



NEW MEXICO ENVIRONMENTAL DEPARTMENT
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

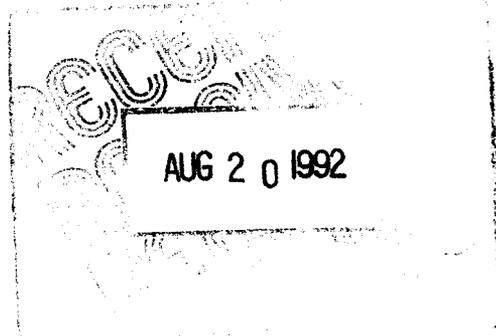
REGION 6
1445 ROSS AVENUE, SUITE 1200
DALLAS, TEXAS 75202-2733
OFFICE OF THE REGIONAL ADMINISTRATOR

Benito
Barbara
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AUG 13 1992

CERTIFIED MAIL-RETURN RECEIPT REQUESTED

Mr. Jerry Bellows
Area Manager
Department of Energy
Los Alamos Area Office
Los Alamos, New Mexico 87544



Dear Mr. Bellows:

Pursuant to Section 6(e) of the Toxic Substances Control Act (TSCA), this letter and enclosed conditions, supersedes your current polychlorinated biphenyl (PCB) disposal approval issued on May 21, 1983. This approval applies to the liquid injection controlled air incinerator (CAI) for PCB liquids generated by the Department of Energy (DOE) at the Los Alamos National Laboratory (LANL).

Based on the results of your June 1982, PCB Trial Burn, the facility is approved to dispose of up to 26.5 kilograms per hour of PCBs in a liquid medium. This approval contains certain additional handling, storage, transport, and operating conditions which were added to ensure additional protection of public health and the environment from PCBs at the LANL facility.

This amendment is based on our evaluation that the facility has met all requirements of 40 CFR 761.70. Violation of 40 CFR Part 761, or any condition included as part of the approval, may subject LANL to enforcement action under TSCA and/or other applicable laws and regulations. Such action could result in a termination, revocation, or modification of the approval. Furthermore, receipt of evidence that (1) a misrepresentation of any material fact has been made in any LANL submittal; (2) all relevant facts have not been disclosed; (3) the nature of the disposal has substantially changed from the effective date of this approval; or, (4) the facility is found to be in non-compliance with its approval conditions (or a violation of requirements under 40 CFR Part 761) during PCB disposal, shall constitute sufficient cause for revocation or modification of this approval.



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This approval shall be effective on the date of this letter, and shall expire at midnight on the date of this letter five years later. LANL shall apply for a new approval one year prior to the expiration date.

If you have any questions, please call Mr. William K. Honker, Chief, RCRA Permits Branch at (214) 655-6770.

Sincerely,



Allyn M. Davis, Director
Hazardous Waste Management Division (6H)

Enclosure

cc: Kathleen Sisneros, NMED

**LOS ALAMOS NATIONAL LABORATORY
LOS ALAMOS, NEW MEXICO
CONTROLLED AIR INCINERATOR PCB APPROVAL CONDITIONS**

I. LOCATION OF FACILITY

The Controlled Air Incinerator (CAI) is located in the Treatment Development Facility at the Los Alamos National Laboratory, Los Alamos, New Mexico.

II. DISPOSAL FACILITIES AUTHORIZED

A. Facility Units Authorized:

The Controlled Air Incinerator (CAI) and related liquid feed and temporary storage appurtenances are approved for liquid and solid PCB disposal.

B. Authorization to Operate Additional Facility Units:

Any facility modification or expansion in capacity of the CAI or related appurtenances shall require prior notification and written approval from the EPA, Region 6, RCRA Permits Branch before PCBs can be disposed in the modified or unit or expansion in capacity.

C. Wastes Authorized:

LANL is authorized to dispose of Department of Energy (DOE) generated PCB liquid or solid wastes.

