

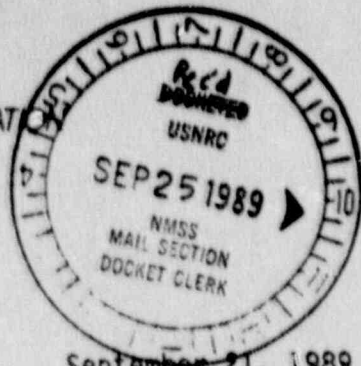
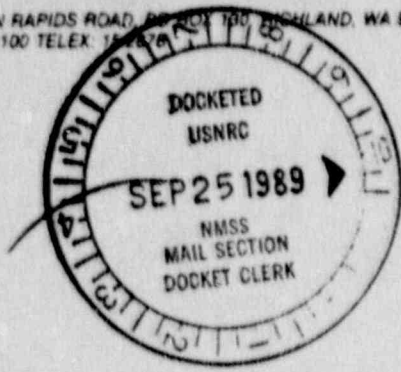
RETURN TO 206-88

70-1257  
PDR

**ADVANCED NUCLEAR FUELS CORPORATION**

2101 HORN RAPIDS ROAD, BOX 100, RICHLAND, WA 99352-0130  
(509) 375-8100 TELEX: 15477

CORPORATE LICENSING



September 21, 1989  
CWM:89:091

U.S. Nuclear Regulatory Commission  
Attention: Mr. George H. Bidinger, Section Leader  
Uranium Fuel Section  
Fuel Cycle Safety Branch  
Division of Industrial and Medical Nuclear Safety, NMSS  
Washington, DC 20555

License No. SNM-1227  
Docket No. 70-1257

Dear Mr. Bidinger:

Advanced Nuclear Fuels Corporation (ANF) is submitting additional information in support of our license amendment application dated June 1, 1989 as requested by your letter of September 11, 1989. A response to your individual questions is contained in the attachment to this letter and is supported by proposed replacement pages (enclosed) to the ANF license application.

If you have further questions regarding this matter, contact me at (509) 375-8537.

Very truly yours,

C. W. Malody, Manager  
Regulatory Compliance

CWM:bp

Attachments

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PDR ADOCK 07001257  
C FDC

addit info 25966

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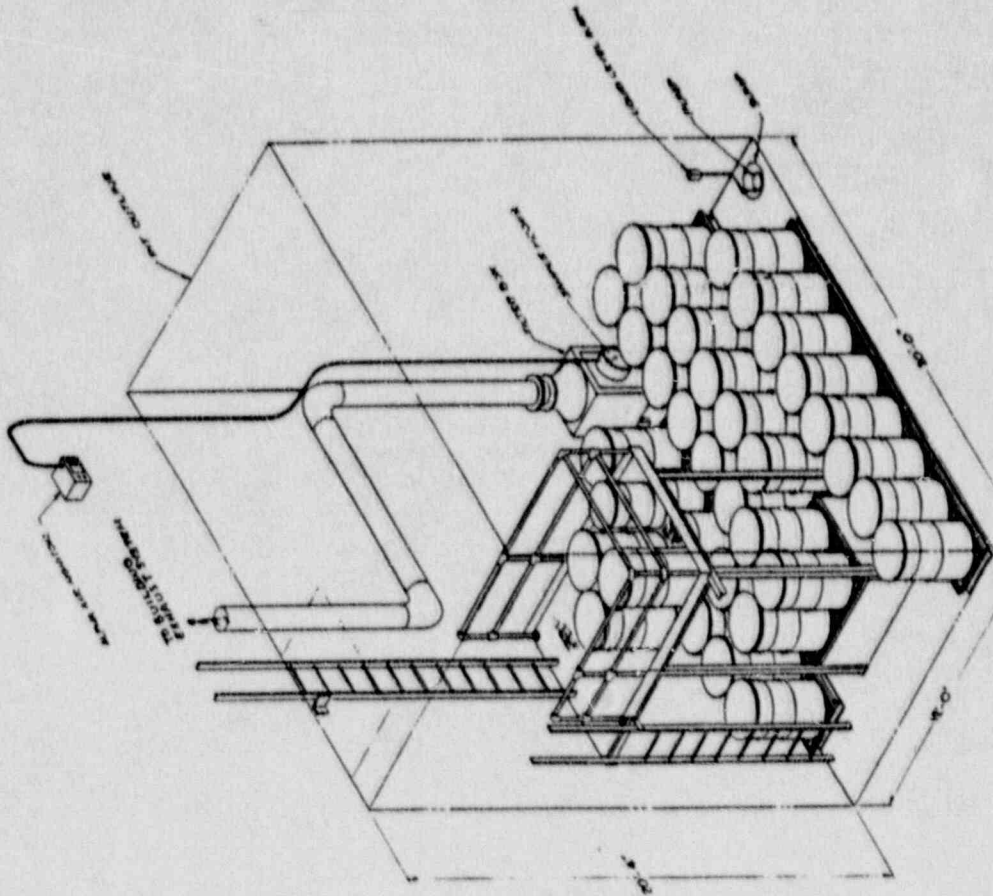
**RESPONSE TO NRC "REQUEST FOR ADDITIONAL INFORMATION"**  
**DATED 09/11/89**

