

**OFFICE OF THE NEVADA ENVIRONMENTAL RESPONSE TRUST TRUSTEE**

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December 16, 2022

Dr. Weiquan Dong, P.E.  
Bureau of Industrial Site Cleanup  
Nevada Division of Environmental Protection  
375 E. Warm Springs Road, Suite 200  
Las Vegas, Nevada 89119

RE: Groundwater and Surface Water Monitoring Program Sampling and Analysis Plan, Revision 3  
Nevada Environmental Response Trust  
Henderson, Nevada

Dear Dr. Dong:

The Nevada Environmental Response Trust (NERT) is pleased to present the Groundwater and Surface Water Monitoring Program Sampling and Analysis Plan (SAP), Revision 3 for Nevada Division of Environmental Protection (NDEP) review. The revised SAP was prepared in accordance with NDEP's correspondence dated August 31, 2022. As requested, an annotated response to comments in also provided with this letter.

After careful review of the first comment in NDEP's August letter, NERT has opted to prepare a separate stand-alone work plan to address the NDEP requirement for "NERT and other BMI companies to analyze the VOCs including chloroform...for the respective 2023 annual sampling event". Accordingly, a second separate work plan is provided with this letter. This NDEP Directed One-Time VOC Sampling Plan (the "NDEP Directed Sampling Plan") summarizes the additional wells that will be installed to support this one-time sampling event as well as the well development and groundwater sampling procedures. It should be noted that 22 of the 75 wells suggested in NDEP's August 31, 2022 letter have been previously abandoned, were soil borings, or are otherwise unavailable and the remaining 53 wells are in SAP Revision 3. It is the intent of NERT to implement the NDEP Directed Sampling Plan alongside the five year event as specified in the revised SAP in May 2023. To achieve this, NERT requests that approval be provided by February 17, 2023, to ensure access negotiations and well installations can be completed by May. If NDEP has additional comments on the attached submittals, NERT requests NDEP submit such comments by January 16, 2023.

If you have any questions or concerns regarding this matter, feel to contact me at (702) 960-4309 or at [steve.clough@nert-trust.com](mailto:steve.clough@nert-trust.com).

