UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 2

In the Matter of:

United States Department of Energy,

Respondent,

In a proceeding under Section 113(d) of the Clean Air Act, 42 U.S.C. § 7413(d)

CONSENT AGREEMENT AND FINAL ORDER

CAA-02-2014-1219

Protection Agency-Reg :

PRELIMINARY STATEMENT

This Consent Agreement and Final Order (CAFO) simultaneously commences and concludes an administrative penalty proceeding brought by the Complainant, the Director of the Division of Enforcement and Compliance Assistance for the U.S. Environmental Protection Agency (EPA) Region 2, against Respondent United States Department of Energy (DOE or Respondent), pursuant to Section 113(d) of the Clean Air Act (CAA or the Act), 42 U.S.C. § 7413(d), and Rules 22.13(b) and 22.18(b) of EPA's Consolidated Rules of Practice Governing the Administrative Assessment of Civil Penalties (the Consolidated Rules), 40 C.F.R. Part 22.

The Consent Agreement portion of this CAFO is signed by the Complainant and duly authorized representatives of Respondent. The Final Order portion of the CAFO is issued by the Region 2 Regional Administrator.

CONSENT AGREEMENT

A. General Provisions

- 1. The purpose of this Consent Agreement is to resolve alleged violations of the CAA and its implementing regulations by the Respondent at DOE's Knolls Atomic Power Laboratory (KAPL) located in Niskayuna, New York.
- 2. The specific alleged violations covered by this Consent Agreement are identified below in Paragraphs 79-87. Consistent with Consolidated Rules 22.13(b) and 22.18(b), the execution and filing of this Consent Agreement and the accompanying Final Order will simultaneously commence and conclude EPA's administrative penalty proceeding for those alleged violations.
- 3. Solely for the purposes of EPA's administrative penalty proceeding, and consistent with Consolidated Rule 22.18(b), Respondent:
 - a. admits the jurisdictional allegations set forth below in Paragraphs 4-11;
 - b. neither admits nor denies the factual allegations set forth below in Paragraphs 40-73;
 - c. consents to the payment of the civil penalty specified in the section of this Consent Agreement entitled "F. Settlement," on the terms specified in that section;
 - d. consents to the issuance of the attached Final Order; and
 - e. waives any right to contest the allegations set forth in Paragraphs 74-87 below, and any right to appeal the attached Final Order.

B. Jurisdictional Allegations

4. Section 113(d) of the CAA authorizes the EPA Administrator to issue an order assessing civil administrative penalties against any person that has violated or is violating any requirement or prohibition of subchapters I, III, IV-A, V or VI of the Act, or any requirement or prohibition of any rule, order, waiver, permit or plan promulgated pursuant to any of those

subchapters, including but not limited to any regulation promulgated pursuant to Sections 112 and 114 of the Act.

- 5. Section 302(e) of the CAA provides that whenever the term "person" is used in the Act, the term includes an individual, corporation, partnership, association, state, municipality, political subdivision of a State, and any agency, department, or instrumentality of the United States and any officer, agent, or employee thereof.
- 6. Pursuant to EPA Delegation of Authority 7-6-A and EPA Region 2 Delegation of Authority 7-6-A, the EPA Administrator has delegated to the Complainant, the Director of the Division of Enforcement and Compliance Assistance, through the Region 2 Regional Administrator, the authority to (a) make findings of violations, (b) issue CAA Section 113(d) administrative penalty complaints, and (c) agree to settlements and sign consent agreements memorializing those settlements.
- 7. Pursuant to EPA Delegation of Authority 7-6-C, the Administrator has delegated to the Region 2 Regional Administrator the authority to execute CAA Section 113(d) Final Orders.
- 8. Pursuant to Section 113(d), the Administrator and the Attorney General, through their respective delegatees, have jointly determined that this matter is appropriate for an administrative penalty proceeding. Specifically, the U.S. Department of Justice granted EPA's request for a waiver of Section 113(d)'s limits on EPA's authority, by letter dated June 25, 2013.
 - 9. Respondent is a "person" within the meaning of Section 302(e) of the Act.
- 10. Respondent is an "owner" and/or "operator" of the Facility, as those terms are used in CAA Section 112(a)(9) and 40 C.F.R. § 61.02.
 - 11. The Facility is subject to 40 C.F.R. Part 61, Subparts A and H.

