



BWX Technologies, Inc.

March 16, 2017  
17-017

ATTN: Document Control Desk  
Director, Office of Nuclear Material Safety and Safeguards  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555-0001

Reference: 1) License No. SNM-42, Docket 70-27  
2) Letter dated January 27, 2017, C. Erlanger (NRC) to J. Schlueter (NEI),  
Response to the Nuclear Energy Institute's Request to Use NEI 14-14,  
"Regulatory Issue Resolution Protocol," Regarding the Issue Associated with  
Medical Treatment of Personnel at Fuel Cycle Facilities

Subject: Request for Exemption from the 24-Hour Reporting Requirement of 10 CFR  
70.50(b)(3) for Medical Treatment of Contaminated Individuals at the Onsite  
Medical Clinic at BWXT NOG-L

Dear Sir or Madam:

BWXT Nuclear Operations Group, Inc. - Lynchburg (BWXT NOG-L), is requesting an exemption from the twenty-four hour reporting requirement in 10 CFR 70.50(b)(3) for situations that require an unplanned medical treatment at our onsite medical facility of an individual with spreadable contamination on the individual's clothing or body. Reference 2 provides the NRC staff review guidance applicable to exemption requests seeking relief from the reporting requirement of 10 CFR 70.50(b)(3) for instances involving the treatment of contaminated workers at onsite medical facilities. The enclosure to this letter provides BWXT NOG-L's justification for the exemption with respect to the review criteria identified in Reference 2.

If you have questions or require additional information, please contact Chris Terry, Manager of Licensing and Safety Analysis, at [cterry@bwxt.com](mailto:cterry@bwxt.com) or 434-522-5202.

Sincerely,

B. Joel Burch  
Vice President and General Manager  
BWXT Nuclear Operations Group, Inc. - Lynchburg

Enclosure

cc: NRC, Merritt Baker

NM5520

# **ENCLOSURE**

**TECHNICAL JUSTIFICATION FOR 10 CFR 70.50 (b)(3) EXEMPTION  
REQUEST**

## TECHNICAL JUSTIFICATION FOR 10 CFR 70.50 (b)(3) EXEMPTION REQUEST

In the enclosure to a letter dated January 27, 2017 (ADAMS Accession Number ML16064A053) to the Nuclear Energy Institute (Reference 2), the NRC identified five criteria to be utilized in the review of exemption requests seeking relief from the reporting requirements of 10 CFR 70.50(b)(3) in situation involving medical treatment of a contaminated individual at an onsite medical facility. Each of the five criteria is listed below in *italics* followed by BWXT NOG-L's technical justification which establish how each criterion is being met:

1. *The on-site medical facility is in a restricted area and not accessible to members of the public.*

### **BWXT NOG-L Justification**

The BWXT NOG-L onsite medical clinic is located within the site's Protected Area (PA) which is not accessible to the public. The PA is maintained in accordance with the applicable requirements of 10 CFR 73 and the site Physical Protection Plan. The PA is also controlled as a Restricted Area (RA) as defined in 10 CFR 20.1003. As such, access to the onsite medical clinic is restricted to either individuals with security clearances and current safety training or individuals that are formally escorted by trained security/safety escorts. The PA/RA is surrounded on all sides by an Owner Controlled Area (general site) which is also isolated from the public. At no time can visitors access the general site without being escorted or being provided General Employee Safety training (GEST) and dosimetry for the duration of their visit. All visitors are escorted in the PA/RA regardless of GEST or dosimetry issuance. Therefore, the on-site medical facility is in a restricted area and not accessible to members of the public.

2. *An injured worker can reach the onsite medical facility without traversing any areas accessible to the public.*

### **BWXT NOG-L Justification**

As noted above, the onsite medical clinic at BWXT NOG-L is within the site's Protected Area (PA)/Restricted Area (RA). The PA/RA is surrounded on all sides by the general site which is also isolated from the public. The BWXT NOG-L protected area/restricted area, Lynchburg Technology Center, Waste Treatment Facility and Security support facilities are included within a larger Owner Controlled Area which is not accessible to the public. For the case of a BWXT NOG-L injured worker outside of the PA/RA, but still within the general site, the onsite medical clinic can be reached without traversing any areas that are accessible to the public.

3. *Radiation safety personnel, who have been trained and qualified in contamination control, are readily available.*

### **BWXT NOG-L Justification**

BWXT NOG-L maintains a very mature Radiation Protection program. NOG-L employs sufficient Radiation Control Technician (RCT) staffing on each production shift (day shift, second shift and third shift) to support radiological work in controlled areas. The RCTs are

trained in the contamination control procedures and techniques required for responding to injured workers with spreadable contamination, and are readily available to respond to emergent conditions as needed. The RCTs must successfully complete a rigorous training and qualification program prior to performing unsupervised activities and must successfully complete an annual re-training/refresher training program to continue unsupervised work. In addition, the site employs a staff of Health Physicists (HPs) to provide guidance and technical radiological expertise to the RCTs. To complement the RCT training, the onsite medical clinic staff has also been trained on radiological fundamentals and site-specific hazards. The training emphasizes the responsibilities of the medical staff to treat the injury while relying on the attending RCT for contamination control and radiological waste management. The training provided to the onsite clinic staff is the same training that is provided to health care professionals at Lynchburg General Hospital who may be utilized to provide medical treatment to a contaminated BWXT NOG-L worker as discussed in section 4.2.2 of the BWXT NOG-L Emergency Plan.

BWXT NOG-L maintains a highly competent, trained emergency response organization which mandates responders must maintain current Radiation Worker Training (RWT) as well as other medical/emergency training as required by the State of Virginia. The emergency responders may render First Aid where required and will attend the patient from the point of injury to the onsite medical facility if further care is necessary. If more robust medical is required, then the individual is transported off-site to the local hospital under the escort and care of the emergency responders. In addition, the Radiation Protection organization is a component of the Emergency Response Organization and the RCTs respond with the emergency responders to provide radiological monitoring and contamination control. The RCTs maintain those duties until the patient is deemed to no longer have spreadable contamination. The RCTs have access to and manage the equipment necessary to perform these duties.

4. *Equipment and facilities that may be needed for contamination control are readily available.*

#### **BWXT NOG-L Justification**

The onsite medical clinic at the BWXT NOG-L site has a room dedicated to trauma response. In the event a contaminated worker needs medical treatment, which will not require transport to Lynchburg General Hospital, the BWXT NOG-L site's emergency response team and a RCT will escort the individual to the Trauma Room at the onsite medical clinic. Adjacent to the Trauma Room is the Radiation Control office. The Radiological Control office contains the equipment and facilities that may be needed for contamination control (instruments, survey materials, lay down plastic, protective clothing, decontamination basin, etc.), and this equipment is readily available to be transported into the Trauma Room as necessary.

5. *The licensee commits to establish and maintain a log of contaminated workers treated at the onsite medical facility, and provides this information for NRC inspection upon request.*

#### **BWXT NOG-L Justification**

BWXT NOG-L currently logs all instances of contaminated workers treated at the onsite medical facility and commits to continue this process. The logged information is maintained by Radiation Protection and is available to the NRC for inspection upon request.