III. FACILITY OPERATION

A. General Operating Requirements:

1. LANL shall at all times during PCB storage and disposal properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed and used to achieve compliance with the conditions of this approval. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls including appropriate quality assurance procedures.

2. All transport vehicles owned by LANL used for the transport of PCBs shall be properly maintained and inspected as required by the applicable Department of Transportation regulations.

B. Incinerator Operating Requirements:

1. At all times during PCB disposal, the incinerator shall meet the incinerator operating requirements specified in 40 CFR 761.70 (a) and (b). The minimum combustion temperature shall be 1100 degrees C, the minimum dwell time shall be 2.0 seconds, and the minimum excess oxygen shall be 3.0 percent.
2. LANL shall sample and analyze each batch of PCB feed for PCB concentration before it is disposed in the CAI. Sampling for PCB concentration and analytical methods shall conform to EPA accepted practices, procedures, and methods. The results of the analysis and the method used shall be recorded and kept on file.
3. The PCB feed rate in the CAI shall not exceed 26.5 kilograms per hour. The feed rate shall be based on the PCB batch analysis results of each feed stream and the weight of PCB solid waste fed to the unit per unit of time. The liquid PCB feed rate shall be measured by a continuous flow measuring and recording device, and the data kept on file.
4. The feed rate of total chlorine shall be limited by the amount allowed through an application of the EPA guidance manual entitled, "Guidance on Metals and Hydrogen Chloride Controls from Hazardous Waste Incinerators", August, 1989, to LANL's facility, or the unit shall achieve greater than a 99% HCl removal efficiency as measured in the stack, whichever condition is more stringent.

Within 90 days of the effective date of this approval, LANL shall submit to the EPA, Region 6, RCRA Permits Branch a waste analysis plan for approval which will ensure compliance with this condition.

5. The total particulate emissions shall not exceed the limit specified in LANL's CAI Resource Conservation and Recovery Act (RCRA) permit issued by the New Mexico Environment Department.
6. LANL shall operate the incinerator in a manner that prevents visible fugitive emissions before the stack.

7. LANL shall shut-off the PCB flow to the CAI immediately upon discovery that any PCB flow measuring or recording equipment required for compliance with this approval is not functioning properly.
8. The percent CO₂ in the stack gas shall be measured using an EPA accepted method at least once every 24-hours of PCB disposal in the incinerator. The results of the analysis, and the carbon dioxide method used, shall be recorded and kept on file.
9. The flow of PCBs to the CAI incinerator shall stop automatically under any of the following conditions:
 - (a) The temperature drops below 1100 degrees C as measured by the thermocouple located in the "hot duct" leading to the water scrubber;
 - (b) The CO concentration in the exit duct gases exceeds 10 times the percent CO₂ concentration in the exit duct gases (calibrate monitors at least once every twenty-four (24) hours during PCB incineration by certified zero and span gas);
 - (c) The O₂ drops below 3.0 percent (monitors shall be calibrated every twenty-four (24) hours by certified zero and span gas);
 - (d) There is a loss of primary combustion air to the burner; or,
 - (e) There is a loss of water to the scrubber.
10. Ash generated in the CAI during PCB incineration shall be disposed in a hazardous waste landfill approved by the appropriate agency to receive such wastes for ash with PCB concentrations less than two parts per million. Ash containing two parts per million or greater shall either be reintroduced into the CAI until the concentration is less than two parts per million, or the ash shall be disposed in an approved PCB landfill.
11. LANL shall calculate, on a daily basis, the dwell time of combustion gases in the CAI that are exposed to at least 1100 degrees C. The minimum dwell time shall be 2.0 seconds. If LANL determines it has disposed of PCBs at less than 2.0 seconds, LANL shall immediately notify the EPA, Region 6, RCRA Permits Branch, in writing describing the date and duration of the event, and what steps have been taken to correct the deficiency. The method used in the dwell time calculation shall be recorded and kept on file.