C. Legal Background

CAA Section 112

- 12. Section 112 of the Act authorizes the EPA Administrator to issue national emission standards for categories of sources that emit hazardous air pollutants (HAPs). Such standards are commonly known as National Emission Standards for Hazardous Air Pollutants, or NESHAPs.
- 13. NESHAPs that were first promulgated pursuant to the CAA as it existed prior to the 1990 CAA amendments are codified at 40 C.F.R. Part 61. NESHAPs that were first promulgated pursuant to the CAA as amended in 1990 are codified at 40 C.F.R. Part 63.
- 14. Section 112(q) of the Act provides that any standard promulgated pursuant to Section 112 and in effect prior to the 1990 CAA amendments remains in force and effect after those amendments.
- 15. Section 112(c)(1)(B) of the Act as it existed prior to the 1990 CAA amendments, and Section 112(i)(3)(A) of the Act as it exists today, require new and existing sources of air pollution to comply with standards promulgated pursuant to Section 112.
- 16. In 1979, the EPA Administrator determined that radionuclides are HAPs subject to regulation under Section 112 of the Act. *See* 44 Fed. Reg. 76738 (Dec. 27, 1979).

 Part 61 Subpart A: The Part 61 General Provisions
- 17. Pursuant to Sections 112 and 114 of the Act, EPA promulgated 40 C.F.R. Part 61, Subpart A (the Part 61 General Provisions).
- 18. The Part 61 General Provisions set forth definitions and requirements that apply to the owners and operators of any stationary source for which a standard is prescribed under 40 C.F.R. Part 61. *See* 40 C.F.R. § 61.01(c).

19. 40 C.F.R. § 61.02 defines:

- a. "construction" as fabrication, erection, or installation of an affected facility.
- b. "effective date" as the date of promulgation in the Federal Register of an applicable standard or other regulation under 40 C.F.R. Part 61, Subpart A.
- c. "existing source" as any stationary source which is not a new source.
- d. "new source" as any stationary source, the construction or modification of which is commenced after the publication in the Federal Register of proposed NESHAPs which will be applicable to such source.
- e. "owner or operator" as any person who owns, leases, operates, controls, or supervises a stationary source.
- f. "standard" as a national emission standard including a design, equipment, work practice or operational standard for a HAP proposed or promulgated under the Part 61 NESHAP General Provisions.
- g. "stationary source" as any building structure, facility, or installation which emits or may emit any air pollutant which has been designated as hazardous by the Administrator.
- 20. 40 C.F.R. § 61.12(c) provides that the owner or operator of each stationary source shall maintain and operate the source, including associated equipment for air pollution control, in a manner consistent with good air pollution control practice for minimizing emissions. It also provides that determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operating and maintenance procedures, and inspection of the source.

Part 61 Subpart H: The RAD NESHAP

21. On December 15, 1989, EPA, pursuant to Sections 112 and 114 of the 1977 Act, promulgated the "National Emissions Standards for Emissions of Radionuclides Other than Radon from Department of Energy Facilities," 40 C.F.R. Part 61, Subpart H (the RAD

NESHAP). See 54 Fed. Reg. 51695 (Dec.15, 1989). EPA, on two occasions, amended the emission monitoring and testing procedures of section 61.93 of the RAD NESHAP. See 65 Fed. Reg. 62156 (Oct 17, 2000) and 67 Fed. Reg. 57166 (Sept. 9, 2002).

- 22. 40 C.F.R. § 61.90 provides that the provisions of the RAD NESHAP apply to operations at any facility owned or operated by DOE that emits any radionuclide other than radon-222 and radon-220 into the air, except that the provisions do not apply to disposal at facilities subject to 40 C.F.R. Part 191, Subpart B or 40 C.F.R. Part 192.
- 23. 40 C.F.R. § 61.91 provides that all terms not defined in that section have the meaning given them in the Act or the Part 61 NESHAP General Provisions.
- 24. 40 C.F.R. § 61.91(b) defines "facility" as all buildings, structures and operations on one contiguous site.
- 25. 40 C.F.R. § 61.92 sets an emission standard for facilities covered by the RAD NESHAP. It provides that the emissions of radionuclides to the ambient air from DOE facilities shall not exceed those amounts that would cause any member of the public to receive in any year an effective dose equivalent of 10 mrem/yr.
- 26. 40 C.F.R. § 61.93(a) provides that to determine compliance with the standard, radionuclide emissions shall be determined and effective dose equivalent values to members of the public calculated using EPA approved sampling procedures, computer models CAP–88 or AIRDOS-PC, or other procedures for which EPA has granted prior approval. It also provides that DOE facilities for which the maximally exposed individual lives within 3 kilometers of all sources of emissions in the facility, may use EPA's COMPLY model and associated procedures for determining dose for purposes of compliance.

