

5.3 Air Quality



This section provides information about federal statutes and assessments related to air quality.

5.3.1 Clean Air Act

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The *Clean Air Act*, the basis for federal air quality regulations, was passed in 1967 and had comprehensive amendments in 1970, 1977, and 1990. In accordance with Section 112 of the *Clean Air Act*, EPA established the *National Emissions Standards for Hazardous Air Pollutants* (40 CFR 61). DOE and EPA signed the *Federal Facility Compliance Agreement for Radionuclides NESHAP* (EPA 1994). The agreement provides a plan and schedule that are being followed to bring the Hanford Site into compliance with *Clean Air Act* requirements under 40 CFR 61, Subpart H, for continuous measurement of emissions from applicable airborne emission sources. Scheduled milestones of the agreement were met during 2004, and Hanford Site radiological air emissions remained well below the levels that approach the EPA offsite emission standard of 10 mrem (100 μ Sv) per year (40 CFR 61.92) (see Section 8.1). The requirements for flow and emissions measurements, quality assurance, and sampling documentation have been implemented at Hanford Site emission sources and/or are monitored for milestone progress in accordance with a schedule approved by EPA and monitored by the Washington State Department of Health. Data for the sources are documented annually in the *Radionuclide Air Emissions Report for the Hanford Site, Calendar Year 2004* (e.g., DOE/RL-2005-06).

The Washington State Department of Health's Division of Radiation Protection regulates radioactive air emissions statewide through Washington State legislative authority. The Hanford Site operates under state license FF-01 for air emissions. Conditions specified in the license were incorporated into the Hanford Site air operating permit

issued by the Washington State Department of Ecology in July 2001. The permit provides a compilation of applicable *Clean Air Act* requirements both for radioactive and non-radioactive emissions. The permit requires the DOE Richland Operations Office to submit periodic reports (e.g., DOE/RL-2002-38) and an annual compliance certification to the Washington State Department of Ecology.

The Washington State Department of Ecology's Nuclear Waste Program regulates air toxic and criteria pollutant emissions from the Hanford Site. The Department enforces state regulatory controls for air contaminants as allowed under the *Washington Clean Air Act* (RCW 70.94). The EPA regulates other potential air emission sources under the *Clean Air Act* at the Hanford Site.

At the local level, EPA designated the Benton Clean Air Authority as the agency to establish a local oversight and compliance program for asbestos renovation and/or demolitions. Benton Clean Air Authority imposes additional requirements on sources within the local agency's jurisdiction and incorporates the EPA's regulation by reference (i.e., the *National Emission Standards for Asbestos* [40 CFR 61, Subpart M]). In addition, the Benton Clean Air Authority regulates open-air burning as an extension of the Washington State Department of Ecology's open-air burning requirements (WAC 173-425).

5.3.2 Clean Air Act Enforcement Inspections

R. C. Bowman

Hanford Site contractors and DOE have worked to resolve notices of violation and warning letters of non-compliance that were received from the Washington State Department of Health and Washington State Department of Ecology during 2004. These documents identify conditions that are alleged to be non-compliant with *Clean Air Act*



requirements. The following paragraphs summarize the four *Clean Air Act* non-compliance documents that were received in 2004.

On March 2, 2004, the Washington State Department of Health issued a Notice of Correction against the 291-T-1 emission unit associated with T Plant. The Washington State Department of Health wrote the Notice of Correction based on their review of the T Plant air permit description and operations found to be outside that scope. As a result of the five findings identified, an update of the T Plant air permit application was pursued. On April 26, 2005, the Consolidated T Plant Operations Notice of Construction (i.e., air permit) was approved by the Washington State Department of Health addressing all current and planned activities at the plant.

On March 4, 2004, the Washington State Department of Health issued a Notice of Correction against the 296-B-2 emission unit associated with B Plant. The Washington State Department of Health wrote the Notice of Correction based on findings from an inspection to determine if capping the 296-B-2 passive vent was in compliance with WAC 246-247, *Radiation Protection—Air Emissions*, standards. As a result of the review, seven findings were identified. On April 30, 2004, DOE provided the Washington State Department of Health with a response to the Notice of Correction findings. The Washington State Department of Health reviewed the response and indicated their desire to meet with the DOE Richland Operations Office to discuss the response.

On July 12, 2004, the Washington State Department of Health issued a Notice of Correction against the 296-P-31 emission unit associated with the 209 E Criticality Laboratory. The Washington State Department of Health wrote the Notice of Correction based on a review of document maintenance practices associated with the emission unit. The Washington State Department of

Health alleged that the licensee was out of compliance because of a failure to retain and provide documents to them as is required by WAC 246-247-080(8) and (10), *Inspections, Reporting, and Recordkeeping*. As a result of the review, one finding was identified. On October 26, 2004, the DOE Richland Operations Office provided an initial response to the Notice of Correction addressing its records retention and provision failure in the case of the 209-E facility. The response addressed two of the three actions specified in the Notice of Correction. The records failure was found to be an isolated incident based on the DOE Richland Operations Office investigation and survey of Hanford prime contractor records practices. On February 11, 2005, the DOE Richland Operations Office provided an ALARA Control Technology assessment of the 209-E facility, demonstrating the associated stack provides minor potential for emissions. Provision of the assessment completed the third and final action specified in the Notice of Correction. As of August 16, 2005, the Washington State Department of Health is reviewing the assessment and is expected to close the Notice of Correction in the near future.

On September 9, 2004, the Washington State Department of Health issued a Notice of Correction against the Central Waste Complex Permacon Unit. The Washington State Department of Health wrote the Notice of Correction based on findings resulting from an inspection they performed on August 11, 2004, to determine compliance of the Central Waste Complex Permacon Unit with WAC 246-247 standards. As a result of their review, six findings were identified. In two separate letters, dated September 23 and October 21, 2004, the DOE Richland Operations Office provided responses to complete actions called for in the six findings. As of August 16, 2005, the Washington State Department of Health has not closed the Notice of Correction.