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# Los Alamos

Los Alamos National Laboratory  
Los Alamos, New Mexico 87545

## memorandum

TO: Distribution

THRU: Thomas C. Gunderson, *is for HSE 10/24/86*  
HSE-8 Group Leader, MS K490

FROM: Roy Bohn, HSE-8 *RB*

SUBJECT: OIL SPILL AT TA-35 TSL-125

DATE: October 24, 1986

MAIL STOP/TELEPHONE: K490/5-0453

SYMBOL: HSE8-86-1204

At 1245 hours on October 9, 1986, Roy Bohn of Environmental Surveillance (HSE-8) was notified of an oil spill that had recently occurred south of TA-35-125 and had discharged into the canyon through a storm water drain. The spill was reported by John Warren of Waste Management (HSE-7) who noticed the spill during a noontime walk.

At 1300 hours Roy arrived at the scene and found that indeed there had been a recent oil spill. Oil was no longer discharging at this time. An oil sample was taken from the storm water drainage and later that day submitted to Health and Environmental Chemistry (HSE-9) for polychlorinated biphenyl (PCB) analysis. Roy Bohn notified Anthony Drypolcher of HSE-8 that an oil spill had occurred. Upon investigation it was determined the spill occurred sometime between 0900 and 1000 hours the same day, while Chemistry and Laser Science (CLS-7) personnel were draining a Marx generator inside TSL-125 into an underground storage tank (UST) outside.

Jerry Umphres, CLS-7, who was conducting the draining operation, said the spill was due to a failure of liquid level sensors designed to indicate the level of liquid in the UST and provide an automatic shutoff of the pumping system when the tanks are full (Attached Memorandum CLS-7:86-282). The underground storage tank overflowed onto the six-inch curbed area surrounding the storage tanks. This area is designed to drain any oil spill through a drain pipe into a catch basin located downslope and southwest of TSL-125. The drain located inside the curbed area was clogged with debris and therefore, the oil could not easily drain into the catch basin. The catch basin could have contained the entire volume of oil spilled. Because the drain was clogged, much of the oil overflowed the retaining curb and flowed downslope into a storm water drain

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and eventually into the canyon bottom (Ten Site Canyon), flowing approximately 30 feet downstream. Jerry estimated that up to 1000 gallons of Shell Dela oil (transformer oil, non-PCB) could have been discharged into the canyon.

Upon inspection of the spill route it was found that much of the oil had collected in pools along the way, and much of the oil had been absorbed by the soil. There was no flow of water in the canyon bottom at this time.

At approximately 1350 hours two members of the Emergency Preparedness Office arrived at the scene and were given the above information by HSE-8 personnel. Charlie Nylander of HSE-8 arrived at the scene at 1405 hours and informed Roy that Pan Am spill clean up crews had been notified and would be responding immediately. At 1415 hours Pete Carlson of Pan Am arrived at the scene with spill clean up equipment, followed by a clean up crew from Pan Am. It was decided that sorbent pillows would be placed in the pools of oil along the spill route and allowed to stay overnight. A dam constructed of sorbent pillows was constructed downstream from the spill in an attempt to collect any run-off in case of rainfall overnight.

At 1630 hours HSE-9 determined there was less than minimum detection limit of PCB present in the oil sample collected by HSE-8 personnel.

Regulation 40 CFR 110 prohibits discharge of oil in harmful quantities on navigable waters, shore lines or the contiguous zone. Since a harmful quantity is defined as "causing a film or sheen on the water, this spill did not violate this regulation as there was no water and the spill was cleaned up before it could create a sheen on any runoff.

Under 40 CFR 112 the Laboratory's Spill Prevention Control and Countermeasure (SPCC) Plan, which has just been completed and is pending administrative review and approval, would have to be submitted to the U.S. Environmental Protection Agency (EPA) Region VI for their review and approval, had the oil spill exceeded 1,000 gallons. Additionally, at the present time there is no reportable quantity under 40 CFR 117 Determination of Reportable Quantities for Hazardous Substances and/or 40 CFR 302 Designation, Reportable Quantities and Notification.

RB:brm

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Attachment: a/s

Cy: J. Aragon, HSE-DO, MS K491  
W. Hansen, HSE-DO, MS K491  
A. Stoker, HSE-8, MS K490  
C. Nylander, HSE-8, MS K490  
R. Vocke, HSE-8, MS K490  
R. Garde, HSE-7, MS E518  
M. Heineman, HSE-3, MS K489  
D. Garvey, ADS-ECMO, MS A120  
HSE-8 Incident File