- 27. 40 C.F.R. § 61.93(b) provides that radionuclide emission rates from existing point sources (stacks or vents) shall be measured in accordance with the requirements of that paragraph, or with the requirements of 40 C.F.R. § 61.93(c), or with other procedures for which the EPA has granted prior approval.
- 28. 40 C.F.R. § 61.93(b)(4)(i) provides that radionuclide emission measurements in conformance with the requirements of paragraph (b) of section 61.93 shall be made at all release points which have a potential to discharge radionuclides into the air in quantities which could cause an effective dose equivalent in excess of 1% of the standard set forth at 40 C.F.R. § 61.92. All radionuclides which could contribute greater than 10% of the potential effective dose equivalent for a release point shall be measured. It also provides that, with prior EPA approval, DOE may determine these emissions through alternative procedures and states for other release points which have a potential to release radionuclides into the air, periodic confirmatory measurements shall be made to verify the low emissions.
- 29. 40 C.F.R. § 61.93(b)(4)(ii) provides that to determine whether a release point is subject to the emission measurement requirements of paragraph (b) of section 61.93, it is necessary to evaluate the potential for radionuclide emissions for that release point. It also provides that in evaluating the potential of a release point to discharge radionuclides into the air for the purposes of this section, the estimated radionuclide release rates shall be based on the discharge of the effluent stream that would result if all pollution control equipment did not exist, but the facilities operations were otherwise normal.
- 30. 40 C.F.R. § 61.93(c) provides that radionuclide emission rates from new point sources (stacks or vents) as defined in 40 C.F.R. Part 60 Subpart A shall be measured in

accordance with the requirements contained in 40 C.F.R. § 61.93(c), or with other procedures for which the EPA has granted prior approval.

- 31. 40 C.F.R. § 61.93(d) provides that when it is impractical to measure the effluent flow rate at a source in accordance with the requirements of paragraph (b)(1) or (b)(2) of 40 C.F.R. § 61.93, the facility owner or operator may use alternative procedures provided that (i) it can be shown that (b)(1) or (2) are impractical for the effluent stream, (ii) the alternative procedure will not significantly underestimate the emissions, (iii) the alternative procedure is fully documented, and (iv) the owner or operator has received prior approval from EPA.
- 32. 40 C.F.R. § 61.93(e), (f) and (g) provide methods to measure radionuclide emission rates from diffuse sources.
- 33. 40 C.F.R. § 61.93(e) provides that radionuclide emission measurements in conformance with the requirements of 40 C.F.R. § 61.93(b) shall be made at all release points that have a potential to discharge radionuclides into the air in quantities that could cause an effective dose equivalent in excess of 1% of the standard. It also provides that all radionuclides which could contribute greater than 10% of the potential effective dose equivalent for a release point shall be measured. In addition it provides that with prior EPA approval, DOE may determine these emissions through alternative procedures. It further provides that for other release points which have a potential to release radionuclides into the air, periodic confirmatory measurements shall be made to verify the low emissions.
- 34. Pursuant to 40 C.F.R. § 61.93(f), to determine whether a release point is subject to the emission measurement requirements of 40 C.F.R. § 61.93(b) or (c), it is necessary to evaluate the potential for radionuclide emissions for that release point. It also provides that in evaluating the potential of a release point to discharge radionuclides into the air for the purposes of this

section, the estimated radionuclide release rates shall be based on the discharge of the effluent stream that would result if all pollution control equipment did not exist, but the facilities operations were otherwise normal.

