

# DEFENSE NUCLEAR FACILITIES SAFETY BOARD

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John T. Conway, Chairman  
A.J. Eggenberger, Vice Chairman  
Edson G. Case  
Olin W. Crawford, Jr.  
Herbert John Cecil Kouts

June 5, 1990

Honorable James D. Watkins  
Secretary of Energy  
Washington, DC 20585

Dear Mr. Secretary:

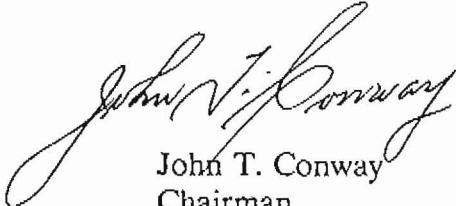
On June 4, 1990, the Defense Nuclear Facilities Safety Board, in accordance with Section 312(5) of the Atomic Energy Act of 1954, as amended, 42 U.S.C.A. Section 2286a(5), approved a recommendation which is enclosed for your consideration.

42 U.S.C.A. Section 2286d(a) requires the Board, after receipt by you, to promptly make this recommendation available to the public in the Department of Energy's regional public reading rooms. Please arrange to have this recommendation placed on file in your regional public reading rooms as soon as possible.

The Board will publish this recommendation in the Federal Register.

You will note that the Board has recommended preparation of a written program to address accumulation of materials in the ventilation ducts and related systems, and prior to resumption of plutonium operations. When this program is completed, the Board wishes to be informed.

Sincerely,



John T. Conway  
Chairman

Enclosure

RECOMMENDATION TO THE SECRETARY OF ENERGY  
pursuant to Section 312(5) of the  
Atomic Energy Act of 1954, as amended.

Dated: June 4, 1990

The Board and its experts have carefully considered criticality safety at the Department of Energy (DOE) Rocky Flats Plant.

The subject of criticality safety at Rocky Flats has been previously examined by Sciencetech, Inc., and reported in "An Assessment of Criticality Safety at the Department of Energy Rocky Flats Plant" and subsequent follow-up activities and reports. Criticality safety has also been examined by the DOE and its Rocky Flats Plant operating contractor.

It is noted that data used in the preparation of the reports by Sciencetech, Inc. and in subsequent plant examinations were developed through the use of non-destructive assay techniques to determine if fissile materials have accumulated in ventilation ducts and associated systems. These efforts resulted in the determination that fissile materials have accumulated in certain portions of these systems. In addition, other more recent physical studies have confirmed fissile and other undefined debris exist in the ducts. Plant personnel are presently continuing efforts to measure the quantity and concentration of plutonium and other debris in the ducts as well as its form and physical consistency. As of this time, full characterization of the situation by DOE and its contractors has not been completed; hence, all specific remediation measures have not yet been determined.

The Board recommends that prior to resumption of plutonium operations at the plant that DOE prepare a written program with commitments to address the accumulation of fissile and other materials in ventilation ducts and related systems. The short-term objective of the program should be to ensure that a criticality accident would not take place and that the presence of fissile and other materials in the ducts would not result in an undue risk to the health and safety of the public, including on site personnel. The remainder of the program should ensure that the accumulated fissile material and other debris in the ventilation and associated systems will be properly removed or substantially reduced in amount and concentration in the longer term, but as soon as reasonably possible. The program should address priorities of specific actions and include an assessment of criticality safety for affected individual lines, systems, or components. The basis for the actions and any time-phased programs should be presented. This program should address and include the following:

- o Description of remediation actions, including the scheduling and basis for same, that are deemed necessary prior to resumption of plutonium operations by DOE.
- o Descriptions and justification of non-destructive assay techniques, calibration, modeling, and assay methodology.

- o Estimation of radiation levels in areas of occupancy, both from gamma rays and fast neutrons.
- o Determination of the effects of accumulation of fissile and other materials on the functionality of the ventilation ducts and related systems which must act to protect the health and safety of the public, including plant operating personnel.
- o Description and justification of procedures and schedules, both short term and long term, for removal or reduction in amount and concentration of existing fissile and other unidentified debris in the ventilation ducts and related systems, as stated above.
- o Determination of any design and operational changes in the ventilation ducts and related systems necessary to prevent further accumulation of significant amounts of fissile and other materials therein and to ensure continued operability of systems installed to protect the health and safety of the public including plant operating personnel. This includes a thorough study of the glovebox filters and ventilation and alarm systems.
- o Establishment of a monitoring program for the ventilation ducts and related systems to establish that design and operational changes and modifications are effective in preventing significant additional accumulation of fissile and other materials.

  
John T. Conway, Chairman

~~Dated: June 7, 1990.~~

~~Sandra M. Kay,  
Alternate Federal Register Liaison Officer.  
[FR Doc. 90-13599 Filed 6-8-90; 8:45 am]  
BILLING CODE 3810-AE-M~~

### DEFENSE NUCLEAR FACILITIES SAFETY BOARD

[Recommendation 90-6]

#### Criticality Safety at the Department of Energy's Rocky Flats Plant, CO

**AGENCY:** Defense Nuclear Facilities  
Safety Board.

**ACTION:** Notice; recommendation.

**SUMMARY:** The Defense Nuclear  
Facilities Safety Board has made  
recommendations to the Secretary of  
Energy pursuant to section 312(5) of the  
Atomic Energy Act of 1954, as amended  
concerning criticality safety at DOE's  
Rocky Flats Plant, CO. The Board  
requests public comments on these  
recommendations.

