



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 2  
290 BROADWAY  
NEW YORK, NY 10007-1866

NOV 30 2011

Mr. Frank Marcinowski  
Deputy Assistant Secretary for  
Technical and Regulatory Support  
U. S. Department of Energy  
Office of Environmental Management  
1000 Independence Avenue S.W.  
Washington DC 20585

Dear Mr. Marcinowski:

We have completed review of the submission, *Radioactive Air Emissions Application for Approval to Construct or Modify G2 Enclosure Ventilation System*, dated July 13, 2011. We have also reviewed the responses to requests for additional information and the compilation of modifications to the applications dated November 29, 2011. All of which has been sent for our review and approval pursuant to 40 CFR Part 61, Subpart H.

Please find enclosed the approval of the application to construct or modify the G2 Enclosure Ventilation System, KAPL-SPRU-G2-001, signed by John Filippelli, Acting Director, Division of Environmental Planning and Protection.

Sincerely,

A handwritten signature in black ink, appearing to read "Paul A. Giardina".

Paul A. Giardina, Chief  
Radiation and Indoor Air Branch

✓ c: S. Feinberg, DOE-SPRU

Enclosure

KAPL-SPRU-G2-001  
G2 Enclosure Ventilation System (G2)  
Approval to Construct/Modify  
Sources of Airborne Radionuclide Emissions

In compliance with provisions of the Clean Air Act, as amended (42 USC §7401 et seq.) the Department of Energy (DOE) Separations Process Research Unit Field Office is granted approval to construct/modify source KAPL-SPRU-G2-001 for the Separations Process Research Unit Disposition Project located at the Knolls Atomic Power Laboratory in Niskayuna, New York.


The approval is granted in accordance with the plans and materials submitted with the application and with Federal regulations governing the "National Emission Standards for Emissions of Radionuclides Other Than Radon From Department of Energy Facilities" (40 CFR Part 61, Subpart H). Any conditions attached to this document are considered part of this approval.

Failure to comply with the conditions or terms set forth in this approval may result in sanctions available under the authority of Section 1-604 of Executive Order 12088 as well as enforcement procedures established by the Clean Air Act.

This approval to construct/modify grants no relief from the responsibility for compliance with other applicable provisions of Federal regulations. This approval shall be effective immediately after receipt of the approval to construct/modify by the applicant.

Dated

11/29/11

  
Acting Director, Division of Environmental Planning & Protection

CONDITIONS

I. Emergency Notification

- A. In the event of an accidental/unplanned release of radionuclides which leads to an air emission that may cause the standards of 40 CFR 61 to be exceeded; or may result in a health threat to the public; the Department of Energy (DOE) Separations Process Research Unit (SPRU) Field Office shall make timely notification to state, local, and Federal agencies.
  
- B. Initial phone notification should include the time of the accidental release; location of accident/release; estimate of quantity released; emergency steps taken to contain/control the release; type of assistance needed; and the name and title of person reporting the incident. A brief written summary of the event shall be submitted to Director, Division of Environmental Planning and Protection (Attn: Regional Radiation Program Manager) within 30 days of the event.
  
- C. EPA Phone Notification - In Order of Preference
  - 1. Regional Radiation Program Manager
    - Paul A. Giardina
    - 212-637-4010
  - 2. Health Physicist
    - Jeanette Eng
    - 212-637-3765
  - 3. National Response Center
    - 800-424-8802
  
- D. New York State Phone Notification - In Order of Preference
  - 1. NYS Department of Health
    - Director, Bureau of Environmental Radiation Protection
    - Stephen Gavitt
    - 518-402-7550
  - 2. NYS Department of Environmental Conservation
    - Chief, Radiological Sites Section
    - Timothy Rice
    - 518-402-8579
  - 3. New York State Warning Point
    - 518-457-2200

II. Permit Expiration

- A. Approval to construct/modify is not transferable to another owner/operator.
  