- 35. 40 C.F.R. § 61.93(g) provides that environmental measurements of radionuclide air concentrations at critical receptor locations may be used as an alternative to air dispersion calculations in demonstrating compliance with the standard if the owner or operator meets the following criteria:
 - (1) The air at the point of measurement shall be continuously sampled for collection of radionuclides.
 - (2) Those radionuclides released from the facility that are the major contributors to the effective dose equivalent must be collected and measured as part of the environmental measurement program.
 - (3) Radionuclide concentrations that would cause an effective dose equivalent of 10% of the standard shall be readily detectable and distinguishable from background.
 - (4) Net measured radionuclide concentrations shall be compared to the concentration levels in Table 2 appendix E of the RAD NESHAP to determine compliance with the standard. In the case of multiple radionuclides being released from a facility, compliance shall be demonstrated if the value for all radionuclides is less than the concentration level in Table 2 of appendix E of the RAD NESHAP, and the sum of the fractions that result when each measured concentration value is divided by the value in Table 2 of appendix E of the RAD NESHAP for each radionuclide is less than 1.
 - (5) A quality assurance program shall be conducted that meets the performance requirements described in Part 61, Appendix B, Method 114 of the RAD NESHAP.
 - (6) Use of environmental measurements to demonstrate compliance with the standard is subject to prior approval of EPA. Applications for approval shall include a detailed description of the sampling and analytical methodology and show how the above criteria will be met.
- 36. 40 C.F.R. § 61.94(a) provides that compliance with the 10 mrem/yr standard shall be determined by calculating the highest effective dose equivalent to any member of the public at

any offsite point where there is a residence, school, business or office. It also provides that the owners or operators of each facility shall submit an annual report to both EPA headquarters and the appropriate regional office by June 30 which includes the results of the monitoring as recorded in DOE's Effluent Information System and the dose calculations required by 40 C.F.R. § 61.93(a) for the previous calendar year.

- 37. 40 C.F.R. § 61.94(b) provides that in addition to the requirements of 40 C.F.R. § 61.94(a), an annual report shall include the following information:
 - (1) The name and location of the facility.
 - (2) A list of the radioactive materials used at the facility.
 - (3) A description of the handling and processing that the radioactive materials undergo at the facility.
 - (4) A list of the stacks or vents or other points where radioactive materials are released to the atmosphere.
 - (5) A description of the effluent controls that are used on each stack, vent, or other release point and an estimate of the efficiency of each control device.
 - (6) Distances from the points of release to the nearest residence, school, business or office and the nearest farms producing vegetables, milk, and meat.
 - (7) The values used for all other user-supplied input parameters for the computer models (e.g., meteorological data) and the source of these data.
 - (8) A brief description of all construction and modifications which were completed in the calendar year for which the report is prepared, but for which the requirement to apply for approval to construct or modify was waived under 40 C.F.R. § 61.96 and associated documentation developed by DOE to support the waiver. EPA reserves the right to require that DOE send to EPA all the information that normally would be required in an application to construct or modify, following receipt of the description and supporting documentation.
 - (9) Each report shall be signed and dated by a corporate officer or public official in charge of the facility and contain the following declaration immediately above the signature line: "I certify under penalty of law that I have personally examined and am familiar with the information submitted herein and based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate and complete. I am aware that

- there are significant penalties for submitting false information including the possibility of fine and imprisonment. See, 18 U.S.C. § 1001."
- 38. Pursuant to 40 C.F.R. § 61.96(a), in addition to any activity that is defined as construction under the Part 61, NESHAP General Provisions, any fabrication, erection or installation of a new building or structure within a facility that emits radionuclides is also defined as new construction for purposes of the Part 61 NESHAP General Provisions.
- 39. Pursuant to 40 C.F.R. § 61.96(b), an application for approval under 40 C.F.R. § 61.07 or notification of startup under 40 C.F.R. § 61.09 does not need to be filed for any new construction of or modification within an existing facility if the effective dose equivalent, caused by all emissions from the new construction or modification, is less than 1% of the standard prescribed in 40 C.F.R. § 61.92. Section 61.96(b) also provides that, for purposes of Section 61.96(b) the effective dose equivalent shall be calculated using the source term derived using Part 61 Appendix D as input to the dispersion and other computer models described in 40 C.F.R. § 61.93. In addition it provides that DOE may, with prior approval from EPA, use another procedure for estimating the source term for use in Section 61.96(b) and provides that a facility is eligible for this exemption only if, based on its last annual report, the facility is in compliance with the RAD NESHAP.

