



Minnesota Pollution Control Agency

Celebrating our 25th anniversary and the 20th anniversary of the Clean Water Act

September 17, 1992

Mr. Denny Lorenz
Sinclair Oil
3401 Fairbanks Avenue
P.O. Box 6247
Kansas City, Kansas 66106

Dear Mr. Lorenz:

RE: Petroleum Tank Release Site Closure
Site: Sinclair Station, 7733 Portland Avenue South, Richfield, Minnesota
Site ID#: LEAK00002572

The Minnesota Pollution Control Agency (MPCA) has reviewed the "Ground Water Monitoring Results," report dated July 2, 1992, for the above-referenced site. The MPCA has determined that the cleanup performed in response to the petroleum tank release at this site has adequately addressed the petroleum contamination and no additional corrective action is required at this site.

On May 22, 1990, a petroleum release was reported to the MPCA. Since the discovery of the release, the following remedial investigations and corrective actions have been conducted in response to the petroleum release.

1. On May 15, 16, and 17, 1990, two 4,000-gallon regular gasoline tanks, two 4,000-gallon unleaded gasoline tanks, one 6,000-gallon unleaded gasoline tank, a 1,000-gallon fuel oil tank, and a 560-gallon used oil tank were removed. The tanks were slightly corroded and contained no visible holes. Leaking dispenser pipelines were the apparent source of the release. The native soil is fine-to-coarse grained sand.
2. During excavation, soil was screened and removed based on appearance, odor, and soil vapor headspace analysis with a photoionization detector (PID). Approximately 300 cubic yards of contaminated soil with PID readings as high as 357 parts per million (ppm) was removed from the tank basin. Excavation of contaminated soil was limited by the proximity of building foundations and buried utilities. Following excavation, field screening indicated that soil with PID readings as high as 357 ppm remains on the bottom and/or sidewalls of the excavation.
3. A total of seven soil samples were collected from the bottom of the completed excavation. Maximum concentrations detected were 1,100 ppm total hydrocarbons as gasoline (THC/gas) and 1,900 ppm total hydrocarbons as fuel oil (THC/fuel oil).
4. Ground water was not encountered during the excavation.

Mr. Denny Lorenz
Page 2
September 17, 1992

5. A remedial investigation was conducted between November 2, 1990, and March 8, 1991. Concentrations as high as 1,100 ppm THC/gas were left in the soil in a thin layer immediately beneath the former tank basin at a depth of 16 feet, because they were beyond the reach of the backhoe. The depth to the water table is approximately 36 feet.
6. Nine soil borings were advanced around the former tank basins, four of which were completed as monitoring wells. Screening soil samples with a PID detected readings as high as 1,250 ppm in the soil borings. Thirteen soil samples were collected from the soil borings. Maximum concentrations detected were 920 ppm THC/gas and 480 ppm THC/fuel oil.
7. Ground water monitoring was conducted in the monitoring wells. Maximum concentrations detected were 3.2 parts per billion 1,2-dichloroethane in MW-3 located cross-gradient and downgradient of the former tank basins and pump islands.
8. The high permeability of the soil and considerable depth to the water table eliminates the potential vapor risk to underground structures and utilities. The water table aquifer was not impacted above the Minnesota Department of Health (MDH) Recommended Allowable Limits (RAL) for drinking water contaminants. The petroleum contamination remaining in the soil is unlikely to significantly impact the ground water table at 36 feet, because of the considerable vertical distance between the contaminated soil and the water table and the small fluctuations in the water table. In addition, the asphalt pavement on the site will prevent atmospheric water from leaching petroleum from the soil and further impacting the water table. The remaining contaminated soil and ground water does not represent a human health or environmental threat and should naturally biodegrade.

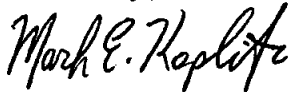
Based on the currently available information, we concur that these actions have adequately addressed the petroleum tank release. Therefore, MPCA staff does not intend to require any more investigation or clean-up work in response to this release. However, the MDH requires all wells be abandoned according to the MDH Water Well Code. Please submit a report documenting the proper abandonment of the monitoring wells. The MPCA reserves the right to reopen this file and require additional work if in the future more work is determined to be necessary, and this letter does not release any party from liability for this contamination.

Because you performed the requested work, the state may reimburse you for a major portion of your costs. The Petroleum Tank Release Cleanup Act establishes a fund which in certain circumstances provides partial reimbursement for petroleum tank release cleanup costs. This fund is administered by the Petroleum Tank Release Compensation Board (Petro Board). More specific eligibility rules are available from the Petro Board (612/297-1119 or 612/297-4203).

Mr. Denny Lorenz
Page 3
September 17, 1992

Thank you for your cooperation with the MPCA in responding to this petroleum tank release to protect the public health and the environment of the state of Minnesota. If you have any questions regarding this correspondence, please call me at 612/297-8611.

Sincerely,



Mark Koplitz
Pollution Control Specialist
Tanks and Spills Section
Hazardous Waste Division

MK:vb

cc: James Berg, Enecotech
Thomas Ferber, Richfield City Clerk
John Erskine, Richfield Fire Chief
Greg Lie, Hennepin County Solid Waste Officer