Office of the Nevada Environmental Response Trust



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NDEP Comments (2/16/2022)	NERT Responses (5/6/2022)	NDEP Comments on NERT Response (8/31/2022)	NERT Responses (12/16/2022)
<b>1. General Comments &amp; Discussion</b>			
<p>Chloroform data gaps between the OSSM property and the NERT Operable Unit 1 (OU-1) could be resolved with the addition of several monitoring wells planned for installation along the eastern edge of OU-1. Historically, chloroform analysis was included in site investigations on NERT property beginning in the late 1980s. However, at that time, the focus was limited to areas surrounding the existing facilities, not necessarily located along the property boundary, and there was no consideration for contamination migration from adjacent properties. Historical records for well logs were vague or missing depth information for data collected from the OSSM property limiting the ability to define depth of chloroform contamination and migration pathways.</p> <p>Figures 5a-f identify the location of the planned monitoring wells. Table 2 identifies the planned analysis annually or five-year period. The new wells to be sampled annually include six wells planned for the 0-55 ft interval, six wells for the 55-90 ft interval, eight wells for the 90-130 ft interval. There are existing transducers that cover the 130-175 ft interval (2) and 175-300 ft interval (3). These wells have been located near the OU1 boundary adjacent to historically high concentrations of chloroform results from the OSSM property. Data from these planned monitoring wells should provide the additional detail to determine the depth of contamination and migration pathway if present. NERT may also consider new wells if these existing wells don't provide the data required to fully define the depth of contamination and migration pathways.</p>	<p>This comment is understood to be regarding the OSSM property and the western edge of OU-1 (not the eastern edge, as written). Generally speaking, the purpose of the NERT Groundwater Sampling and Analysis Plan (SAP) is to identify an approach to effectively monitor the performance of the NERT Groundwater Extraction and Treatment System (GWETS) and generally assess groundwater conditions with data primarily used to prepare the NERT Annual Groundwater Monitoring and GWETS Performance Report and the Semi-Annual Groundwater Monitoring and GWETS Performance Memorandum.</p> <p>This program also bridges the gap between the Remedial Investigation (RI) and Remedial Design (RD) since completion of the Feasibility Study, Proposed Plan, and Record of Decision can take a number of years to complete. If additional data are required to complete RD, such requirements will be evaluated at that time.</p> <p>The SAP is not designed to characterize the extent of chloroform contamination. As NDEP is aware, NERT recently completed the RI for Operable Units 1 and 2 (OU-1 and OU-2). This investigation was specifically designed to determine the nature and extent of contamination in OU-1 and OU-2. The characterization of the nature and extent of chloroform (and other chemicals of potential concern [COPCs]) in the vicinity of NERT's property boundary with OSSM was presented in the RI Report for OU-1 and OU-2. This evaluation was based on all available information, including soil, soil gas, dense non-aqueous phase liquids (DNAPL), and groundwater data. The RI Report concluded that the existing data were sufficient to characterize the nature and extent of chloroform within OU-1 and OU-2. There were no comments received from NDEP on the RI Report indicating that the available chloroform data on the west side of OU-1 was insufficient for this purpose.</p> <p>The submitted SAP Revision 2 (SAP v2) proposed adding 20 annually-sampled wells to the program in the vicinity of NERT's property boundary with OSSM to effectively monitor OSSM's trespassing plume, with intent to bridge the time between the RI and RD, and inform the operation of the GWETS. While historical records for data collected from the OSSM property may be insufficient to fully define the depth of OSSM's</p>	<p>The NDEP's BMI Regional Goals and Directives state that all remedy evaluations must identify all contaminants of potential concern (COPCs) discovered on the individual properties regardless of origin of these chemicals, including alleged trespass contaminants. NDEP is not requiring NERT to treat any other companies' chemicals except for Henderson Legacy Chemicals.</p> <p>This comment meant to refer to the western edge of the NERT property with OSSM. It is also understood that chloroform plume delineation is not part of the overall goal of this version of the SAP, however, chloroform itself is part of the groundwater quality that will be monitored as part of the SAP. The original comment was general in nature, and while it concluded with a sentence mentioning additional wells, the intent was to highlight the fact that the proposed wells could also function in a way to help delineate the trespassing plume (it was intended as an overall positive, not critical comment). There is no need to install more wells along the OSSM – NERT boundary than those already mentioned in this report.</p> <p>Therefore, NDEP requires that NERT and other BMI companies to analyze the VOCs including chloroform for the wells suggested below at least for the respective 2023 annual sampling event. Some of these wells are in the annual sampling events of this SAP Reversion 2. The goal is to build a sound foundation to determine the chemicals migrating through the east and west NERT property boundaries.</p>	<p>Additional existing monitoring wells in the vicinity of the Unit 4 building have been added to the SAP Revision 3 (SAP Rev. 3). With these additions to the SAP, there are no locations listed in the NDEP comment letter that are active monitoring wells owned by NERT that are not already in the SAP.</p> <p>Consistent with NDEP direction to NERT and other BMI Companies, a comprehensive VOC sampling event will be completed in 2023 to "build a sound foundation to determine the chemicals migrating through the east and west NERT property boundaries". This event consists of the five-year sampling event conducted consistent with SAP Rev. 3 and the collection of additional groundwater samples from the seven proposed wells not part of the ongoing groundwater monitoring program but further defined and discussed in the NDEP Directed One-Time VOC Sampling Plan submitted alongside this SAP Rev. 3 and Response-to-Comments.</p>