D. Factual Background

Respondent, KAPL, Separation Process Research Unit (SPRU) and Response Actions At All
Relevant Times To This Consent Agreement

- 40. Respondent (DOE) is a department of the United States.
- 41. KAPL is a research and development facility, situated on a 170-acre parcel of real property at 2401 River Road, in the Town of Niskayuna, New York.

- 42. Since at least 2006 if not earlier, DOE has been an owner and/or operator of KAPL.
 - 43. DOE's contractors have participated in the operation of KAPL.
- 44. KAPL has been comprised of buildings, structures, facilities, equipment, or installations, some of which emitted into the air radionuclides, which are designated as HAPs by the Administrator.
- 45. Based on representations of DOE, neither radionuclides radon-222 nor radon-220 have been emitted into the air from any buildings, structures, facilities, equipment, or installations at KAPL, which includes SPRU.
- 46. SPRU is located on a 5 acre parcel of real property located within the real property boundaries of KAPL. SPRU, which was part of KAPL, was comprised of buildings, structures, facilities, equipment, or installations some of which have emitted and/or continue to emit radionuclides into the air.
- 47. From 1950 through 1953, the United States Atomic Energy Commission conducted pilot plant nuclear operations at SPRU. During the course of SPRU's operations, land and structures including buildings, ductwork, tunnels and soils were contaminated with radionuclides. Any radioactive waste, remaining on-site is a basis for determining a source term for RAD NESHAP emission estimates.
- 48. Even though pilot plant activities ceased at SPRU in 1953, since the land and buildings were not decontaminated and decommissioned, air emissions and depositions of radionuclides occurred.

- 49. To facilitate a response action comprising a decontamination and decommissioning (D&D) of radioactively contaminated media, structures and process equipment at SPRU, in September 1992, the DOE Office of Environmental Management (DOE-EM) and the DOE Office of Naval Reactors Laboratory Field Office Naval Nuclear Propulsion Program (DOE-NR), which operated KAPL, entered a "Memorandum of Agreement Concerning the Decontamination and Decommissioning of the Separations Process Research Unit" (the KAPL/SPRU MOA).
- 50. The KAPL/SPRU MOA establishes roles and responsibilities regarding the SPRU D&D.
- 51. The KAPL/SPRU MOA provides that DOE-EM is responsible for requesting funds for and managing the SPRU D&D.
- 52. The KAPL/SPRU MOA identifies specific areas to be included in the SPRU D&D, including:
 - K-5 (retention basins)
 - Building H-2, including the vent stack, and underground tanks outside the building
 - Contaminated soil adjacent to or originating from H-2
 - Building G-2
- 53. The KAPL/SPRU MOA provides that to the maximum extent possible, that portion of the KAPL site turned over to DOE-EM for the SPRU D&D will be treated as a separate site for the duration of the SPRU D&D and it provides that as such DOE-EM will be responsible for obtaining all necessary Federal, State, and local permits and licenses, as well as submission of regulatory reports.

The D&D at K-5

- 54. In November 2006, a DOE contractor began the demolition phase of the D&D of a concrete retention basin, located on the grounds of SPRU, known as K-5.
- 55. As of the initiation of the demolition, K-5 was contaminated with three radionuclides: Cesium-137, Americium-241 and Plutonium-239.
 - 56. The demolition of K-5 involved the release of radionuclides into the ambient air.
- 57. In investigating the K-5 D&D pursuant to Section 114 of the CAA, EPA found that DOE had not evaluated the potential for radionuclide emissions at K-5 as a result of the K-5 demolition, or evaluated whether those emissions would be subject to the emission measurement requirements of 40 C.F.R. §§ 61.93(b) or (c).
- 58. DOE's annual RAD NESHAP report to EPA for calendar year 2006 (the 2006 RAD NESHAP Report) did not discuss the K-5 demolition or contain a description of the handling and processing of radioactive materials that were involved in the K-5 demolition.
- 59. The 2006 RAD NESHAP Report did not identify K-5 as including any stacks, vents or other points where radioactive materials are released into the atmosphere.
- 60. The 2006 RAD NESHAP Report did not identify K-5 as a release point for radionuclides.

The D&D at H-2

- 61. Based on representations of DOE, on September 23, 2010, another DOE contractor, Washington Group International (WGI or Contractor), initiated a D&D operation of Building H-2 and internal process equipment.
- 62. Based on representations of DOE, building H-2 included an emissions stack. When the stack was operating, airborne emissions of radionuclides from H-2 were directed

through the stack and were controlled by HEPA filters and these emissions were continuously sampled.

