



**Department of Energy**  
West Valley Demonstration Project  
10282 Rock Springs Road  
West Valley, NY 14171-9799

September 18, 2019

Ms. Amy Snyder, Senior Project Manager  
Materials Decommissioning Branch  
Division of Decommissioning, Uranium Recovery,  
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Office of Nuclear Material Safety and Safeguards  
U.S. Nuclear Regulatory Commission  
Two White Flint North  
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**SUBJECT:** Transmittal of Final "Study" Document: "Vitrification Facility Air Emissions during Open-Air Demolition, Measured vs Predicted," WVDP-579, Rev. 0

- REFERENCES:** 1) Letter (381378), S. A. Anderson to A. M. Cooney, "Contract No. DE-EM0001529, Section J-3, Item 125, Regulator Reports/Plans, 'Vitrification Facility Air emissions During Open-Air Demolition, Measured vs. Predicted,' WVDP-579," dated September 5, 2019
- 2) Email (381421), A. Snyder to M. N. Maloney, "WVDP Weekly Project Status Report," dated June 3, 2019
- 3) Letter (380841), A. Snyder to B. C. Bower, "U.S. Department of Energy West Valley Demonstration Project Main Plant Process Building Decommissioning & Demolition Plan, WVDP-586, Revision 1, dated September 27, 2017 (Docket No. 05000201 (POOM-032)), dated May 30, 2019

Dear Ms. Snyder:

Enclosed, please find the Final "Study" Document: "Vitrification Facility Air Emissions during Open-Air Demolition, Measured vs Predicted," WVDP-579, Rev. 0 which is being submitted in response to your requests (References 2 and 3). Please note that this Final "Study" document includes the "Test Plan for Study of Air Emissions from the Demolition of the Vitrification Facility at West Valley Demonstration Project (WVDP) Compared to Emissions Estimates Using Methodology for Radionuclide Source Term Calculations for Air Emissions from Demolition Activities," BC-RP-0112, Rev. D ("Test Plan") and the revised "Methodology for Radionuclide Source Term Calculations for Air Emissions from Demolition Activities," BC-RP-0124, Rev. 1 ("Alternative Method") which will be used for future WVDP demolition assessments. The "Study" findings and subsequent changes to the attached "Alternative Method" were based on AERMOD software modeling and comparisons with actual radiological air concentrations. An external U.S. Department of Energy reviewer has verified AERMOD calculations.

Ms. Amy. Snyder

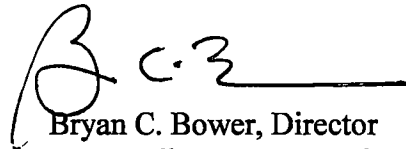
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Lastly, please note that the Vitrification Facility demolition electronic AERMOD calculations and information (also submitted to the EPA), used for rad-National Emission Standard for Hazardous Air Pollutants compliance is being submitted to you via email in parallel with this correspondence.

Please contact Moira N. Maloney of my staff at (716) 942-4255 if you have any questions or need additional information.

Sincerely,



Bryan C. Bower, Director  
West Valley Demonstration Project

Enclosure: "Vitrification Facility Air Emissions during Open-Air Demolition Measured vs Predicted" (WVDP-579, Rev. 0; BC-RP-0117, Rev. 0)

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