**DATES:** Comments, data, views, or  
arguments concerning the  
recommendations are due on or before  
July 11, 1990.

**ADDRESSES:** Send comments, data,  
views, or arguments concerning the  
recommendations to: Defense Nuclear  
Facilities Safety Board, 600 E Street,  
NW., Suite 675, Washington, DC 20004.

**FOR FURTHER INFORMATION CONTACT:**  
Kenneth M. Pusateri, at the address  
above or telephone 202/376-5083, (FTS)  
376-5083.

Dated: June 5, 1990.

Kenneth M. Pusateri,  
General Manager.

[Recommendation 90-6]

#### Criticality Safety at the Department of Energy's Rocky Flats Plant, CO

Dated: June 5, 1990.

The subject of criticality safety at  
Rocky Flats has been previously  
examined by Sciencetech, Inc., and  
reported in "An Assessment of  
Criticality Safety at the Department of  
Energy's Rocky Flats Plant" and  
subsequent follow-up activities and  
reports. Criticality safety has also been  
examined by the DOE and its Rocky  
Flats Plant operating contractor.

It is noted that data used in the  
preparation of the reports by Sciencetech,  
Inc. and in subsequent plant  
examinations were developed through  
the use of non-destructive assay  
techniques to determine if fissile  
materials have accumulated in  
ventilation ducts and associated  
systems. These efforts resulted in the

determination that fissile materials have  
accumulated in certain portions of these  
systems. In addition, other more recent  
physical studies have confirmed fissile  
and other undefined debris exist in the  
ducts. Plant personnel are presently  
continuing efforts to measure the  
quantity and concentration of plutonium  
and other debris in the ducts as well as  
its form and physical consistency. As of  
this time, full characterization of the  
situation by DOE and its contractors has  
not been completed; hence, all specific  
remediation measures have not yet been  
determined.

The Board recommends that prior to  
resumption of plutonium operations at  
the plant that DOE prepare a written  
program with commitments to address  
the accumulation of fissile and other  
materials in ventilation ducts and  
related systems. The short-term  
objective of the program should be to  
ensure that a criticality accident would  
not take place and that the presence of  
fissile and other materials in the ducts  
would not result in an undue risk to the  
health and safety of the public, including  
on site personnel. The remainder of the  
program should ensure that the  
accumulated fissile material and other  
debris in the ventilation and associated  
systems will be properly removed or  
substantially reduced in amount and  
concentration in the longer term, but as  
soon as reasonably possible. The  
program should address priorities of  
specific actions and include an  
assessment of criticality safety for  
affected individual lines, systems, or  
components. The basis for the actions  
and any time-phased programs should  
be presented. This program should  
address and include the following:

- Description of remediation actions,  
including the scheduling and basis for  
same, that are deemed necessary prior  
to resumption of plutonium operations  
by DOE.
- Descriptions and justification of  
non-destructive assay techniques,  
calibration, modeling, and assay  
methodology.
- Estimation of radiation levels in  
areas of occupancy, both from gamma  
rays and fast neutrons.
- Determination of the effects of  
accumulation of fissile and other  
materials on the functionality of the  
ventilation ducts and related systems  
which must act to protect the health and  
safety of the public, including plant  
operating personnel.
- Description and justification of  
procedures and schedules, both short-  
term and long-term, for removal or  
reduction in amount and concentration  
of existing fissile and other unidentified

debris in the ventilation ducts and  
related systems, as stated above.

- Determination of any design and  
operational changes in the ventilation  
ducts and related systems necessary to  
prevent further accumulation of  
significant amounts of fissile and other  
materials therein and to ensure  
continued operability of systems  
installed to protect the health and safety  
of the public including plant operating  
personnel. This includes a thorough  
study of the glovebox filters and  
ventilation and alarm systems.

- Establishment of a monitoring  
program for the ventilation ducts and  
related systems to establish that design  
and operational changes and  
modifications are effective in preventing  
significant additional accumulation of  
fissile and other materials.

John T. Conway,  
Chairman.

#### Appendix—Transmittal Letter to the Secretary of Energy

June 5, 1990

Honorable James D. Watkins  
Secretary of Energy, Washington, DC 20585

Dear Mr. Secretary: On June 4, 1990, the  
Defense Nuclear Facilities Safety Board, in  
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Sincerely,

John T. Conway,

Chairman.

Enclosure

[FR Doc. 90-13398 Filed 6-8-90; 8:45 am]

BILLING CODE 6820-KD-M

### DEPARTMENT OF EDUCATION

#### National Assessment Governing Board; Meeting

**AGENCY:** Department of Education.

**ACTION:** Notice of partially closed  
meeting.

**SUMMARY:** This notice sets forth the  
schedule and proposed agenda of a  
forthcoming meeting of the Executive