- 63. Based on representations of DOE, after disabling the building ventilation and removing the HEPA filters, the Contractor demolished the vent stack, along with other portions of Building H-2, leaving behind and exposing contaminated process equipment to the open air.
- 64. Based on representations of DOE, on September 29, 2010, when the Contractor removed and resized the process equipment, an uncontrolled release and spread of radioactive contamination occurred at the H-2 D&D site (the "September 2010 Uncontrolled Release") and spread to offsite areas.
- 65. On November 23, 2010, DOE-EM, in accordance with DOE Order 225.1A, Accident Investigations, issued a report: "Type B Accident Investigation Report, Radiological Contamination Event During Separations Process Research Unit Building H-2 Demolition, September 29, 2010" (Type B Report).
- 66. The Type B Report analyzed and identified "contributing causes", "root causes" and "judgment of needs" regarding the September 2010 Uncontrolled Release. DOE concluded in the Type B Report that the uncontrolled demolition of the evaporator vessels located within the Building H-2 footprint resulted in the release of radionuclides to areas beyond the H-2 D&D site perimeter.
- 67. In the Type B Report, DOE identified managerial, programmatic and work practice deficiencies on the part of the Contractor as among the causes to the September 2010 Uncontrolled Release.
- 68. As a result, the EPA conducted an investigation into the September 2010 Uncontrolled Release. EPA found among other things that DOE incorrectly evaluated the

potential for radionuclide emissions at H-2 and failed to properly determine whether, during the H-2 D&D, the H-2 releases would be subject to the emission measurement requirements of 40 C.F.R. § 61.93(b) or (c).

DOE's 2009 RAD NESHAP Annual Reports

- 69. For the 2009 reporting year, DOE submitted to EPA two (2) RAD NESHAP Annual reports: (1) the 2009 KAPL RAD NESHAP Annual Report; and (2) the 2009 SPRU RAD NESHAP Annual Report.
- 70. DOE's submission of the two (2) reports was consistent with the KAPL/SPRU MOA, which split the KAPL facility into two different facilities, KAPL and SPRU.
- 71. DOE, in the 2009 KAPL RAD NESHAP Annual Report, did not include H-2 as a release point nor did it include SPRU workers as off-site receptors for the period April 13, 2009 through December 31, 2009.
- 72. In response to EPA feedback on the 2009 KAPL RAD NESHAP Annual Report, DOE developed Revisions 1 and 2 of the 2009 SPRU RAD NESHAP.

In the first revision to the 2009 SPRU RAD NESHAP report, DOE revised the original report to:

- (i) include wind data from the closest wind monitor, as opposed to a wind monitor located roughly 15 miles away from KAPL;
- (ii) calculate the maximum offsite dose in each of the sixteen wind direction sectors;
- (iii) include radiation exposure through the food pathway;
- (iv) include all of the primary radionuclides (Pu-239, Am-241, Cs-137 and Sr-90) as opposed to only Pu-239 and Cs-137;
- (v) include accurate concentrations of radionuclides in the calculation of fugitive emissions; and
- (vi) include the accurate location of the release point in the CAP-88.

73. In addition, the 2009 SPRU NESHAP REPORT did not contain KAPL release point and KAPL workers in the dose calculations.

E. Conclusions of Law

General Conclusions

- 74. At all times relevant to this Consent Agreement, and since at least 1992, KAPL and SPRU both contained "stationary sources," within the meaning of 40 C.F.R. § 61.02.
- 75. At all times relevant to this Consent Agreement, KAPL, has been one "facility," within the meaning of 40 C.F.R. § 61.91(b) comprised of, among things, KAPL and SPRU buildings, structures and operations on one contiguous site.
- 76. At all times relevant to this Consent Agreement, KAPL, which includes SPRU, had been subject to the Part 61 General Provisions and the RAD NESHAP.
- 77. At all times relevant to this Consent Agreement, the K-5 retention basins were a release point, within the meaning of 40 C.F.R. § 61.93(f).
- 78. Through the actions described in Paragraph 63 above, DOE had converted Building H-2 from a point source into a diffuse source for purposes of the RAD NESHAP, including monitoring and testing in accordance with 40 C.F.R.§ 61.94(e) and (f).

