

July 10, 2006

Ms. Leah R. Morrell  
Licensing Officer  
BWX Technologies, Inc.  
Nuclear Products Division  
P.O. Box 785  
Lynchburg, Virginia 24505-0785

SUBJECT: BWX TECHNOLOGIES, INC. - REQUEST FOR ADDITIONAL INFORMATION  
ON LICENSE RENEWAL APPLICATION FOR FIRE SAFETY AND  
ENVIRONMENTAL PROTECTION (TAC L31836)

Dear Ms. Morrell:

This letter relates to the staff review of your license renewal application. Our review of this matter has concluded that additional information is needed to address regulatory issues. This letter contains questions related to the fire safety and environmental protection portions of your application only. You have already received a request for additional information on your environmental report, dated December 27, 2004, security plans, dated August 3, 2005, and criticality safety, dated November 10, 2005.

The additional information, specified in the enclosure, should be provided within 60 days of the date of this letter. Please reference the above TAC number in future correspondence related to this request.

If you have any questions regarding this matter, contact me at (301) 415-5848, or by e-mail at [bcg@nrc.gov](mailto:bcg@nrc.gov).

[Redacted]

L. Morrell

2

[Redacted]

Respectfully,

/RA/

William Gleaves, Project Manager  
Fuel Manufacturing Section  
Fuel Cycle Licensing Branch  
Division of Fuel Cycle Safety  
and Safeguards  
Office of Nuclear Material Safety  
and Safeguards

Docket No.: 70-27  
License No.: SNM-42

Enclosure: Request for Additional Information

[Redacted]

[REDACTED]

L. Morrell

2

[REDACTED]

Respectfully,

/RA/

William Gleaves, Project Manager  
Fuel Manufacturing Section  
Fuel Cycle Licensing Branch  
Division of Fuel Cycle Safety  
and Safeguards  
Office of Nuclear Material Safety  
and Safeguards

Docket No.: 70-27  
License No.: SNM-42

Enclosure: Request for Additional Information

**DISTRIBUTION:**

FCFB r/f      MBaker      GWertz, RGN II      MAdams      JDowns      RWescott  
JWiebe

**ML061740375**

<b>OFC</b>	FCFB		FCFB		FCFB	
<b>NAME</b>	WGleaves		VCheney		JLubinski	
<b>DATE</b>	07/07/06		07/07/06		07/10/06	

**OFFICIAL RECORD COPY**

[REDACTED]

Request for Additional Information on the  
BWX Technologies, Inc.  
License Renewal Request  
Docket #70-27  
SNM-42

Environmental Protection

- EP-01 Provide a demonstration that the action levels presented in Chapter 9 for liquid and gaseous effluents are sufficient to ensure compliance with the dose limits in 10 CFR 20.1301 for the member of the public likely to receive the highest dose from the licensed operation. Include the methods, assumptions, and parameter values used in estimating the dose. This information is needed to determine compliance with the requirements of 10 CFR 20.1301 and 10 CFR 20.1302.
- EP-02 Provide a description or map of the locations at which environmental samples are collected or a reference to this information. Section 9.3.1 states, "environmental samples are collected from each designated location semi-annually," however the designated locations are not specified. This information is needed to determine compliance with the requirements of 10 CFR 20.1302(a).

Fire Safety

- FS-01 In review of the revision to the site wide integrated safety analysis (ISA), one open item was documented in fire protection. Although the potential for a credible external event that envelopes more than one process area [REDACTED] was evaluated, the results of this evaluation, the consequences of this scenario, and any necessary IROFS and/or management measures need to be provided. This information is needed to determine compliance with the requirements of 10 CFR 70.65(b)(4).
- FS-02 The staff could find no discussion of hot work permits and control in SNM-42. Please discuss the protection from fires associated with hot work. This information is needed to satisfy the guidance in Sections 7.4.3.1 and 7.4.3.4 of NUREG-1520.
- FS-03 Section 7.2.1 of SNM-42 discusses the Fire Safety Analysis (FSA). Provide a copy of this for review and describe how it compares to the Fire Hazards Analysis (FHA) in NFPA 801. This information is needed satisfy the guidance in Section 7.4.3.2 of NUREG-1520.
- FS-04 Section 7.3 of SNM-42 discusses Facility Design. Provide a plant layout drawing showing fire areas and any separation between process areas. Provide information on the fire protection design basis document for the existing structures. Discuss further the

Enclosure

[REDACTED]

fire protection and fire hazards in the moderation control areas, such as the type(s) of wheeled fire extinguishers used, the frequency of employee training on the proper use of this equipment, and any additional training given to the Emergency Team on fire suppression techniques in this area. Discuss how the facility design ensures that potentially contaminated runoff from fire protection systems does not reach the environment. [REDACTED]

[REDACTED]. This information is needed to determine compliance with the requirements of 10 CFR 70.65(b)(2) and 10 CFR 70.65(b)(3) and satisfy the guidance in Section 7.4.3.3 of NUREG-1520.

FS-05 Section 7.4 of SNM-42 discusses Process Fire Safety and states that the fire/explosion hazards for each process area are described in the ISA Summary. Provide a copy of this portion of the ISA Summary and document the approximate inventory for each hazard presented and verify no other combustible materials are present in each process area. This information is needed to determine compliance with the requirements of 10 CFR 70.65(b)(3) and 10 CFR 70.65(b)(4).

FS-06 Section 7.5 of SNM-42 discusses Fire Protection Systems. Provide information on the design basis for each of the fire protection systems on site. If any portions of the facility are protected by automatic fire suppression, then give their location and generally describe the system. This information is needed to satisfy the guidance in Section 7.4.3.3 of NUREG-1520.

FS-07 [REDACTED]

FS-08 Section 1.9.4, 7.1.6, and 7.1.7 of SNM-42 discusses the Pre-Fire Plan and an Emergency Team. Provide a copy of the Pre-Fire Plan for review. [REDACTED]. Describe the types of equipment the Emergency Team uses during a fire event. Provide information on hose length on their response vehicle [REDACTED]. This information is needed to satisfy the guidance in Section 7.4.3.5 of NUREG-1520.

[REDACTED]