

Los Alamos

NATIONAL LABORATORY

Los Alamos National Laboratory
Los Alamos, New Mexico 87545

Date: October 6, 1999
In Reply Refer To: ESH-18/WQ&H:99-0409
Mail Stop: K497
Telephone: (505) 665-1859



Ms. Marcy Leavitt
Ground Water Protection Bureau
New Mexico Environment Department
P.O. Box 26110
Santa Fe, New Mexico 87502

Ms. Barbara Hoditschek
Surface Water Quality Bureau
New Mexico Environment Department
P.O. Box 26110
Santa Fe, New Mexico 87502

SUBJECT: NOTICE OF INTENT TO DISCHARGE (NOI) WATER FROM NEUTRINO OBSERVATION POOL AT TECHNICAL AREA (TA)-3-253.

Dear Ms. Leavitt and Ms. Hoditschek:

The enclosed Notice of Intent to Discharge (NOI) and map are being submitted by Los Alamos National Laboratory for the discharge of approximately 40,000 gallons of potable water from an indoor, enclosed pool located at TA-3-253. This pool is used for the observation of neutrinos by means of a small remotely operated submersible vehicle. Draining of the pool is necessary to re-configure the sensors in the pool and to perform maintenance. Water from the pool will be discharged into a storm drain located outside the building. The storm drain discharges into Two Mile Canyon located approximately 0.3 mile from the pool location.

The discharge will be periodically monitored during the two days that will be required to empty the pool. Draining the pool will be performed only during normal working hours. The areas below the discharge have been reviewed and found to have no Solid Waste Management Units (SWMU's) or Potential Release Sites (PRS's) that could be impacted by this discharge.

Please call Harvey Decker at 665-2014 if additional information would be helpful.

Sincerely,

Steven Rae
Water Quality and Hydrology Group

SR:HD/rm



5588

Handwritten vertical text: HSWA LANC 1/11/99/3

Handwritten mark: TV

Enclosures: a/s

Cy: J. Bearzi, NMED/HRMB, Santa Fe, New Mexico, w/enc.
S. Yanicak, NMED DOE OB, w/o enc., MS J993
J. Vozella, DOE/LAAO, w/enc., MS A316
B. Enz, DOE/LAAO, w/enc., MS A316
S. Archuleta, P-ESH-FM, w/enc., MS D459
M. Saladen, ESH-18, w/o enc., MS K497
H. Decker, ESH-18, w/enc., MS K497
M. Alexander, ESH-18, w/o enc., MS K497
S. Veenis, ESH-18, w/o enc., MS K497
WQ&H File, w/enc., MS K497
CIC-10, w/enc., MS A150

NOTICE OF INTENT

1. **Name and address of facility making the discharge.**

Los Alamos National Laboratory
P.O. Box 1663
Los Alamos, New Mexico 87545

Attention: Stephanie Archuleta
P-ESH-FM
MS D459

2. **Location of the discharge. (In Township, Range and Section, if Available).**

This discharge of approximately 40,000 gallons of potable water will take place at Technical Area (TA) 3 Building 253. The discharge will be from an enclosed, covered pool used for diagnostics of a small electrically powered remote controlled submarine used for neutrino detection. The proposed discharge and drainage area have been reviewed for and determined to have no Solid Waste Management Units (SWMU's) or Potential Release Sites (PRS's) that could be impacted by this discharge.

3. **The Means of Discharge. (To Lagoon, Flowing Stream, Water course, Arroyo, Septic Tank, other).**

The discharge will be accomplished by pumping the water from the pool to an outside storm drain at approximately 50 gallons per minute (gpm). This discharge will be performed over a two day period during normal working hours. The receiving storm drain discharges to Two Mile Canyon located approximately 0.3 mile to the south. The discharge will be periodically monitored to assure that no erosion or other environmental damage is taking place.

4. **The estimated concentration of contaminants (if any) in the discharge.**

This water is from the Los Alamos County potable water supply system and received additional filtration to assure clarity for the neutrino detection observations. On September 10, 1999, a sample of the water was collected for pH and Chlorine. The pH was 7.50 s.u. at 23.9° C and Chlorine for both free and total Cl₂ was measured at 0.0 mg/l for both parameters. No treatment chemicals or other additives were used in this pool water and no other contaminants are believed to be present based on the source (potable water supply system) and the isolated and controlled nature of the pool.

5. **The type of operation from which the discharge is derived**

This potable water was used for the detection and observation of neutrinos by way of a small remotely operated submersible vehicle. The pool is located inside Building 253 at Technical Area (TA)-3 and access to the enclosed, covered pool is restricted for safety considerations and to protect the integrity of the on-going research. The pool is being drained in order to re-configure sensors located in the pool for additional experiments and for general maintenance.