Specific Violations

79. DOE violated 40 C.F.R. § 61.93(f) by failing to evaluate the potential for radionuclide emissions at K-5 in order to determine whether, during the K-5 demolition, the K-5 release point could be subject to the emission measurement requirements of 40 C.F.R. § 61.93(b) or (c).

- 80. DOE violated 40 C.F.R. § 61.94(b)(3) by failing to include in the 2006 RAD NESHAP Annual Report a description of the handling and processing of radioactive materials that occurred during the K-5 demolition.
- 81. DOE violated 40 C.F.R. § 61.94(b)(4) by failing to identify K-5 as a release point in the 2006 RAD NESHAP Annual Report.
- 82. DOE violated 40 C.F.R. § 61.93(f) by failing to correctly evaluate the potential for radionuclide emissions at H-2 in order to determine whether, during the H-2 demolition, the H-2 release point would be subject to the emission measurement requirements of 40 C.F.R. § 61.93(b) or (c).
- 83. DOE violated 40 C.F.R. § 61.12(c) by failing to maintain and operate H-2, including associated equipment for air pollution control, in a manner consistent with good air pollution control practice for minimizing emissions.
- 84. DOE violated 40 C.F.R. § 61.94(a) by failing to calculate the highest effective dose equivalent to any member of the public where there is a residence, school, business or office.
- 85. DOE violated 40 C.F.R. § 61.94(a) by submitting separate RAD NESHAP annual reports for KAPL and SPRU, rather than a single report covering both KAPL and SPRU.
- 86. DOE violated 40 C.F.R. § 61.94(b) in its 2009 RAD NESHAP annual reports by failing to provide the information detailed in Paragraphs 71-73 above.
- 87. Each of DOE's violations of 40 C.F.R. Part 61 is a violation of Section 112 and/or Section 114 of the CAA.

F. Settlement

88. Pursuant to Section 113(d) of the Act, Respondent shall pay a civil penalty of \$155,000. Respondent shall pay the \$155,000, by Electronic Fund Transfer ("EFT") within one hundred twenty (120) days from the date of issuance of the attached Final Order (the "Due Date").

To ensure proper payment by EFT, the Respondent shall provide the following information to its remitter bank:

- a. Amount of Payment: \$155,000
- b. SWIFT address: FRNYUS33, 33 Liberty Street, New York, NY 10045
- c. Account Code for Federal Reserve Bank of New York receiving payment: 68010727
- d. Federal Reserve Bank of New York ABA routing number: 021030004
- e. Field Tag 4200 of the Fedwire message should read "D 68010727 Environmental Protection Agency"
- f. Name of Respondent: Department of Energy
- g. Case Number: CAA-02-2014-1219

Respondent shall promptly thereafter furnish reasonable proof that such payment has been made, to both:

Gaetano LaVigna, Acting Chief, Air Compliance Branch Division of Enforcement and Compliance Assistance U.S. Environmental Protection Agency – Region 2 290 Broadway – 21st Floor New York, New York 10007

and

Liliana Villatora, Air Branch Chief Office of Regional Counsel U.S. Environmental Protection Agency – Region 2 290 Broadway – 16th Floor New York, New York 10007

G. Signatures

U.S. Department of Energy, Schenectady, NY

FINAL ORDER

The Regional Administrator of EPA, Region 2, concurs in the foregoing Consent Agreement, in the matter of United States Department of Energy, EPA Index Number CAA-02-2014-1219, the Consent Agreement, entered into by the parties, is hereby approved and issued, as a Final Order, effective upon filing with the Regional Hearing Clerk.

DATE: 5 27 14

Judith A. Enck

Regional Administrator

United States Environmental Protection Agency, Region 2

Certificate of Service

I certify that on May 28, 2014, I caused the foregoing Consent Agreement and Final Order in the matter of United States Department of Energy, CAA-02-2014-1219, to be served on the following people in the manner listed below:

One Original and One Copy, by hand delivery to:

Karen Maples
Regional Hearing Clerk
U.S. Environmental Protection Agency
Region 2
290 Broadway, 16th Floor
New York, NY 10007-1866

One Copy, by hand delivery to:

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Dated: May 28, 2014

Katherine Zuckerman Air Branch Secretary

U.S. Environmental Protection Agency Office of Regional Counsel, Region 2