

Berven, Shawna D (DOH)

From: Utley, Randell J (DOH)
Sent: Tuesday, February 12, 2013 11:08 AM
To: Berven, Shawna D (DOH)
Subject: FW: Request for Approval to Relocate N576 NFM and Remove N577 NFM
Attachments: Removal of N577 NFM Station -(02-08-2013).pdf

Importance: High

Shawna,

Please assign an incoming mail to the attached e-mail and attachment.

RAES Tracking Title: Removal of N577 Air Monitor and Relocation of N576 Air Monitor
Associate: USDOE FF-01 License

Thank you,
Randy

From: Bates, John A [mailto:John_A_Bates@rl.gov]
Sent: Monday, February 11, 2013 4:35 PM
To: Martell, P John (DOH)
Cc: Schmidt, John W (DOH); Jackson, Dale E; Utley, Randell J (DOH); Rogers, Tom / Richland (DOH); McDonald, John (Scott) (DOH); Splett, Dale H; Balone, Steven N; Turlington, Daniel R; Engelmann, Richard H; Cawrse, Allan E; Dixon, Brian J; Beam, Thomas G; Perkins, Craig J; Bates, John A
Subject: Request for Approval to Relocate N576 NFM and Remove N577 NFM
Importance: High

Mr. Martell,

This email and attachment are provided on behalf of the DOE-RL (contact: Dale Jackson, 376-8086). The attached request describes a change to the diffuse and fugitive environmental monitoring network of near-facility ambient air monitors, specifically two monitoring stations located in the 100 K Area of the U.S. Department of Energy (DOE) Hanford Site. In accordance with Section 5.1.7, "Changes to the Diffuse and Fugitive Environmental Monitoring, "of the Hanford Site FF-01 License, DOE is requesting Washington State Department of Health (WDOH) approval to relocate the ambient air monitoring station N576 and remove station N577. Aside from the proposed changes, no other modifications to the NFM program are identified in the request. We propose that the remaining stations surrounding 100 K Area will provide adequate tracking and trending of ambient air quality in the near field area.

We have worked closely with Randy Utley, Scott McDonald, and Tom Rogers of your office regarding this request. Their attention to this request and their positive approach are appreciated. Please call or reply with any questions.

Best Regards,

John Bates ✉
Environmental Protection/Technical Services
CH PRC
376-2088 Cell 531-8192

Request for Approval to Relocate
Near Facility Ambient Air Monitoring Station N576
And Remove Station N577

This request describes a change to the diffuse and fugitive environmental monitoring network of near-facility ambient air monitors, specifically two monitoring stations located in the 100 K Area of the U.S. Department of Energy (DOE) Hanford Site. In accordance with Section 5.1.7, "Changes to the Diffuse and Fugitive Environmental Monitoring," of the Hanford Site FF-01 License, DOE is requesting Washington State Department of Health (WDOH) approval to relocate the ambient air monitoring station N576 and to remove the ambient air monitoring station N577. Aside from the proposed changes, no other modifications to the NFM program are identified in this request.

As noted in Figure 1, the N576 and N577 stations exist as two in a perimeter of seven such Near Facility Monitoring Program stations surrounding the 100KW and 100KE cleanup activities. Recently conducted deactivation, decontamination, decommissioning, and demolition (D4) and soil remediation activities associated with CERCLA removal and remedial actions at these 100K locations have resulted in a significant reduction in the surface contamination footprint and complete removal of the 105-KE spent fuel storage facility. For this reason, localized sources of fugitive/diffuse emissions of radionuclides have been greatly reduced, with minimal remaining emissions associated with the 100KE and 100KW locale.

The N576 station is presently powered by building utility power, but as part of planned cleanup of the nearby administrative and non-radiological support facilities this power source will be removed. It is therefore proposed, and WDOH has tentatively agreed, to relocate the station to a position nearer the 105 KW footprint, very near the northeast corner of the MO500 office building, and proximal to but well removed from the intersection of K Avenue and Winchester Street. This location allows for the station to be powered by building utility power, yet retains a desirable near-facility distance of approximately 400 meters from the 105 KW fugitive/diffuse source.

The N577 station is presently being powered by 24-hour operation of a portable diesel-fired generator. The remaining perimeter of six stations at 100K Area will remain operating to meet the objectives of the near-facility environmental monitoring program. Current 100K Area site cleanup schedules call for much reduced outdoor site cleanup activities to be occurring in the 100 KW and 100 KE locations for the next several years.

As is evident by the Near Facility Monitoring Program sample results shown in Figure 2 below, ambient air sample results for the N576 and N577 stations combined with the other two stations covering the southeast quadrant of 100K Area have for the past several years demonstrated comparable and very stable levels of ambient air quality, even during the height of the 100 K cleanup activities involving outdoor contaminated sites. With outdoor cleanup activities significantly scaled down for the next several years, no expected challenges to the air quality would support the need for all four indicated monitoring stations. We also do not find any unique terrain, source location aspects, or building wake effects that would compromise the ability of the remaining stations (i.e., after relocation of N576 and removal of N577) to adequately track ambient air quality for the southeast quadrant of the 100K Area. The station N577 is not specifically relied upon for any current conditions, and no planned actions relying upon this station are currently funded. At the point any new cleanup activities are scheduled in upcoming years, the requirements for any new monitoring stations will be revisited, with added stations provided if and where needed.

Also, based upon precedent established with Washington State Department of Ecology regarding the Hanford Site Air Operating Permit, adjustment in various stations within the Hanford Site Near Facility Monitoring network does not represent an overall reduction in monitoring of the Hanford Site fugitive/diffuse ambient air conditions. For this reason there has been no identified need for an AOP modification reflecting the requested relocation and removal. With the stated understandings in place, we request approval to relocate the N576 station, and to remove the N577 station with its attendant need for operation of a portable continuous power generator.

Figure 2. Alpha/Beta Airborne Concentrations Observed at Stations N535, N576, N577, and N900 (also labeled PNNL-1)

