



Department of Energy
Albuquerque Operations Office
Los Alamos Area Office
Los Alamos, New Mexico 87544

SEP 19 2000

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Carl Will, Permits Project Leader
Permits Management Program
Hazardous Waste Bureau
New Mexico Environment Department
2044-A Galisteo Street
P. O. Box 26110
Santa Fe, New Mexico 87502-6110

Dear Mr. Will:

Subject: Resource Conservation and Recovery Act (RCRA) Change During Interim Status Proposal – Characterization, High Activity Processing and Storage Facility (CHAPS), Los Alamos National Laboratory (LANL)

The purpose of this letter is to request approval of the CHAPS at LANL Technical Area 54 (TA-54), Area G, as a change during interim status in accordance with the New Mexico Administrative Code, Title 20, Chapter 4, Part 1, revised June 14, 2000 (20 NMAC 4.1), Subpart IX, §270.72(a)(3). This letter and the information provided are in response to discussions held between your staff and LANL representatives of the Department of Energy/University of California (DOE/UC) in the waste management and permit issues meeting of May 4, 2000. As required by the regulation, this request includes a revised Part A permit application and the following justification for the approval of the CHAPS.

The project was presented at the May meeting as the TA-54 "Multi-Purpose Facility" but has subsequently been renamed. The CHAPS will be located on the site of the existing TA-54 Area G Transuranic Waste Inspectable Storage Project (TWISP) Storage Pad 4. It will be used to support the mixed waste retrieval and safe storage activities associated with the TWISP and other LANL waste management activities. The building will include space for mixed transuranic waste characterization equipment and the storage of TWISP retrieved waste.

The CHAPS is a metal pre-engineered structure (Butler Building™, approximately 25,000 square feet) that will be placed over Pad 4. The existing asphalt pad has been removed because of damage received during operational storage and the waste retrieval process. The site will be re-leveled for an upgraded concrete pad and foundation for the CHAPS. The CHAPS will be built to meet the requirements of a Category 2 Nuclear Facility (i.e., designed to withstand a wind loading event of up to 96 miles per hour and an earthquake of up to 0.2g). It will include fire suppression, high efficiency particulate air (HEPA) filtration, localized heating, and enhanced security systems.

TWISP and the subsequent safe storage of retrieved containers are a result of the December 10, 1993 Consent Agreement between NMED, DOE, and UC. We believe that the waste storage



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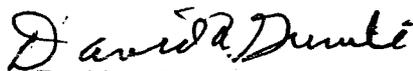
improvements and the added option for on-site waste characterization at the CHAPS warrant the project's inclusion as an advantageous and necessary support for TWISP. The mixed waste storage at the CHAPS is not being requested as an increase in the total allowed waste storage capacity associated with TWISP or TA-54, Area G. The storage capacity remains the same as that currently being utilized for Storage Pad 4 (970,000 gallons). We request that these factors be considered in support of approval of this process as a change during interim status as allowed by the above referenced regulation.

The attached Part A permit application contains a new U.S. Environmental Protection Agency (EPA) Form 8700-23 (Revised October 1999) and a TA-54 replacement section as Revision 2.0 to the "LANL General Part A Permit Application, Revision 0.0," originally submitted to NMED on April 30, 1998. The application includes drawings and photographs of the Decontamination and Volume Reduction System (TA-54, Building 412) to include the changes made as part of that approval ("LANL General Part A Permit Application, Revision 0.0/0.1/1.0," submitted November 19, 1999, and approved December 6, 1999).

The Part A permit application also contains other revisions that upgrade the document for TA-54 waste management operations. LANL has received guidance from your office (Request for Supplemental Information, LANL General Part B Permit Renewal Application, March 29, 2000) that requests entire sections of permit-related documents be replaced when necessary rather than page replacements. In order to certify the accuracy and correctness of the revised Part A permit application, all changes at TA-54 to this date were added. The changes include revised maps and figures for Area G; new photos of Area G Storage Pads 1, 2, and 4; revised estimated annual quantities; and the addition of EPA Hazardous Waste Numbers for Areas L and G that were inadvertently omitted from the 1998 Part A permit application. The waste numbers are being added pursuant to 20 NMAC 4.1, Subpart IX, §270.72(a)(1). A permit application revision package is also being prepared to incorporate the CHAPS changes into the LANL Technical Area 54 Part B Permit Renewal Application upon your approval of the project.

If you should have any questions or comments concerning this submittal, please contact Joe Vozella of my staff at (505) 665-5027 or Jack Ellvinger, UC/LANL, at (505) 667-0633.

Sincerely,



David A. Gurulé, P. E.
Area Manager

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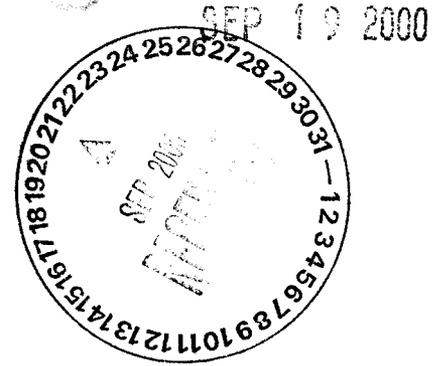
Enclosures

cc:

See page 3

Mr. Carl Will

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cc w/enclosures:

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ESH-19 (990055.GB), LANL, MS-K490

ATTACHMENT 1

Characterization, High Activity Processing and Storage Facility

The proposed Characterization, High Activity Processing and Storage (CHAPS) Facility, to be located at Los Alamos National Laboratory (LANL), Technical Area (TA) 54, Area G, in Building 420, is designed to be a centralized area for waste characterization, processing, and storage of radioactive and mixed waste. Transuranic (TRU) waste characterization activities have historically been conducted in different facilities throughout LANL. By providing a location at Area G for centralization of some characterization activities, the need for transportation of waste between characterization facilities can be reduced, thereby also reducing the potential for spills and releases associated with the loading, unloading, and transportation of TRU waste at LANL.

