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March 25, 2008 08-047

U.S. Nuclear Regulatory Commission Attn: Document Control Desk Washington, DC 20555

References: (1) License SNM-42, Docket 70-27

- (2) Letter dated August 24, 2007, Morrell (BWXT) to NMSS (NRC), 30-Day Written Report for Event Notification # 43528
- (3) Letter dated November 16, 2007, Cochrane (BWXT) to Document Control Desk (NRC), Response to Apparent Violation in Inspection Report No. 70-27/2007-06, EA-07-240
- (4) Letter dated January 23, 2008, Cochrane (BWXT) to Document Control Desk (NRC), Request for Modification to Commitment Made in Response to Apparent Violation 70-27/2007-006, EA-07-240 (Note: AV reference corrected via this letter dated March 25, 2008)
- (5) Letter dated February 26, 2008, Collins (NRC) to Cochrane (BWXT), Response to Request for Modification to Commitment Made in Response to Apparent Violation 70-27/2007-006-01

Subject:

Reply to NRC Request for Additional Information for Modification to Commitment Made in Response to Apparent Violation 70-27/2007-006-01

#### Gentlemen:

Enclosed is the BWXT response to the Request for Additional Information contained in the Reference (5) letter.

In the Reference (3) letter, BWXT committed to installing lifting devices on Raschig-ring-filled vacuum cleaners (RRVC) because up to this point all RRVCs were subject to transport outside of controlled areas. As stated in the Reference (4) letter, this commitment has been completed for those RRVCs that are intended for transport outside of a controlled area. Also in the Reference (3) letter, BWXT committed to implementing controls to prevent the transfer of Uranium Recovery RRVCs from the Uranium Recovery controlled area. This commitment has also been completed. For these reasons, as well as the ones stated in the Reference (4) letter, BWXT has requested to revise the commitment from "Installing lifting devices on Raschig-ring-filled"

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vacuum cleaners" to "Install lifting devices on Raschig-ring-filled vacuum cleaners intended for transport outside of a controlled area."

Should you have any questions or require additional information, please contact our Licensing Officer, Barry Cole, at (434) 522-5665.

Sincerely

Roger Cochrane General Manager

BWXT, Nuclear Operations Division

#### **Enclosure**

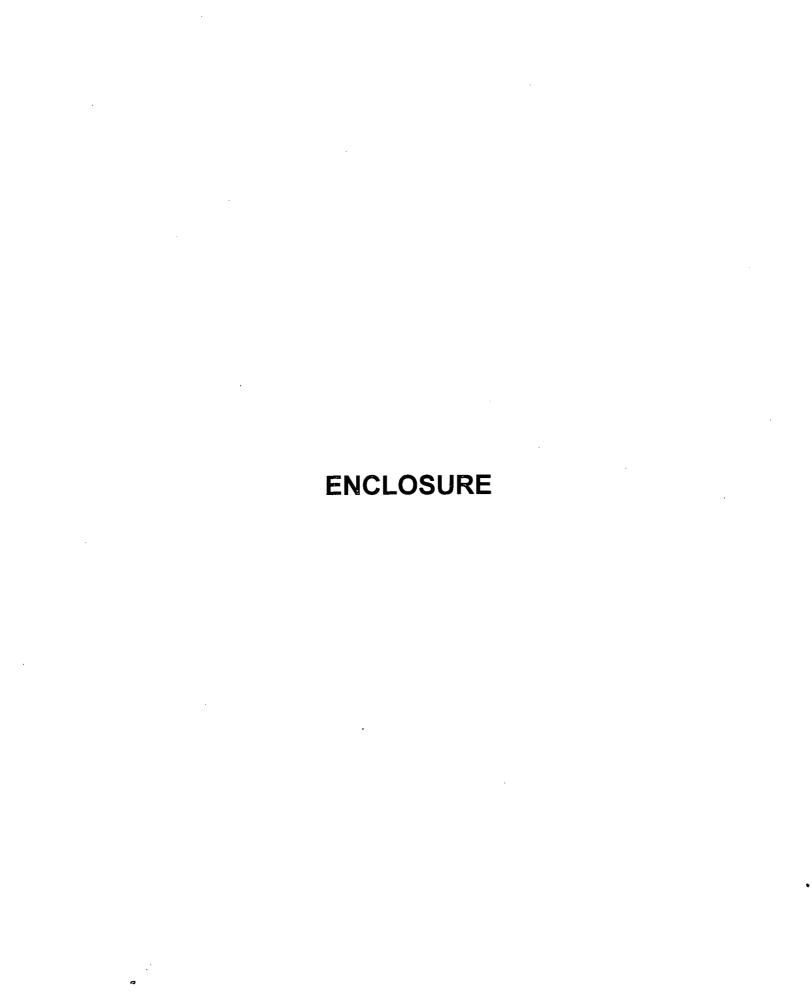
cc: NRC, Resident Inspector.

