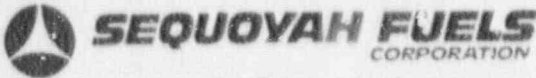


40-8027
PDR/LPDR



March 21, 1991

Certified Mail
Return Receipt Requested

Robert M. Bernero, Director
Office of Nuclear Material
Safety and Safeguards
U.S. NUCLEAR REGULATORY COMMISSION
Washington, D.C. 20555

RE: License SUB-1010; Docket No. 40-8027
Notification of Existence of a Defect
10 CFR 21.21 Report

Dear Mr. Bernero:

On March 18, 1991, Sequoyah Fuels Corporation (SFC) was advised by letter of a Department of Transportation (DOT) exemption associated with 119 model 48X uranium hexafluoride cylinders presently or formerly owned by SFC. The cylinders were each subject to DOT exemption allowing for a nominal head thickness of 0.625 inch rather than a minimum head thickness of that dimension. The subject cylinders were manufactured by W. H. Stewart Company of Oklahoma City, Oklahoma. The NRC's Region IV office was notified by phone of the defect on March 19, 1991, and the situation was discussed with Merri Horn of your staff on March 20, 1991. Pursuant to the requirements of 10 CFR 21 "Reporting of Defects and Noncompliance," a written report (attached in triplicate) is being submitted to your office. Also enclosed in triplicate are copies of the letter advising SFC of the DOT exemption and the DOT exemption itself.

Should you have any questions concerning this information, you may contact me at 918/489-3207.

Best regards,

Lee R. Lacey
Vice President
Regulatory Affairs

LRL:nv

xc: Robert D. Martin, NRC Region IV
Merri Horn, NRC - NMSS
Bob Litchenberg, Martin Marietta Systems-Paducah, KY
Steve Battle, Martin Marietta Systems-Pikeston, OH

9103290091 910321
PER ADDCK 04008027
PDR

NFD1

SEQUOYAH FUELS CORPORATION

DECLARATION OF EXISTENCE OF A DEFECT

(10 CFR 21.21)

1. Name and address of individuals informing the Commission:

Sequoyah Fuels Corporation
P. O. Box 610
Gore, Oklahoma 74435
918/489-3207

2. Identification of basic component which contains a defect:

Model 48X uranium hexafluoride cylinders purchased by SFC with manufacturer's serial numbers 6045-6163. Other Model 48X uranium hexafluoride cylinders with the same defect are identified by manufacturer's serial number on the enclosed copy of the DOT exemption.

Note: The DOT exemption erroneously identifies these cylinders as only Model 48Y cylinders. It should read 48X and 48Y cylinders.

3. Identification of firm supplying the basic component which contains a defect:

W. H. Stewart Company
500 East Sheridan
Oklahoma City, Oklahoma 73104
405/235-0548

4. Nature of defect and safety hazard which could be created by defect:

The cylinders identified in item 3 above were manufactured to a nominal head thickness of 0.625 inch rather than to a minimum head thickness of that dimension. The thinner cylinder head may not possess the resistance to rupture characteristics of a cylinder manufactured to correct specifications. This minimum head thickness requirement is established in American National Standard (ANSI) N14.1-1982. This standard also specifies design, fabrication, inspection, testing, and marking requirements for uranium hexafluoride cylinders. These cylinders, as fabricated, meet the minimum operational thickness of 0.5 inches as specified by ANSI.

5. The date on which the information of the defect was obtained:

SFC obtained knowledge of the defect from a letter received by SFC on March 18, 1991 from W. H. Stewart Co.

The letter advised SFC of a Department of Transportation exemption obtained by W. H. Stewart Co. which addresses the subject defect. SFC informed NRC Region IV of the situation on March 19, 1991, by telephone, and discussed the subject with an NMSS staff member on March 20, 1991.

6. The number and location of the basic components with the subject defect:

There are 119 Model 48X uranium hexafluoride cylinders originally purchased by SFC with the subject defect. They are identified by serial number in item 2 above. SFC can provide information on their locations at NRC's request.

7. The corrective action which has been, is being, or will be taken:

At this time, SFC has not taken, nor does it anticipate taking any action to correct the subject defect. In obtaining the DOT exemption, 49 CFR 107.103(b)(7) and (b)(9) require a form of safety evaluation be conducted. SFC interprets DOT's issuance of the exemption to mean that the cylinders adequately satisfy relevant safety performance requirements.

Additionally, 49 CFR 173.420(b) requires packagings of uranium hexafluoride to be periodically inspected, tested, marked, and otherwise conform with ANSI N14.1-1987. These inspections include an evaluation of cylinder head and wall thickness. If the thickness is not greater than a minimum value specified in ANSI N14.1-1987 the cylinder is removed from service. The specified minimum wall thickness for 48X cylinders is 0.5 inches.

