

John T. Conway, Chairman
A.J. Eggenberger, Vice Chairman
John W. Crawford, Jr.
Joseph J. DiNunno
Herbert John Cecil Kouts

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

625 Indiana Avenue, NW, Suite 700, Washington, D.C. 20004
(202) 208-6400



December 9, 1992

The Honorable Richard A. Claytor
Assistant Secretary for
Defense Programs
U.S. Department of Energy
Washington, D.C. 20585

Dear Mr. Claytor:

In DOE-RFO letter WMED:GMD:12639, the Rocky Flats Plant indicated that the Supercompactor and Repackaging Facility (SARF) is ready to commence operations and requested your authorization to proceed. I wish to recall to your attention certain concerns identified in Board trip reports previously forwarded to you concerning SARF operations.

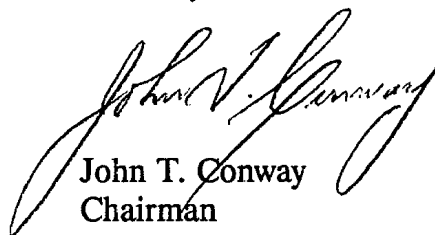
The attached memorandum addresses the documentation provided by the Rocky Flats Plant recommendation to you to proceed with SARF operations. There is a concern that the memorandum does not demonstrate compliance with DOE orders or DOE's own requirements for assuring contractor compliance with DOE orders. As you know, identification of orders, assessment of their adequacy and status of their implementation has been addressed by the Board in Recommendation 90-2.

In addition, required ALARA reviews have not been provided to the Board staff for review. The Board believes that radiation exposure received by workers should be minimized and continues to be interested in ALARA reviews conducted for SARF.

Please consider the attached memorandum in conjunction with the response being prepared relative to the Board trip reports concerning SARF operations. It is not our intent in this connection to suggest delay in initiating such operations.

If you need further information, please let me know.

Sincerely,



John T. Conway
Chairman

Copy: V. Stello, DP-6
Mario Fiori, DR-1

Enclosure:

(1) DNFSB Staff Memorandum "Rocky Flats Plant - Preliminary Review of the DOE-RFO Recommendation of Readiness and Request to Commence Operation of the Supercompactor and Repackaging Facility (SARF)"

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

December 8, 1992

MEMORANDUM FOR: Technical Director

COPY TO: Board Members

FROM: R. E. Kasdorf *R.E. Kasdorf*

THROUGH: A. G. Stadnik *A.G. Stadnik*

SUBJECT: Rocky Flats Plant - Preliminary Review of the DOE-RFO Recommendation of Readiness and Request to Commence Operation of the Supercompactor and Repackaging Facility (SARF)

1. Purpose: This memorandum provides Staff comments from a preliminary review of the Recommendation of Readiness and Request to Commence Operation of the Supercompactor and Repackaging Facility, forwarded by DOE-RFO letter WMED:GMD:12639 not dated, concerning readiness of the Supercompactor and Repackaging Facility (SARF) to commence operations.

2. Summary:

a. The DOE-RFO readiness to proceed memorandum does not demonstrate compliance with DOE orders or DOE's own requirements for assuring contractor compliance with DOE orders. Identification of orders, assessment of their adequacy and status of their implementation has been addressed by the Board in Recommendation 90-2. To date, only the first portion of the EG&G assessment which addresses completion and closure of previously identified non-compliances has been completed. The second portion which is the actual verification of compliance with the agreed to orders has not been completed. The second portion is not scheduled for completion until mid-December. Additionally, DNFSB staff concerns with the first portion raised with DOE and EG&G have not been resolved.

b. In addition, DOE has not provided documentation of the required ALARA review of the SARF operations even though the staff formally requested such documentation several months ago and has periodically repeated the request.

3. Background:

- a. DOE considers that operation of SARF presents a low risk to the health and safety to the public. The DNFSB staff agrees with this assessment.
- b. In support of readiness to proceed, EG&G was to evaluate compliance with DOE orders. This effort involved evaluating compliance with a subset of the forty-eight orders pertinent to the RFP. In a meeting between DOE, EG&G and the DNFSB staff, an agreement was reached as to the orders (fifteen orders) that were most pertinent to health and safety relative to SARF operation. Remaining orders were to be evaluated at some time after commencement of SARF operation.
- c. The EG&G assessment of the fifteen orders was approached in two parts. The first part of the assessment addressed completion and closure of non-compliances (i.e., existing CSA's, STCS's, EX's and ED's) identified in previous evaluations. The second part of the assessment involved the actual verification that requirements from the fifteen orders were properly implemented.

3. Discussion:

a. The DNFSB staff was given a draft copy of the EG&G evaluation of the fifteen orders in late October 1992. This draft copy contained only the first part of the EG&G assessment.

The staff had many concerns with the first part of the evaluation. These concerns were discussed verbally with DOE (Barrett) in early November 1992. Additionally, the staff provided written comments to EG&G (Davis, et.al.) in a meeting on November 4, 1992. The staff concerns provided to DOE and EG&G can be summarized into the following categories:

- (1) Closure of issues not verified.
- (2) Discrepancies (i.e., lack of compliance) with compensatory actions not justified.
- (3) Many non-compliance documents (CSA's and STCS's) have not been approved by DOE.
- (4) Requirements of some non-compliance documents appear to have been improperly assessed.