	<p>contamination and migration pathways on their property, it is not NERT's responsibility to resolve this issue.</p> <p>As such, NERT disagrees with NDEP's conclusion that additional monitoring wells should be considered in this area in either the context of the SAP or the NERT RI.</p>		
<b>2. Maps &amp; Figures</b>			
<p>1) Evaluation of the coverage for VOCs and other analytes is quite difficult with the current maps. Perhaps the maps could be updated to include which analytes are monitored at given wells.</p> <p>Additionally, in figures B-3 through B-10 it is hard to tell if the transducer density is relative between figures or not. It might be more meaningful to add values to the density legend rather than 'high' or 'low' and to discuss an intended density benchmark that was supported by the references.</p>	<p>As stated in the response to Comment #1, the purpose of the SAP is to identify an approach to effectively monitor the performance of the NERT GWETS and generally assess groundwater conditions with data primarily used to prepare the NERT Annual Groundwater Monitoring and GWETS Performance Report and the Semi-Annual Groundwater Monitoring and GWETS Performance Memorandum. This program also bridges the gap between the RI and RD. If additional data are required to complete RD, such requirements will be evaluated at that time.</p> <p>The figures in the SAP are not intended to evaluate spatial coverage of individual analytes. Tables 3 through 7 are organized by OU and Study Area to help understand the proposed analytical program by geographic area. With few exceptions, the four NERT Primary COPCs, as further defined in the RI Report (perchlorate, chlorate, chromium, and chloroform), are analyzed at every monitoring well specified in the SAP to be sampled within OU-1 and west of Pabco Road within OU-2 and OU-3. East of Pabco Road in OU-2, COPCs are administratively limited to perchlorate and chlorate. While chloroform, hexavalent chromium, and other potential contaminants may be present in groundwater within OU-2 east of Pabco Road, and consistent with NDEP's July 2016 directive, NERT's investigations within the Eastside Sub-Area are limited to the investigation of perchlorate and chlorate impacts to the subsurface, as further detailed in the RI Report for OU-1 and OU-2.</p> <p>Consistent with the Settlement Agreement and Administrative Order on Consent: BMI Common Areas, Phase 3, known as AOC3, the potential presence of chloroform, hexavalent chromium, and other potential contaminants in groundwater within the Eastside Sub-Area will be addressed separately by BRC under the oversight and direction of NDEP. The exception to this is east of Pabco Road in OU-3. In this area, the Primary COPC chromium is also analyzed in addition to perchlorate and chlorate for consistency with the Downgradient Investigation performed by AECOM.</p>	<p>The comment's intent was to suggest that perhaps the maps could be updated to include which analytical suites are monitored at given wells, specifically where VOCs are planned to be monitored. It is agreed that coverage for individual analytes does not need to be mapped for this report. While Tables 6 and 7 provide this information, it is not easy to find each well on each of the maps. If the spatial delineation is simply that all wells in Tables 6 and 7 that are not being monitored for VOCs are because they are in OU-3, please make that clearer in Sections 3.1.4 and 3.1.5. If it is not as simple as that, it would be helpful to show which wells are planned to be sampled for VOCs on Figures 5a through 6f.</p> <p>For example, Figure 6e shows all Lower Middle wells, regardless of if they are in OU-2 or not, and also shows a legend for wells that are not shown at all (Shallow and Deep).</p> <p>Perhaps the symbology marking the locations could be utilized to show VOC or non-VOC monitoring instead, as these figures never show a shallow, middle, and deep well on the same map. It is actually a little bit confusing having those depths in the legend key when they don't appear on the maps. This is one possible way to show the VOC analytical suite on these maps, though it is not the only acceptable response. However, it is still requested to spatially clarify where the annual and 5-year VOC sampling will occur.</p> <p>For the transducer density comment, the reply is acceptable pending review of the revised report.</p>	<p>Section 3.0 has been updated to include an in-text table and an explanation of the spatial relationship between the RI Study Areas (divided by east and west of Pabco Road) with each of the selected analytes. Each of these areas corresponds with the groupings used to present the annual and five-year sampling events proposed in Tables 6 and 7, respectively.</p> <p>The legends in the figures have been revised to only show the locations included within each figure.</p> <p>Consistent with NDEP direction to NERT and other BMI Companies, a comprehensive VOC sampling event will be completed in 2023 to "build a sound foundation to determine the chemicals migrating through the east and west NERT property boundaries". Figures 1a – 1e, 2a – 2c, and 3a – 3c of the NDEP Directed One-Time VOC Sampling Plan presents the wells where samples will be collected in 2023 for VOC analysis. This sampling event involves the collection of samples from seven wells outside the groundwater monitoring program and 397 wells as defined in SAP Rev. 3, for a total of 404 wells to be sampled in 2023 for VOC analysis.</p>

