

SMP Work Plan for Non-Excavation Control Area IWF Extraction Well I-S Pipe Replacement

Project: ETI-1-U

On Monday, October 25, 2021 at 7:10 am Envirogen Technologies, Inc. (ETI) discovered a small leak coming from the discharge pipe associated with Interceptor Well Field (IWF) extraction well I-S. ETI estimated that approximately 3 to 5 gallons of water leaked from the pipe. The western leg of the IWF was immediately shutdown and the soil immediately surrounding the leaking pipe (approximately 0.5 cubic yard) was excavated to uncover the leak. All soil excavated was placed on plastic sheeting and the short segment of broken pipe (approximately 1 foot in length) was replaced and the western leg of the IWF was placed back in service. This work was performed as an **Emergency Project** as defined in Section 4.7 of the Site Management Plan, Revision 6.

IWF extraction well I-S is located between the Chromium Treatment Plant and the D-1 Building and is not within an excavation control area (Figures 1 and 2). Based on the data presented in the 2020 Annual Groundwater Monitoring and GWETS Performance Report submitted by the Nevada Environmental Response Trust (NERT) on February 27, 2021 groundwater extracted by well I-S contains the following constituents:

- Perchlorate at a concentration of 250 mg/L.
- Chloroform at a concentration of 0.05 mg/L (results from adjacent monitoring well M-168).
- Chromium at a concentration of 1.4 mg/L.
- Total Dissolved Solids at a concentration of 7,200 mg/L.

Based on this information, the volume of water released, and the volume of soil that appears to be impacted, NERT does not currently believe that a spill must be reported. However, NERT plans to remove additional soil that came in contact with the water that leaked from the pipe. As such, NERT plans to complete additional soil excavation as described below as a **Utility Project** as defined in Section 4.6 of the Site Management Plan, Revision 6.

1. If required, ETI will be responsible for obtaining a Clark County DAQ Dust Permit.
2. ETI will excavated wet soil in the area of leak immediately surrounding IWF extraction well I-S.
3. The excavation is estimated to be 2.5 feet long, 2 feet wide, and 2 feet deep. All excavated soil will be placed in a dumpster to ultimately facilitate disposal of the soil. The soil removed as part of the Emergency Project will be transferred from the plastic sheeting to the dumpster.
4. The excavated soil will be sampled in accordance with Section 4.6.2.2. Based on the volume of soil expected to be excavated, a single soil sample will be analyzed by compositing from four subsamples representative of the excavated soil. The sample will be submitted to Eurofins for analysis consistent with the

groundwater COPCs identified in the Remedial Investigation Report for OU-1 and OU-2 and those required by the landfill receiving the excavated soil.

5. The excavation will be backfilled using the clean soil stockpile staged onsite that was previously approved by NDEP for use onsite. This material has been tested and demonstrated to be free of any constituents above NDEP's Basic Comparison Levels.

If it is determined that the leak has impacted more than 3 cubic yards of soil, NERT will report this spill to NDEP's 24-Hour Spill Notification Line.

Since the work planned is within 50 feet of a GWETS component (namely extraction well I-S), NERT will implement the following contingency plan to ensure that the extraction well is not damaged:

1. Equipment transport routes will be established to avoid an encounter with exposed extraction and monitoring wells. Drivers and operators will be informed of the hazards prior to operating equipment at the facility.
2. The disposal bins for storing soil will be staged a minimum of 10 feet away from existing extraction and monitoring wells.
3. Work areas will be delineated as necessary to avoid unauthorized entry into the work area.
4. A designated spotter will be used during movement of heavy machinery. A policy of no vehicle backing without performing a 360-degree inspection and spotter guidance will be enforced.

Figure 1
Location of IWF Extraction Well I-S



◆ Extraction Wells

Extraction Well I-S

Figure 2
Excavation Location