12. LANL shall comply with its Controlled Air Incinerator (CAI) PCB Operating Manual. The manual shall be updated when changes are made to the standard PCB operating procedures, and a copy of the revised manual shall be submitted to the RCRA Permits Branch, EPA, Region 6 within five (5) days.
13. LANL shall limit the feed rate of the following heavy metals in its PCB waste feed streams: antimony, arsenic, barium, beryllium, cadmium, chromium, lead mercury, silver, and thallium. The feed limits shall be based upon an application of EPA's "Guidance on Metals and Hydrogen Chloride Controls from Hazardous Waste Incineration", August, 1989, to LANL's facility. Within 90 days of the effective date of this approval, LANL shall submit to EPA, Region 6, RCRA Permits Branch a waste analysis plan for EPA approval which will ensure compliance with this condition.
14. The continuous carbon monoxide and excess oxygen monitors shall comply with the certification requirements of 40 CFR Part 60, Appendix B. The temperature thermocouples shall have an accuracy range within 3%.

C. Storage Facility Operation Requirements:

All PCB storage facilities for the CAI incinerator shall comply with 40 CFR 761.65 (b) and 761 Subpart K. A copy of LANL's SPCC Plan for PCB storage shall be submitted to EPA, Region 6, RCRA Permits Branch, within 60 days of the effective date of this approval.

1. PCB Containerization:

Any PCB container used for PCB transport, storage, or disposal shall not be used for any other purpose unless decontamination of the container complies with 40 CFR 761.79. All decontamination wash fluids shall be incinerated. LANL may request approval for an alternate treatment or disposal method for PCB contaminated wash fluids.

2. Marking of Containers:

All PCB articles, equipment, and containers shall be properly marked according to 40 CFR 761.45, and 761.90.

3. Condition of Containers:

If a container holding PCB wastes is not in good condition (e.g., severe rusting, apparent structural defects) or, if it begins to leak, LANL shall immediately transfer the PCB waste from this container to a container that is in good condition. If this is not possible, PCB wastes shall be managed in some other way that is in compliance with the PCB regulations and this approval.

4. Container Storage:

Containers holding PCB waste shall be stored in a manner which will allow ready detection of leaks. Stacking of containers shall not be permitted.

5. Aisle Space:

The equipment aisle space in the CAI PCB storage building shall be adequate (minimum of five feet) to allow the unobstructed movement of personnel and fire equipment. Other aisle spaces shall be a minimum of two (2) feet.

IV. STANDARD APPROVAL CONDITIONS

A. Severability:

The conditions of this authorization are severable, and if any provision of this authorization, or any application of any provision is held invalid, the remainder of this authorization shall not be affected thereby.

B. Duty to Comply:

Los Alamos National Laboratory (LANL) shall comply with all Federal, State, and local regulations and agreements, including:

1. Permits for the incineration of solid and hazardous wastes during PCB incineration; and
2. The applicable Resource Conservation and Recovery Act (RCRA) Hazardous Waste Regulations ("Interim Status Standards" and "RCRA Hazardous Waste Permit Regulations").

C. Personnel Safety:

LANL's personnel safety requirements and procedures for PCB handling, storage, transport, and disposal shall comply with OSHA requirements.

D. Duty to Mitigate:

LANL shall correct any adverse impact on the environment resulting from noncompliance with this approval.

E. Operation and Maintenance:

LANL shall at all times during PCB incineration properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed and used to achieve compliance with the conditions of this approval. Proper operation and maintenance include effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls including appropriate quality assurance procedures.

F. Duty to Provide Information:

LANL shall furnish to EPA any relevant information which the EPA may request to determine whether cause exists for modifying, revoking, reissuing, or terminating this approval, or to determine compliance with this approval. LANL shall also furnish, upon request, copies of records required to be kept under the TSCA PCB regulations.