1. There are no corrosive liquids stored or used in the area (Room 162) or routinely transported through the area. Corrosive liquid spillage is an improbable event. However, any liquid spills in the area would be promptly cleaned up, including an inspection of the pit for possible liquid. A liquid level sump alarm, activated automatically, will warn of liquid presence in the pit.
2. The storage pit will be continuously exhausted and continuously sampled for contamination control and auditing purposes. The continuous exhaust will also assure that a hazardous atmosphere will not build in the pit. The exhaust is located near the bottom of the pit with inlet air flowing from around the cover plate at the top of the pit to provide reasonable air movement in all pit areas.
3. The pit in Room 162, Specialty Fuels Building is 12' wide, 20' long and 20' - 4 1/2" deep. The walls are 10" thick, reinforced concrete. The floor is 18", reinforced concrete. An 18" diameter by 18" deep sump for liquid collection and monitoring is located in one corner of the pit. The floor and walls are keyed and sealed with a continuous water stop. The concrete surfaces are finished in accordance with applicable sections of the American Concrete Institute Manual 301. The walls and floor are painted. The pit is covered with floor grating and overlaid with sheetsteel. Vertical ladders with a hinged door section provide access to the pit. See drawing ANF 608,736 for proposed arrangement.
4. There are no provisions for or plans to store materials, other than the plutonium contaminated waste drums in the pit. It is the practice at ANF to exclude the storage of material, in a special nuclear material storage area, which is unrelated to special nuclear material. As can be seen from the enclosed drawing, there are no provisions for storage of other than the plutonium waste drums.
5. Health Physics Technicians will conduct periodic dose rate surveys in affected areas during maintenance outages of the criticality alarm system or any portion thereof. This fact has been added to page 1-7 of the license application and will replace the proposed page submitted with the June 1, 1989 amendment application.

PART I - LICENSE CONDITIONS	REV. 18
<p>1. ANF-12, "Nuclear Material Safeguards Procedures Description for the Fuels Fabrication Plant," (Revision 18). This document shall be maintained in a current and approved status and shall be properly implemented.</p> <p>1.6.7 <u>Authorization at Reactor Sites</u></p> <p>Advanced Nuclear Fuels is authorized to possess fuel assemblies or fuel rods at reactor sites for the purpose of loading them into shipping containers and delivering them to a carrier for transport.</p> <p>1.6.8 <u>Authorized Release Guidelines</u></p> <p>Advanced Nuclear Fuels is authorized to release equipment, scrap or facilities for unrestricted use, or for termination of license according to the "Guidelines for Decontamination of Facilities and Equipment Prior to Release for Unrestricted Use or Termination of Licenses for Byproduct, Source, or Special Nuclear Material" as published by the U.S. Nuclear Regulatory Commission dated August 1987. A copy of these guidelines is contained in Appendix A to Chapter 3.</p> <p>1.6.9 <u>Authorized Criticality Alarm System Outage</u></p> <p>Advanced Nuclear Fuels is granted an exemption from 10 CFR 70.24(a) for the purpose of performing maintenance on the criticality alarm system. Sections of the criticality alarm system may be taken out-of-service provided that all movement or processing of fissile material in affected areas is halted for the duration of the outage. Health Physics Technicians will conduct periodic surveys of the areas during the criticality alarm system outage.</p>	
<p>AMENDMENT APPLICATION DATE June 1, 1989</p>	<p>PAGE NO 1-7</p>



	REV.
<p><b>10.4.6 <u>Plutonium Contaminated Waste Storage</u></b></p> <p>A waste storage facility is provided for storing plutonium contaminated waste which remains from a previous mixed oxide fuel fabrications facility. The plutonium concentration in the contaminated waste is greater than allowed for class C waste and therefore no disposal site exists which is licensed to receive this waste. The facility is described below and depicted in Figure II-10.33.</p> <p>The storage facility is located in Room 162 of the Speciality Fuels Building. The facility is a below grade room approximately 12' X 20' X 20' deep constructed of reinforced concrete and covered by steel floor grating overlaid with steel plate. The room contains a sump for liquid collection which is monitored by a liquid level alarm. A sump pump is installed which can be manually activated and which discharges to a waste retention tank south of the UO<sub>2</sub> building.</p> <p>Drum storage will be on steel grating to support the drums off the concrete floor and on a mezzanine also fabricated of steel grating. Ingress and egress for personnel and equipment is from the top of the room.</p> <p>The room is ventilated. Air is drawn down from the roof and exhausted near floor level through one stage of HEPA filtration into the Speciality Fuels Building exhaust system. The exhaust air is continuously sampled and monitored prior to the installed HEPA filter. The air sample is also analyzed weekly.</p>	
AMENDMENT APPLICATION DATE: June 1, 1989	PAGE NO.: Page 10-47



FOR INSTALLATION DETAILS, DRAWING LIST, & GENERAL NOTES, SEE SHEETS 3, 4, 5.

8910040325 - 01

NO.	DESCRIPTION	DATE
1	DESIGNED BY: [Name]	[Date]
2	CHECKED BY: [Name]	[Date]
3	APPROVED BY: [Name]	[Date]
4	REVISIONS	
5	BY: [Name]	[Date]
6	BY: [Name]	[Date]
7	BY: [Name]	[Date]
8	BY: [Name]	[Date]
9	BY: [Name]	[Date]
10	BY: [Name]	[Date]

FIGURE 11 - 10.33

SPECIALTY FUELS BLDG  
 AUTOCLAVE PIT  
 WASTE DRUM STORAGE  
 ARRANGEMENT

AWF 608,735

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