During the November 4, 1992 meeting, EG&G (Davis) indicated that the document provided to the staff had been prepared by a contractor and had not been adequately reviewed. EG&G (Davis) agreed that additional work was needed to ensure the document contained adequate documentation of order compliance and justification for compensatory actions.

The concerns raised by the staff relative to the first part of the EG&G

evaluation have not been resolved in the readiness to proceed memorandum. Attachment A provided examples of the types of concerns that were not resolved.

The second part of the assessment is not yet complete and is not scheduled to be complete until mid-December.

b. Many of the non-compliance documents (CSA's and STCS's) referenced in the EG&G evaluation were formally requested in late October 1992 and have not yet been provided to the staff.

c. Based on the above discussion the staff concludes that the DOE-RFO readiness to proceed memorandum does not demonstrate compliance with DOE orders or DOE's own requirements for assuring contractor compliance with orders.

d. An additional concern relative to operation of SARF is with radiation exposure to the SARF operators. EG&G estimates that the SARF operators will receive an average whole body exposure of about 0.9 person-rem per year. The staff has requested on numerous occasions any ALARA reviews performed to determine if there were reasonable methods to minimize the radiation exposure the operators will receive. To date, ALARA reviews concerning SARF operations have not been provided to the staff. The staff formally requested documentation of the required ALARA review in August 1992 and has periodically repeated the request to DOE-RFO.

e. DOE-RFO also notes that they have recently received a notice from the regional EPA office that EG&G is not in compliance with 40CFR61 and that EG&G must submit an application to the EPA for approval of any new source term construction or source term modification. RFO is meeting with the EPA to clarify the intent of this notice but it could require that RFP obtain EPA approval of a new permit prior to SARF beginning operations. This process would likely take several months to complete.

Distribution:

J. J. McConnell
D. F. Owen

Comments related to the
EG&G Rocky Flats, Inc. Report on Building 776
Readiness to Support Supercompactor Operations,
Pursuant to DNFSB Recommendation 90-2
(Preliminary Assessment)

1. DOE Order 5480.5:

- A. EG&G states that they are in "partial compliance" with compensatory actions regarding establishment of a formal system for document control and records management addressed in CSA-38E. To be only in partial compliance with an agreed upon compensatory measure needs to be justified. Actions yet to be completed related to document control, as discussed by EG&G are extensive. The schedule for completing these actions relative to operation of SARF is not provided.
- B. EG&G states that they have not developed implementation plans to bring Building 776 into compliance with the procedure process (PAPG) as required by CSA-43C. The document does not provide any such plans for coming into compliance or justification for why this is acceptable for SARF operation regardless of "mission transition activities".
- C. The document states that "All maintenance personnel who are involved in surveillance required by the OSR on vital safety systems are in a formal, documentable training and qualification program." The compensatory action for CSA-4G requires that, "All maintenance personnel who are involved in surveillances required by the Operational Safety Requirements on vital safety systems are trained and qualified in a formal, documentable program" [emphasis added]. The status of qualifications (or other compensatory actions) is not provided.
- D. The document states that CSA-6H prohibits "listed" plutonium operations in a building which is not in compliance with the fissile material handler training requirements of DOE Order 5480.5. The document also states that "SARF Operators do not entail any of the listed Plutonium Operations". There is no qualifying "list" of plutonium operations in CSA-6H. In fact, the CSA states, "In order to obtain a uniformly high standard of expertise, the requirements of DOE Order 5480.5, section 10.a.(10) for personnel who process, store, transfer, or handle significant quantities of fissionable materials have been applied to all fissionable material handlers, operators, and supervisors." No status of compliance with 5480.5 section 10.a.(10) is provided.

2. DOE Order 5480.7

- A. The document states that "No open tasks are reported" for 5480.7-EX-1. Does this mean all items are closed? Given that dampers are not used in the Building, what is the status of compliance with this EX?
- B. The document identifies that CSA-22B is not yet approved and there are no compensatory actions identified. This requires a technical justification of adequacy.

3. DOE Order 5480.19

- A. The document states a Conduct of Operations conformance matrix for Building 776 has been completed. Is this document approved by DOE? Please provide a copy of this required document.
- B. The Document states that the Conduct of Operations Program for Solid Waste Treatment Operations is being executed on schedule. Many of the Solid Waste Treatment Operations Conduct of Operations Implementation Plan tasks identified in the August 5, 1991 plan presented to the Board are past due. Is there a new approved plan for which Building 776 is on schedule?
- C. The document references the site COOP manual, it is unclear if and when all chapters of the COOP manual be implemented in the building.
- D. When will the Building 776 "senior supervisor"/mentor be in place. Who will fill this position?

4. DOE Order 5480.11

The document states task 4 of CSA-63C is open. Has EG&G initiated baseline bioassay sampling in Building 776? If not, what are the compensatory actions and why are they sufficient?

5. Generic Safety Issues

- A. There are a significant number of items which require verification of closure. The DNFSB staff understood verification of closure to be one of the principle activities of this SARF/Building 776 90-2 review. When will the closure of these items be verified? What is the justification for starting SARF without identifying the status of order compliance and compensatory actions?
- B. The document uses the phrase "no open issues have been identified" for some Orders. Does this mean all previously identified issues for the DOE Order are

verified closed?

- C. A significant portion of the CSAs and STCSs for SARF/Building 776 are not yet approved by DOE. What is the technical justification for starting operations in this condition?