	<p>The NERT SAP will be updated to include additional language to present an expanded justification for the proposed analytical program which will be consistent with the discussion of administratively limited COPCs east of Pabco Road.</p> <p>With respect to the comment regarding transducer density, the information presented in the SAP is not intended to be compared between Figures B-3 through B-10 in Appendix B. The kernel density tool in ArcGIS generates an arbitrary scale between the lowest and highest densities observed each time the tool is run (i.e., for each figure). As such, there is no specific value assigned using the software that can be used as a benchmark throughout the analysis. The figures are solely intended to provide a qualitative representation of transducer density.</p> <p>They are not intended to provide a quantitative basis on which decisions about keeping or removing transducers can be made.</p>		
<p>2) Comparison to Chloroform Data Investigation and Current Well Coverage: NDEP previously performed a data investigation of chloroform on the entire BMI Complex and surrounding area in its "Chloroform Report Black Mountain Industrial Complex (BMI)" that was distributed as a draft on January 7, 2022. This draft report looked at historical accounts of chemical production and storage by different companies as well as the production of spatio-temporal chloroform groundwater plumes based on all data available in the BMI Regional Database. Based on this investigation, there were several suggested areas to target for additional sampling. Comparing those suggestions to this report regarding the NERT subareas specifically, there are some specific suggestions/notes (a-e):</p>	<p>As stated in the response to Comment #1, the purpose of the SAP is to identify an approach to effectively monitor the performance of the NERT GWETS and with data primarily used to prepare the NERT Annual Groundwater Monitoring and GWETS Performance Report and the Semi-Annual Groundwater Monitoring and GWETS Performance Memorandum. This program also bridges the gap between the RI and RD. If additional data are required to complete RD, such requirements will be evaluated at that time.</p> <p>The SAP is not designed to characterize the extent of chloroform impact (or other COPCs). The RI Report for OU-1 and OU-2 concluded that the existing data were sufficient to characterize the nature and extent of chloroform in groundwater within OU-1 and OU-2.</p> <p>There were no comments received from NDEP on the RI Report for OU-1 and OU-2 indicating that the available chloroform data were insufficient for this purpose.</p> <p>See additional detailed responses (a through e) below.</p>	<p>It is understood chloroform is not the primary focus of this report, but it can be considered a stand-in for the purposes of the comments for groundwater monitoring on the site. The SAP is concerned with groundwater monitoring, and to that extent, should be concerned with, or at least be made aware of, potential data gaps that have arisen since the RI.</p>	<p>Acknowledged. Consistent with NDEP direction to NERT and other BMI Companies, a comprehensive VOC sampling event will be completed in 2023 to "build a sound foundation to determine the chemicals migrating through the east and west NERT property boundaries" as defined and discussed in the NDEP Directed One-Time VOC Sampling Plan submitted alongside this SAP Rev. 3 and Response-to-Comments.</p>