8. Any advice related to the defect in the basic component that has been, is being, or will be given to users/handlers of the basic component:

To date no action has been taken. Prior to shipping, SFC will plainly and durably mark applicable cylinders with "DOT-E 10460." This will be done pursuant to item 8(e) of the DOT exemption. Also, SFC will ensure that each outgoing (from SFC) motor vehicle used to transport packages covered by this exemption carry a copy of this exemption on board. Finally, SFC will make this information available to DOE facilities which may ship or receive these cylinders.



W. H. STEWART CO.

500 EAST SHERIDAN AREA CODE 405 - 235-0548
OKLAHOMA CITY, OKLAHOMA, U.S.A. 73104

March 15, 1991

RECEIVED

MAR 18 1991

SEQUOYAH

Sequoyah Fuels Corporation
ATTN: Quality Control
P.O. Box 610
Gore, Oklahoma 74435

RE: DOT-E 10460

Gentlemen:

Please be advised that the W.H. Stewart Co. has been granted an exemption from certain provisions by the U.S. Department of Transportation. The complete two-page exemption is attached and should be maintained as per Paragraph 8. W.H. Stewart Co. advises that to comply with item 8.(e.), the marking of "DOT-E 10460" would best be Steel Stamped into the Tank Head above the Name Plate.

The W.H. Stewart Co. will annually renew this exemption and forward you a timely notice of renewal.

If you have any questions, please do not hesitate to contact me.

Sincerely,

W.H. STEWART CO.

Robert B. Feistel
Vice President



U.S. Department
of Transportation
Research and
Special Programs
Administration



400 Seventh Street, S.W.
Washington, D.C. 20590

JAN 7 1991

DOT-E 10460

1. W.H. Stewart Co., Oklahoma City, Oklahoma is hereby granted an exemption from certain provisions of this Department's Hazardous Materials Regulations to offer packages prescribed herein for the radioactive materials described in paragraph 3 below for transportation in commerce, subject to the limitations and special requirements specified herein. This exemption authorizes the use of non-DOT specification containers, and provides no relief from any regulation other than as specifically stated.
2. BASIS. This exemption is based on the application of W.H. Stewart Co. dated August 30, 1990, as supplemented by letter dated November 19, 1990, submitted in accordance with 49 CFR 107.103 and the public proceeding thereon.
3. HAZARDOUS MATERIALS (Descriptor and class). Uranium hexafluoride, low specific activity, classed as radioactive material.
4. PROPER SHIPPING NAME (49 CFR 172.101). Uranium hexafluoride, low specific activity.
5. REGULATION AFFECTED. 49 CFR 173.420(a)(2)(1)
6. MODES OF TRANSPORTATION AUTHORIZED. Motor vehicle.
7. SAFETY CONTROL MEASURES.
 - a. Packagings authorized by this exemption are Model 48Y cylinders as described in American National Standards ANST N14.1 (1982 edition). The packagings were manufactured to a nominal head thickness of 0.625" rather than to a minimum head thickness of that dimension.
 - b. Only packagings manufactured by W.H. Stewart Co. with the following serial numbers are authorized: 5875-5974, 6034, 6045-6163, 6194-6466, 6472-6474, 6495, 6496, 6780-6785, 6818-6881, 6898, 6899, 7093-7102, 7176-7179, 7228-7235, 7257-7261, 7263-7280, 7301-7318, 7363-7365, 7396, 7397, 7508-7522, 7546-7570, 7590, and 7591.
8. SPECIAL PROVISIONS.
 - a. A copy of this exemption must be carried aboard each motor vehicle used to transport packages covered by this exemption.

b. Persons who receive packages covered by this exemption may reoffer them for transportation provided no modifications or changes are made to the packages, all terms of this exemption are complied with, and a current copy of this exemption is maintained at each facility from which such reoffering occurs.

c. Drivers must have been instructed as to necessary safeguards and proper procedure in the event of unusual delay, fire, or accident.

d. Motor carriers operating under the terms of this exemption must have a "Satisfactory" or "Conditional" safety rating as prescribed in 49 CFR Part 385.

e. The outside of each package must be plainly and durably marked "DOT-E 10460."

9. REPORTING REQUIREMENTS. Any incident involving loss of packaging contents or packaging failure must be reported to the Associate Administrator for Hazardous Material Safety as soon as practicable.

10. EXPIRATION DATE. January 3, 1992.

Issued at Washington, DC:



Alan I. Roberts
Associate Administrator
for Hazardous Materials Safety

JAN 7 1991

(Date)

Address all inquiries to: Associate Administrator for Hazardous Materials Safety, Research and Special Programs Administration, U.S. Department of Transportation, Washington, DC 20590.
Attention: Exemptions Branch.

Dist: FHWA