NRC, Amy Snyder

NRC, Region II, Regional Administrator

NRC, Director, Office of Enforcement

VDH, Director, Bureau of Radiological Health



## Information Provided Pursuant to NRC Request For Additional Information in Letter dated February 26, 2008

Set forth below is information in response to NRC regulations and the NRC Request For Additional Information (RAI) in a letter dated February 26, 2008 to support modification to a commitment made in BWXT's response to Apparent Violation 70-27/2007-006-01:

# RAI #1: Describe how BWXT will maintain awareness and control over which vacuums will only be used in a controlled area.

As discussed in the Reference (2) letter, there are two groups of Raschig-ring-filled vacuum cleaners (RRVCs) at the BWXT facility as shown in the table below. All of these RRVCs are used in controlled areas. The seven RRVCs in Group 1 are dedicated to the Uranium Recovery & Specialty Fuel Facility controlled area, and are used for general cleaning activities. These RRVCs remain in that controlled area, and consequently, do not have lifting devices. The six RRVCs in Group 2 are equipped with lifting devices for fork-lift trucks; these vacuum cleaners are infrequently transferred to other areas of the facility. They are also transferred into the Uranium Recovery & Specialty Fuel Facility controlled area to be serviced as needed.

Raschig-Ring-filled Vacuum Cleaners: Groups & Dedicated Areas

RRVC	Group	Dedicated Controlled Area	Lifting Device
1	1	Uranium Recovery & Specialty Fuel Facility	No
2	1	Uranium Recovery & Specialty Fuel Facility	No
3	1	Uranium Recovery & Specialty Fuel Facility	No
4	1	Uranium Recovery & Specialty Fuel Facility	No
5	1	Uranium Recovery & Specialty Fuel Facility	No
6	1	Uranium Recovery & Specialty Fuel Facility	No
7	1	Uranium Recovery & Specialty Fuel Facility	No
8	2	Process Development Laboratory	Yes
9	2	Chemistry Laboratory	Yes
10	2	Filler Manufacturing Area	Yes
11	2	Metallurgical Laboratory	Yes
12	2	Research Test Reactor & Target Area	Yes
13	2	Research Test Reactor & Target Area	Yes

Control of the RRVCs in Group 1 is maintained per BWXT procedure OP-0061167 – Spill and Leak Handling Emergency Procedure. This procedure prohibits the transfer of the Group 1 RRVCs from the Uranium Recovery &

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Specialty Fuel Facility controlled area. Control of the Group 2 RRVCs is maintained per BWXT procedure OP-1020110 – SNM Internal Transfer Procedure. This procedure requires that a RRVC being transported be equipped with the appropriate lifting device , and also requires verification that the RRVC contains  $\leq 2.5$  liters of solution or the uranium concentration of the solution is  $\leq 5$  grams/liter. All RRVCs are posted with Nuclear Criticality Safety (NCS) requirements. Foremen and operators train to these procedures and postings.

### RAI #2: Describe how the vacuums that will not be transported to the controlled area will be controlled.

As stated in the response to RAI #1, the RRVCs dedicated to the Uranium Recovery & Specialty Fuel Facility controlled area remain in that controlled area and do not have lifting devices for transport. Control of these RRVCs is maintained per BWXT procedure OP-0061167 – Spill and Leak Handling Emergency Procedure. This procedure prohibits the transfer of these RRVCs from the Uranium Recovery & Specialty Fuel Facility controlled area.

### RAI #3: Discuss what criteria will be used to determine when a vacuum cleaner is to be removed from a controlled area.

As discussed in the above responses to RAI #1 and RAI #2, the RRVCs dedicated to the Uranium Recovery & Specialty Fuel Facility controlled area remain in that controlled area. The RRVCs dedicated for use in the other controlled areas are transferred per BWXT procedure OP-1020110 – SNM Internal Transfer Procedure. This procedure requires that a RRVC being transported be equipped with the appropriate lifting device, and also requires verification that the RRVC contains  $\leq 2.5$  liters of solution or the uranium concentration of the solution is  $\leq 5$  grams/liter.

### RAI #4: Do all controlled areas have a mechanism to pump the waste from the vacuums that are dedicated to those areas?

Yes.

# RAI #5: Describe how BWXT will control the waste transfer from the vacuums that will not be transported out of controlled areas.

The RRVCs used in the Uranium Recovery & Specialty Fuel Facility controlled area will also be discharged in that area. After the uranium concentration is determined, the solutions are either transferred into a waste collection system or into the appropriate system for further processing as needed.

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# RAI #6: Will controlled area vacuums be dedicated to one specific area or used at any controlled area location?

As stated in the responses to RAI #1, RAI #2 and RAI #3, the RRVCs dedicated to the Uranium Recovery & Specialty Fuel Facility controlled area remain in that controlled area. RRVCs dedicated for use outside the Uranium Recovery & Specialty Fuel Facility may be used in other controlled areas, and are transported according to the requirements of OP-1020110 – SNM Internal Transfer Procedure. This procedure requires the use of a transport lifting device and verification that the RRVC contains  $\leq 2.5$  liters of solution or the uranium concentration of the solution is  $\leq 5$  grams/liter.