<p>2a. OU-1: One deeper well to the south of the Units 4 and 5 buildings (re: Figure 5b). Additional wells in the Lower Shallow Water-Bearing Zone directly between the Unit 4 building and the barrier wall, at an annual sampling interval for the next five years (re: Figure 5b). There are few Lower Shallow wells on this side of OU-1 in general. NDEP suggests adding some existing shallow monitoring wells for this SAP.</p>	<p>The Unit 4 and 5 Buildings area and the Lower Shallow Water-Bearing Zone between the Unit 4 Building and the barrier wall have been thoroughly characterized in the Unit Buildings 4 and 5 Source Area Characterization Report and the RI Report for OU-1 and OU-2. The Unit Buildings 4 and 5 Source Area Characterization Report was approved by NDEP on January 13, 2020, and NDEP's comments on the RI Report for OU-1 and OU-2 did not indicate that the available chloroform data, including both soil and groundwater data, were insufficient. Since the extent of contamination has been sufficiently delineated in the Unit Buildings 4 and 5 Source Area Characterization Report and the RI Report for OU-1 and OU-2, the installation of additional wells as suggested by NDEP is not necessary to achieve the stated goals of the SAP.</p>	<p>The suggestion here was highlighting potential spatial gaps and was two-part: 1) considering to add a deeper well to the south of Units 4 &amp; 5 buildings and 2) add more existing wells to the SAP between Units 4 and 5 buildings and the barrier wall in the Lower Shallow zone. As for suggestion 1, perhaps a deeper well south of the buildings is not needed if the characterization report is deemed sufficient in spatial coverage for the extent of potential Units 4 and 5 buildings. For 2, however, it is still not clear why more existing Lower Shallow zone wells are not included on the east side of OU-1 between the Units 4 and 5 buildings and the barrier wall. It is understood there is an OU 1 &amp; OU 2 RI report that has been reviewed but not approved at this point and an approved characterization report for Units 4 and 5 buildings. However, those reports were concerned with using data that has been collected, and this report is concerned with monitoring data that will be collected. There is a striking hole in Figure 5b for wells on the east side of OU-1. Perhaps wells in the Lower Shallow do not exist in that area? If so, please state this. It seems as if there was a lack of wells in this area at a similar depth in the OU 1 &amp; OU 2 RI. If there are existing wells in this area in the Lower Shallow zone, which is in the area characterized as containing contamination, why are they excluded as part of the SAP? Stating that there were no wells used here because they weren't used in previous reports is not a fully acceptable answer.</p> <p>NERT should consider these comments when adding more monitoring wells from the wells suggested below, because the Unit 4 was confirmed one of the chloroform sources in the BMI region.</p>	<p>With respect to part (1) of this comment, we have included all available wells that are in the vicinity of the Unit 4 and 5 buildings in SAP Rev. 3 (21 total locations). Given that the Unit 4 Source Area In-Situ Bioremediation Treatability Study is ongoing, none of the monitoring wells within the Unit 4 basement have been included in SAP Rev. 3. However, performance monitoring will be conducted as part of the treatability study and data from the 62 wells associated solely with the study will be reported under separate cover.</p> <p>Regarding part (2), there are no existing wells in the Lower Shallow zone between the Unit 4 and 5 buildings and the barrier wall. Within the RI Report for OU-1 and OU-2, saturated soil samples from deep soil borings in the surrounding vicinity were used to supplement groundwater data at this depth interval.</p> <p>While it remains the opinion of the Trust that the extent of groundwater contamination in this area was sufficiently delineated using data derived from deep soil borings collected in 2017-2018 to meet the objective of the OU-1 RI, the Trust also acknowledges that several years have elapsed since the deep soil boring samples were collected. To provide NDEP a current data set to "build a sound foundation to determine the chemicals migrating through the east and west NERT property boundaries", additional wells are proposed for installation as further detailed in the NDEP Directed One-Time VOC Sampling Plan.</p>
<p>2b. Two or three wells in the Former Parcels C &amp; D in both the Upper and Lower Shallow Water-Bearing Zone, if possible (re: Figure 5b). Some model results have shown a lobe of the chloroform plume through this area, but there are no wells here. The NDEP Chloroform draft report shows that potential areas of contamination at depth (below 55 ft., perhaps related to early results from well H-23) for early years (ca. 1984) in the spatio-temporal chloroform plume model map. However, there is not much sampling that has been done at depth in this area since 1984.</p>	<p>Former Parcels C and D are no longer owned by NERT and, consistent with the terms of the 2013 Easement Agreement between NERT and TRECO, NERT is required to and is currently in the planning and coordination stage of relocating certain monitoring wells to the northern property boundary or Former Parcels C and D. NERT did not start discussions with the new owner of Former Parcels C and D until after submittal of SAP v2. Accordingly, concurrent with the preparation of these response to comments, NERT is in the process of preparing correspondence to send to NDEP to detail the relocations of up to four NERT-owned wells (MC-50, MC-51, MC-53, and potentially M-</p>	<p>This is acceptable pending review of the revised report.</p>	<p>Acknowledged.</p>

