



U.S. Department of Energy Hanford Site

4/28/2020

20-ECD-0012

Mr. John Martell, Manager
Radioactive Air Emissions Section
Washington State Department of Health
309 Bradley Blvd., Suite 201
Richland, Washington 99352
(Hanford Mailstop: B1-42)

Dear Mr. Martell:

U.S. DEPARTMENT OF ENERGY, OFFICE OF RIVER PROTECTION SUBMITTAL OF PROPOSED DEVIATION TO WASTE TREATMENT AND IMMOBILIZATION PLANT RADIOACTIVE AIR EMISSION UNIT PITOT TUBE ORIENTATION SENSITIVITY TESTING UNDER 40 CFR 52, APPENDIX E

- References:
1. WDOH letter from P. J. Martell to K. W. Smith, ORP, "Conditional Installation Approval of Waste Treatment Plant Analytical Laboratory Radioactive Stack Sampling and Monitoring Systems," AIR 13-1203, dated December 12, 2013.
 2. WDOH letter from J. Martell to B. T. Vance, ORP, "Approval of Installation of Radioactive Air Emissions Sampling and Monitoring Systems at Waste Treatment and Immobilization Plant (WTP) Low-Activity Waste (LAW) Facility," AIR 19-207 Corrected, dated February 20, 2019.
 3. WDOH letter from J. Martell to B. T. Vance, ORP, "Approval of Installation of Sampling Systems at Effluent Management Facility (EMF)," AIR 19-1011, dated October 25, 2019.
 4. Email from G. Laws, WDOH, to R. Haggard, BNI, "WTP Laboratory SDJ Orientation Sensitivity Testing Under 40 CFR 52 Appendix E," dated November 25, 2019.
 5. Email from G. Laws, WDOH, to B. Walker, BNI, "40 CFR 52 Appendix E Deviation Request," dated December 5, 2019.

By References 1 through 3, the Washington State Department of Health (WDOH) approved the Waste Treatment and Immobilization Plant (WTP) radioactive stack sampling and monitoring system designs and authorized installation. The design documentation supporting WDOH's installation approvals commit to performing 40 CFR 52, Appendix E pitot tube orientation

sensitivity testing on each WTP emission unit. Recent testing of the Laboratory emission unit pitot tubes determined that the 40 CFR 52 orientation sensitivity criteria is not intended for bolted flange designs where rotation is prevented.

On November 20, 2019, Bechtel National, Inc., and the U.S. Department of Energy (DOE) presented WDOH with a proposal to deviate from the orientation sensitivity criteria since all WTP radioactive air emission unit pitot tubes are bolted flange design. The WDOH informally concurred with the proposal and agreed that the deviation should apply to all WTP emission units (Reference 4). The WDOH concurrence also requested DOE to submit a formal deviation request to confirm its formal review and approval.

WDOH's informal review of this request (Reference 5) confirmed that its previous observation of correctly installed Laboratory emission unit pitot tubes supersedes the need to perform 40 CFR 52, Appendix E orientation sensitivity testing, as it demonstrates a proper fixed alignment to the system flow.

DOE is requesting formal approval from WDOH of the deviation request. If approved, the deviation request will be incorporated into each WTP emission unit ANSI N13.1 Code Compliance Matrix.

If you have any questions, please contact Bryan R. Trimberger, Environmental Compliance Division, Office of River Protection, on (509) 376-2674.

Sincerely,



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ou=Department of Energy, cn=GLYN
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Glyn D. Trenchard, Assistant Manager
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