G. Inspection and Entry:

LANL shall allow an authorized representative, upon presentation of credentials and other documents as may be required by law to:

1. Enter the LANL facility where PCBs are being handled, stored, treated, or disposed;
2. Have access to and copy, at reasonable times, any records that must be kept under TSCA PCB regulations;
3. Inspect any facilities, equipment (including monitoring and control equipment), practices, or operations required under this approval or the TSCA PCB regulations; and,

4. **Sample or monitor for the purpose of assuring that the LANL facility is operating in compliance with the conditions of the approval or the TSCA PCB regulations.**

H. Monitoring and Records:

LANL shall comply with all monitoring and record keeping requirements of 40 CFR Part 761.70(c) and 761.180. All PCB incineration records, documents, and reports shall be maintained at one centralized location at the LANL facility, and shall be made available for inspection by authorized EPA representatives. All records required by 40 CFR Part 761.180 and this approval shall be written in ink or typed. Any modification or correction of the records must be initialed and dated by the supervisor in charge.

I. Notice of Transfer of Ownership:

LANL shall notify EPA at least ninety (90) days before transferring ownership of the facility. LANL shall also submit to EPA at least ninety (90) days before such transfer a notarized affidavit signed by the transferee stating that the transferee shall abide by the terms of this approval.

J. Noncompliance:

If at any time LANL becomes aware of any departure from the TSCA PCB regulations, DOT violations during transport of PCBs, the approval, or the conditions of approval, LANL shall notify the RCRA Permits Branch, EPA Region 6, by telephone within 24 hours and shall submit a written report to the RCRA Permits Branch within five (5) days.

K. Other Information:

When LANL officials become aware that LANL has failed to submit any relevant facts in the PCB incineration application, or submitted incorrect information in any report to EPA, LANL shall promptly submit such facts or information to EPA, Region 6, RCRA Permits Branch.

L. Annual Retesting:

EPA may require annual testing or monitoring of the incinerator for PCBs, hydrochloric acid (HCl), metals, particulates and up to 3 organics identified by EPA. Written reports discussing the results of the testing or monitoring shall be submitted to EPA within 120 days of the test.

M. Operation of the Facility:

LANL shall maintain an adequately trained on-site inspector to direct emergency procedures which could result from fires, explosions, or releases of PCB containing wastes at the facility. LANL shall submit the name of this inspector within sixty (60) days of the effective date of this approval. LANL shall maintain in good working order any equipment required to deal with these emergencies.

N. PCB Spills:

PCB spills occurring at the CAI facility, or from any LANL owned PCB transport vehicle in route to the CAI, shall be cleaned up according to the PCB Spill Cleanup Policy, 40 CFR Part 761., Subpart G. PCB spills occurring outside PCB storage areas, PCB feed staging areas, or from LANL owned PCB transport vehicles, shall be reported within twenty-four (24) hours of the event to the RCRA Permits Branch, EPA, Region 6.

If spills cannot be cleaned up within twenty-four (24) hours, a LANL official shall notify the EPA, Region 6, RCRA Permits Branch of the circumstances of the spill, the estimated time of cleanup, and a justification for the delay of the cleanup. EPA may order cessation of PCB incineration at LANL if spills are not cleaned up to acceptable levels as defined by EPA.

O. Duty to Notify:

LANL shall notify EPA, Region 6, RCRA Permits Branch in writing at least thirty (30) days prior to any planned physical or operational changes to the incinerator which could alter the emissions of particulates, HCl, PCBs, metals, or chlorinated organics. Any changes to the approved units which may result in increased emissions or changes in types of emissions may require additional testing, monitoring, or a modification of the approval.

P. Effective Date:

The approval shall become effective on the date of the approval letter, and expire at midnight the same month and day after five years. LANL shall apply for a new approval at least one year before the expiration date. The approval request shall contain information which demonstrates that the facility complies with 40 CFR Part 761.

END OF APPROVAL CONDITIONS