- B. The DOE may submit to the Regional Administrator (Region 2 Environmental Planning and Protection Division Director) a written application for a determination

of whether actions intended to be taken by the KAPL-SPRU constitutes a modification or construction of a source subject to the standard. The Regional Administrator will notify the owner/operator of his determination within 30 days after sufficient information to evaluate the application (40 CFR 61.06).

- C. If intended actions to be taken by the KAPL-SPRU are determined to constitute construction/modification which effects existing permitted sources, the permit and conditions shall supersede and/or amend the existing permit.
- D. Updates in notification requirements and phone contacts supersede previous permit conditions.

### III. Other Notifications

The owner/operator shall provide written notification to EPA Region 2 as follows.

1. The 30-day notification of startup testing.
2. Within 30 days after completion of startup testing, provide report on the results and conclusions. A copy of this report shall be submitted to EPA Region 2 for inclusion with the materials submitted for this application.
3. As part of startup testing, confirm the physical location where horizontal plume velocity is zero and whether the G2 plume will be entrained by H2 plume. Include findings in the report on startup testing.
4. Notification of start of normal stack operation.

### IV. Operations/Maintenance

- A. Operations, testing and maintenance described in the application and associated correspondence shall apply.
- B. The facility owner/operation shall maintain all equipment, facilities, and systems installed or used to achieve compliance with the standard (40 CFR 61.92) in accordance with 40 CFR 61 Subpart H, your application and associated correspondence, and in a manner consistent with good air pollution control practices for minimizing emissions.
- C. The facility owner/operator shall evaluate the weekly filter screening and quarterly filter laboratory results against the source term (both nuclides and activity concentrations) to verify that the CAP88 source assumptions remain valid.
- D. Records of operations, maintenance, inspection, testing, repair, monitoring data, and Standard Operating Procedures for conducting such activities shall be maintained pursuant to 40 CFR 61.12(c) and provided to EPA Region 2 upon request.

E. Correspondence associated with KAPL-SPRU

- a. November 29, 2011, F. Marcinowski to P. Giardina, "Radioactive Air Emissions Application for Approval to Construct or Modify G2 Enclosure Ventilation System SPRU EEC-11-003 Rev 0", dated November 11, 2011 supplement.
- b. November 9, 2011, H. Davis to J. Eng, "Re: Request for Clarification of Response from email dated October 13, 2011", email.
- c. November 4, 2011, J. Eng to S. Feinberg, "Request for Clarification of Response from email dated October 13, 2011", email.
- d. October 13, 2011, H. Davis to J. Eng, "Responses to EPA Questions on G2 and H2 NESHAP Applications", email.
- e. September 20, 2011, J. Eng to S. Feinberg, "Request for Additional Information/Clarification for H2 and G2 Applications", email.
- f. September 2, 2011, H. Davis to J. Eng, "Responses to EPA Questions from August 16, 2011 site Visit", email.
- g. August 24, 2011, S. Feinberg to J. Eng, "FW: Building H2 and G2 NESHAP Permit, Responses to EPA Questions from August 4, 2011 Conference Call", email.
- h. July 22, 2011, F. Marcinowski to P.A. Giardina, "Radioactive Air Emissions Application for Approval to Construct or Modify G2 Enclosure Ventilation System", SPRU EEC-11-003 Rev1, dated July 13, 2011.

V. Severability

The provisions of this approval to construct/modify are severable, and, if any provision of this approval to construct/modify is held invalid, the remainder of this approval to construct/modify shall not be affected thereby.

VI. Other Applicable Regulations

The owner/operator shall construct and operate the source in compliance with all other applicable provisions of 40 CFR 52, 60, and 61.

VI. Agency Notification

All correspondence as required by this approval to construct/modify shall be sent to:

U.S. Environmental Protection Agency  
Director, Division of Environmental Planning & Protection  
Attention: Regional Radiation Program Manager  
290 Broadway  
New York, NY 10007