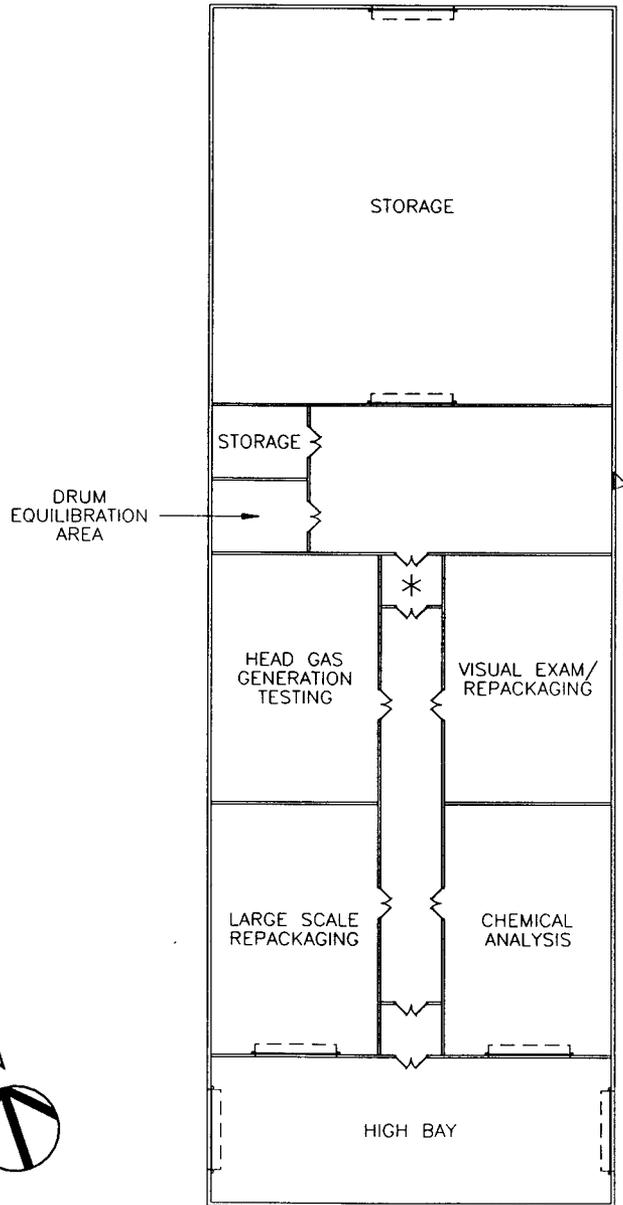
The CHAPS Facility operations will include: 1) assaying existing packaged waste; 2) segregation; 3) repackaging; 4) headspace gas sampling; 5) drum coring; 6) gross decontamination; and 7) robust storage. The building, to be erected at Storage Pad 2, will also be used for the continued storage of TRU waste retrieved by the Transuranic Waste Inspectable Storage Project (TWISP). Approximately half of the structure will be used to store waste containers awaiting characterization, processing, and/or disposal.

The CHAPS Facility is planned as a 2-hour fire-rated, multipurpose structure approximately 250 ft long by 100 ft wide located on and west of Storage Pad 2. The floor in the CHAPS building will be a concrete pad sloped to a sump with a grating cover to provide traction and a level working surface. The CHAPS will be equipped with personnel access doors and roll-up vehicle access doors. The CHAPS facility will be comprised of primary working cells, and storage high bays (See Figure 1). The characterization containment cells will consist of interconnected modular enclosures or cells. Waste containers will generally be handled with forklifts, overhead cranes, and frictionless air pallets. Negative ventilation will be maintained throughout the CHAPS Facility with discharge through high efficiency particulate air (HEPA) filtration.

The primary working cells located within the CHAPS Facility will allow for isolated glovebox-type operations associated with segregation, repackaging, headspace gas sampling and drum coring. Portable equipment in the CHAPS Facility will include nondestructive assay systems, digital scales, and portable ventilation systems. Access ports for ventilation, pneumatic tool air lines, and decontamination lines will be provided for each of the cells. Negative ventilation for each of the cells will be maintained with discharge through HEPA filtration.

Container management practices associated with storage of TRU waste containers at the CHAPS container storage area will be protective of human health and the environment in compliance with *New Mexico Administrative Code*, Title 20, Chapter 4, Part 1, Subpart V, Part 265, Subpart I (revised June 14, 2000).

TA-54 AREA "G" CHARACTERIZATION, HIGH ACTIVITY
PROCESSING AND STORAGE FACILITY (CHAPS)
(PRELIMINARY, GENERAL STRUCTURAL CONFIGURATION)



* FINISH FLOOR ELEVATION
APPROXIMATELY = 6674.12

Figure 1.