

August 4, 2020

Mr. Tim Noger
NMED Petroleum Storage Tank Bureau
2905 Rodeo Park Drive East, Building 1
Santa Fe, New Mexico 87505

RE: Response to Public Comments, Final Remediation Plan, NMDOT Cliff Patrol Yard, Grant County, New Mexico

Dear Mr. Noger,

- 1. Public Comment #1: Why not recapture all COCs instead of releasing to air? I live downwind as well as down stream and at present time can smell diesel fumes when the guys idle their engines. Toluene and benzene are lethal in air or water.**

During the design process for the soil vapor extraction remediation system (SVE System), calculations were completed to determine if concentrations of contaminants of concern (COC) in the SVE system effluent (the soil vapor extracted from the subsurface and subsequently released to the atmosphere) required treatment prior to discharging to the atmosphere. It was determined that the COC concentrations in the SVE system effluent will be much lower than those requiring treatment per New Mexico Environment Department (NMED) Air Quality Bureau (AQB) regulations; therefore, it was deemed appropriate to direct discharge the SVE system effluent into the atmosphere. INTERA will submit these calculations to the NMED AQB as part of the No Permit Required application. The No Permit Required application is not a regulatory requirement but rather a voluntary application which NMED AQB will provide a courtesy review and a letter of concurrence.

The effluent discharge point will be installed at a height greater than 10 ft to promote mixing with air to reduce or eliminate any nuisance odors. Additionally, the effluent will be routinely sampled to confirm that COC concentrations have not changed and direct discharge to the atmosphere is still deemed appropriate.

- 2. Public Comment #2: In "Lab Report", does the RL column represent the upper allowable limits of the contaminants? Example, page 5 of 11: Benzene. Result 32; RL 10. Does this mean there is 3x more Benzene than acceptable?**

RL is an acronym for "Reporting Limit," which is defined as the lowest concentration of an analyte (e.g., benzene) that can be reported reliably by a laboratory. If a contaminant is detected above the RL, then the numerical concentration (result) will be reported (i.e., benzene

result of 32 µg/L). If a contaminant is reported as non-detect, then the concentration of that contaminant is less than the RL. The acceptable levels of contaminants are set by the NMED and are presented in the tables in each report.

3. Public Comment #3: Also, are there no water samples? Samples say Air Matrix.

Laboratory analytical data provided in the Final Remediation Plan (FRP) are from the collection and analysis of soil vapor samples in support of determining if vapor treatment or permitting was required. The New Mexico Department of Transportation has performed comprehensive investigations of the magnitude and extent of dissolved-phase contaminant distribution (groundwater contamination) and is maintaining a routine groundwater monitoring and sampling program. The result of the groundwater investigations and the routine monitoring program are available to the public for review. Interested parties are encouraged to obtain access to these records through NMED.

4. Public Comment #4:

a. As for Operations, what is the decibel level?

The manufacturer's manual for the blower, which is the only mechanical component of the SVE system, has a noise level range rated between 82 and 83 decibels. Other components on the SVE system may also contribute noise but it is difficult to determine the noise level until the SVE system is installed and started.

It should be noted that the noise range of the blower is given for a distance of 1 to 3 feet from the blower. Noise levels naturally dissipate with distance from the source.

If a sound is generated at a point source in a free field, meaning there are no walls or other obstructions, the sound pressure level, will be reduced by 6 dBA each time the distance from the noise source is doubled.

Applying this attenuation rule to the manufacturer's product data provides the following results:

Distance from the SVE System (feet)	Sound Pressure Level (decibels)
1	83
50	49
100	43
500	29

Noise dissipation calculations are based on the OSHA Technical Manual, Section III, Chapter 5 - Noise, Appendix B. The indicated attenuation rule does not take into account meteorological conditions (e.g. wind), vegetation (ground level or as an obstruction), or physical obstructions. Decibels (dBA) are units of sound pressure levels.

During SVE system start-up, and subsequent operation and maintenance visits, INTERA will measure and record the decibel level emitted from the SVE system at various distances from the location of the SVE system. If noise is determined to be a nuisance, a silencer will be added to reduce the noise level.

b. How much lighting, including little red and green" engine on " lights?

The control panel for the SVE system may include up to three operation/alarm annunciators (e.g. lights). These lights are anticipated to be no larger than 1-1/2-inches in diameter. The annunciators will emit a muted red or green color and are not designed for area illumination. Additional flood lights or alarm strobes are not included in the design.

5. Public Comment #5: Does SVE suck water, or just vapor? If water how does it get clean?

The SVE system extracts contaminated soil vapor from the subsurface, no groundwater will be extracted. A very small volume of moisture entrained in the soil vapor will be removed from the vapor stream and disposed of in accordance with NMED requirements.

6. Public Comment #6: Do the monitoring wells or SVE wells break the caliche cap containing the plume?

A cemented sand and gravel layer was encountered during the drilling of AS-1 at 28.6 ft below ground surface. The total depth of the SVE well (SVE-1) does not extend to the cemented layer ("caliche cap"). Drilling of other nearby monitoring wells did not note a cemented layer at this depth. Groundwater monitoring at AS-1 indicates that COC concentrations are not present in groundwater at concentrations above NMED regulatory standards below this cemented layer.

7. Public Comment #7: Why the rush to end the comment period when you don't start till Nov.?

NMED Petroleum Storage Tank Bureau (PSTB) regulations sets the 21-day public comment period per Subsection D of 20.5.119.1923 NMAC.

8. Public Comment #8: I look forward to the remediation of this spill as we have clean, shallow water that needs to be protected. In the meantime, I don't want to breathe toluene or listen to a compressor 24/7 for a year because DOT is looking for the cheapest alternative.

Monitoring of the contaminants in groundwater have indicated that concentrations are naturally decreasing, and the extent of the contamination is isolated to an area inside of the NMDOT property. Because of the low risk that the plume presents to human health, the NMED has only required that the contamination be continuously monitored to ensure that the

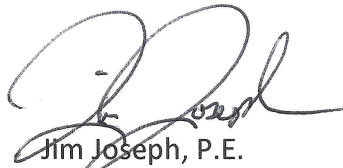
conditions and risk do not change. To be proactive and a steward of the environment, NMDOT has elected to speed the process of remediating the contamination without the use of financial assistance available through the NMED's corrective action fund. This voluntary action has included the use of their own funds to design and install the SVE system discussed in the FRP. Furthermore, SVE is a proven technology for remediating the COCs found in the subsurface at the Cliff Patrol Yard and NMDOT is committed to monitoring effluent concentrations and noise levels during SVE system operation and address any nuisance concerns that may become apparent.

Sincerely,

INTERA Incorporated



Eileen Marcillo
Project Manager/Hydrologist



Jim Joseph, P.E.
Principal Engineer

cc: Mr. Larry Kemp, NMDOT
Ms. Katherine MacNeil, NMED PSTB