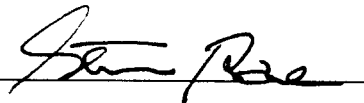
6. **The estimated flow to be discharged per day.**

The pumping rate is expected to be approximately 50 gpm for two 8-hr. days to empty the pool of the 40,000 gallons of purified water.

7. **The estimated depth to Ground Water (if available)**

The approximate depth to ground water at this location is 1000 feet.

Signed: _____



Date: 10-6-99

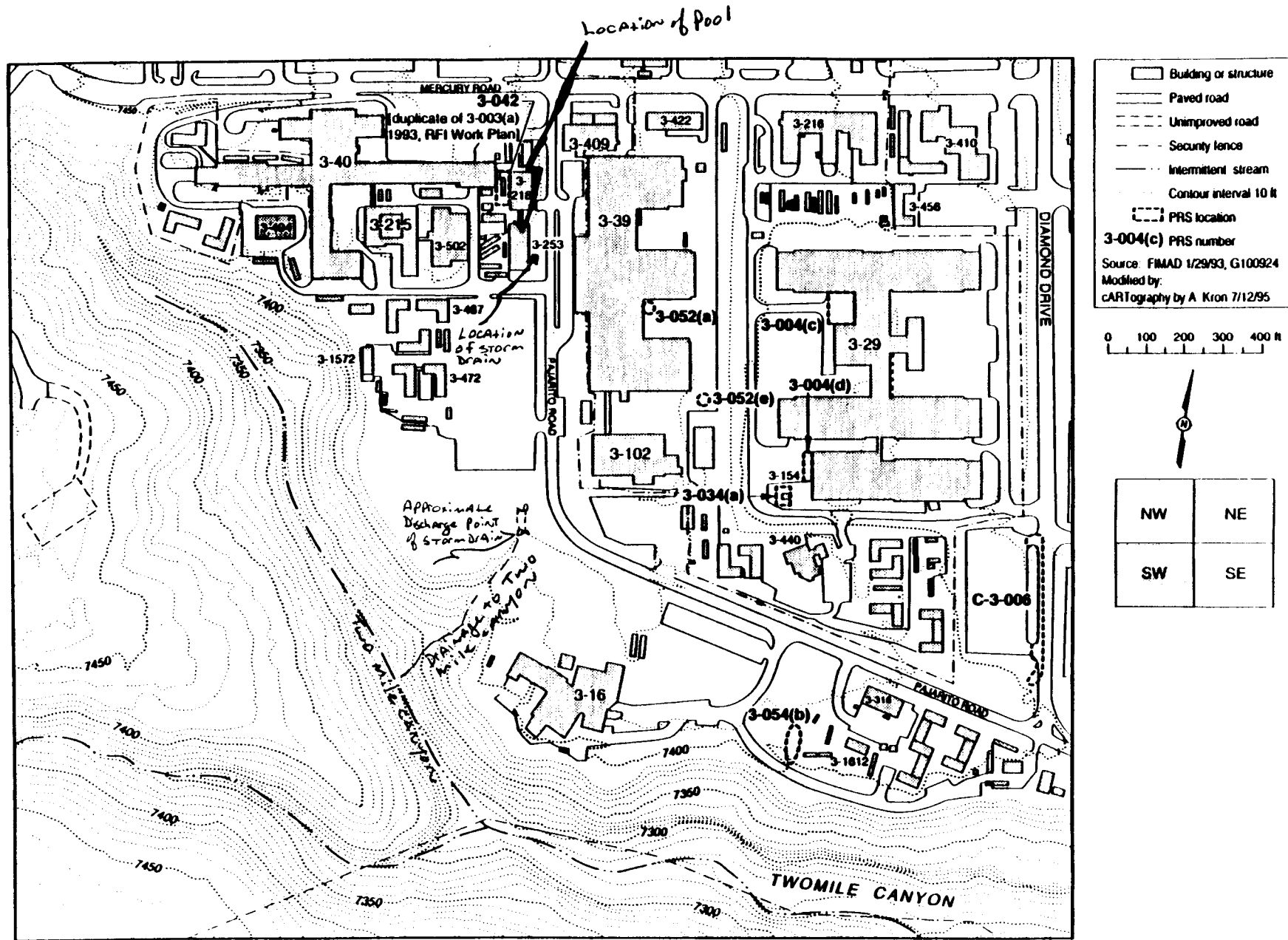


Fig. E-14. Topographic map of TA-3 (SW quadrant) showing sampling locations of PRSs.