processing LLMW (depleted Uranium mixed waste - only) is addressed in the earlier Environmental Checklist document. The necessary safety requirements needed to process Beryllium and all other non-psz generated LLMW is being reviewed by the EJO's identified earlier in this Environmental Checklist.

The manner in which the Low Hazard Facility rating will be maintained is based on the following routine operational requirements: a) all drums, crates and equipment, etc. being brought into 889 for the purpose of waste processing (baling, crushing, dismantling, packaging and/or repackaging) will be verified as having passed an RTR analysis and Passive/Active (P/A) drum/crate counters when appropriate; b) those that failed RTR analysis will be handled on a one time basis depending on the reason(s) they may have failed the RTR analysis and those which demonstrate a positive P/A result will not be allowed in 889 Bldg.; c) no identifiable liquids will be allowed in the waste processing operations; d) all containers containing mixed waste or Beryllium (Be) shall be opened inside an exhausted enclosure to ensure that all volatiles and/or resuspensionable Be particles are exhausted prior to waste processing; e) any low level mixed waste baling will be designated as one time efforts to either handle a specific issue or achieve some net gain in storage space; f) the non-psz side of the plant currently generates minimal low level mixed wastes (volatiles) and they are considered to be contact contaminants; thus, presenting a less than measurable quantity of liquid organic materials; g) during these one time baling operations of LLMW (anticipated operations of less than four-six months) the exhaust enclosure is expected to be in operation less than two-four hours per day (it could be an even shorter period of time based on proposed field measurements to be taken by Industrial Hygiene); h) while performing Be waste processing operations the exhaust hood is expected to be in use less than two hours per day, and the anticipated Be work would be approximately two months in duration about two times a year; and i) Industrial Hygiene is prepared to take the following measurements as needed to ensure the workers safety: 1) air flow measurements at the access doors to the waste processing equipment (exhaust hood, baler, crusher, and also at the local and room exhausts), 2) volatile organic vapor measurements are not only to establish limits but also to verify operational time frames necessary to accomplish complete evacuation of volatiles, and 3) both Be airborne and routine smear measurements .

The significance of having achieved parts e, f, and g (previous environmental checklist pertaining to low level mixed waste) in the above paragraph greatly strenghtens Rocky Flats capabilities to process LLMW wastes in the future. As the definitions change, having already established the LLMW capability, it could become our greatest assest.

It is important to recognize that all of the aforementioned processes and activities were previously performed in the 889 Building. The Be and all other non-psz generated LLMW activities were curtailed in the 1987 time frame due to the need to improve safety requirements and preclude generation of low level mixed liquid waste. The LLW waste operations continued on until late 1989. Since late 1989, the building has been operationally shutdown for about one and one-third years. Those safety issues which shutdown the above operations will be resolved through the support and implementation of EJO's #395920 and #411040 which provide significant improvements and operational efficiency over existing conditions.

ROCKY FLATS PLANT
NATIONAL ENVIRONMENTAL POLICY ACT NEPA DOCUMENTATION
ENVIRONMENTAL CHECKLIST (CONTINUED)

The most recent improvements (1991) was the near completion of Bldg. 889 annex (rm. 112). It was built to provide additional space for receiving and shipping of waste crates and drums containing both low level waste and low level mixed wastes. This room currently serves as the entry way (air-lock) to room 106 (the old high bay) where decontamination, dismantling, and crating of large pieces of equipment takes place. Room 112 is exhausted thru the upper plenum (located on the mezzanine) in room 112. This upper plenum is a certifiable two (2) stage (bag-in/bag-out) HEPA filtration system. Operationally room 112 is set up to function as a "cold" uncontrolled area.

The contamination and hazard controlled rooms (rms. 106, 107, and 108) are currently controlled through the existing plenum system. The existing plenum consists of back-to-back HEPA filters but is only testable and certifiable as a single stage HEPA system. This plenum has two fans which provide exhaust air flow by utilizing both overhead and underground exhaust ductwork. This ventilation control system is scheduled to be replaced by the certifiable two-stage (walk-in) HEPA filtration system. This high quality walk-in type of new plenum system is located in room 112 on the ground floor for better control and accessibility.

| | | Checklist* | | |
|----|--|------------|----|---------|
| | | YES | NO | UNKNOWN |
| 7. | Is the project/activity a budget line item? | | X | |
| 8. | Will the project/activity require or potentially require an application for permit or permit modification under: | | | |
| | a. the Clean Air Act* | | X | |
| | b. the Clean Water Act | | X | |
| | c. RCRA? | | X | |
| 9. | Does this project involve remedial action under CERCLA? | | | X |

* note - APENs is required & in work

KZ

5/6

ROCKY FLATS PLANT
NATIONAL ENVIRONMENTAL POLICY ACT NEPA DOCUMENTATION
ENVIRONMENTAL CHECKLIST (CONTINUED)

| | | Checklist* | | |
|-----|---|------------|----|---------|
| | | YES | NO | UNKNOWN |
| 10. | Is the project/activity | | | |
| | a. new or | | | X |
| | b. modification, rather than a direct replacement? (New or modified activities will generally have more impact than a direct replacement.) | | | X |
| 11. | Will the project/activity result in, or have the potential to result in, long-term changes to the environment, (e.g., constructing a building, erecting above-ground power lines, development of new waste ponds or landfills)? | | | X |
| 12. | Will the project/activity result in changes and/or disturbances of the following existing factors: | | | |
| | a. noise level | | | X |
| | b. air emissions* | | | X |
| | c. liquid effluents | | | X |
| | d. solid waste | | | X |
| | e. radioactive waste (including contaminated soil) | | | X |
| | f. (chemically) hazardous waste | | | X |
| | g. mixed waste (radioactive & hazardous) | | | X |
| | h. chemical or petroleum product storage | | | X |
| | i. water use (withdrawal of ground water or diversion or withdrawal of surface water) | | | X |
| | j. drinking water system | | | X |
| | k. sewage disposal system | | | X |
| | l. soil movement outside facility fences | | | X |
| | m. site clearing, excavation, or other alterations | | | X |

EC Prepared by: M. A. Martinez

Date: 02/01/91

Organization : Solid Waste Operations Bldg: 889 Extension: 4466

*Clarification of any of these answers may be provided in the Project/Activity Description.

* note - air emissions will be different, potentially from current status *ES*

6/6