	<p>23). Once approved by NDEP, NERT will submit a revised SAP to detail this change.</p> <p>NERT understands that the new property owner will have a similar request for any other owners of groundwater monitoring wells located on these parcels. In addition to the NERT owned wells, there are an additional 12 wells owned by others of which two (MC-93 and MC-45) are included in the NERT SAP v2 which will most likely be abandoned by others and thus will be removed from the SAP in a future iteration of the document. It should be noted that the removal of these two wells (MC-93 and MC- 45) is not considered detrimental to NERT at this stage in the program.</p> <p>The Trust would also like to note that the configuration of the four NERT replacement wells as currently conceived will allow for better east-west delineation of OSSM's trespassing plume that migrates through the NERT site and into this area. However, these wells will be screened in the upper shallow water bearing zone.</p> <p>Acknowledging the above, the NERT RI Report for OU-1 and OU-2 demonstrated that the chloroform west of the WC-West Pond originates from the OSSM site. East of the trespassing OSSM plume (underlying the WC-West and WC-East Ponds), there is chloroform in groundwater that is associated with the Unit 4 and 5 Building source area. Accordingly, and to the extent NDEP requires additional vertical delineation west of the WC-West Pond, such delineation should be performed by OSSM. Please note that Figure 7-70b of the RI Report for OU-1 and OU-2 provides an isoconcentration contour map of chloroform within the lower shallow water bearing zone</p>		
<p>2c. To help delineate the edges of the OSSM plume at depth, it may be helpful to sample wells M-243, M-246, M-5D, M-14D, and M-230 annually for the first five years.</p>	<p>NERT is not responsible for the further delineation of OSSM's plume. The NERT RI Report for OU-1 and OU-2 demonstrated that the chloroform referenced in this comment originates from the OSSM site.</p> <p>Accordingly, and to the extent NDEP requires additional delineation in this area, such delineation should be performed by OSSM.</p> <p>As stated in the response to Comment #1, the purpose of the SAP is to identify an approach to effectively monitor the performance of the NERT GWETS and generally assess groundwater conditions with data primarily used to prepare the NERT Annual Groundwater Monitoring and GWETS Performance Report and the Semi-Annual Groundwater Monitoring and GWETS Performance Memorandum. This program</p>	<p>Part of the purpose of the SAP is to understand groundwater conditions on NERT property, and sampling five wells once a year for five years would help to do so. However, it is understood that evaluating a specific groundwater plume originating off of NERT's property is not fully within the scope of the SAP.</p>	<p>Acknowledged.</p>



	<p>also bridges the gap between the RI and RD. If additional data are required to complete RD, such requirements will be evaluated at that time.</p> <p>Accordingly, modifying the NERT SAP to include sampling wells M-243, M-246, M-5D, M-14D, and M-230 annually for five years is not necessary.</p>		
<p>2d. OU-2: There was a possibility, based on the modeled chloroform plume that the Alpha and Beta ditches could have helped transport chloroform through OU-2 in the NDEP Chloroform draft report. The ditches are not mapped on the figures showing the planned and existing sampling locations, but if a few of the wells on Figure 6a could be associated with the ditch, this would be interesting to identify them in the sampling plan. In Figure 6a, a suggestion is to move the new five-year monitoring interval wells east of Pabco Rd. in OU-2 to the annual interval for the first five years.</p>	<p>The NERT SAP will be updated to include the Alpha and Beta Ditches to the relevant figures as suggested. However, as discussed in response to Comment #2.1, NERT's COPCs within the Eastside Sub-Area east of Pabco Road are administratively limited to perchlorate and chlorate. Accordingly, and to the extent NDEP requires the collection of groundwater samples for chloroform analysis in this area east of Pabco Road, such sampling and analysis should be performed by BRC. Since the suggestion to move the new five-year monitoring interval wells east of Pabco Road in OU-2 to the annual interval for the first five years appears to be associated with obtaining chloroform data, NERT does not believe this change would provide any benefit to the proposed monitoring of perchlorate and chlorate east of Pabco Road. The primary performance metric in this area is the calculation of the mass flux along an east-west transect that separates OU-2 and OU-3 as required by NDEP. As such, NERT does not believe this sampling frequency change is appropriate.</p>	<p>In light of the limited and administrative responsibilities placed on NERT, this is considered an acceptable response, pending review of the revised report and the regulator's agreement regarding the administrative boundaries.</p>	<p>Acknowledged.</p>
<p>2e. OU-3: Adding a well to monitor annually below 55 ft. somewhere between wells DBMW-4 and DBMW-5 at the boundary of the OU-2 area would fill in a spatial gap at that depth (re: Figure 7b).</p>	<p>NERT assumes that this comment pertains to monitoring chloroform in groundwater between monitoring wells DBMW-4 and DBMW-5. As indicated above, NERT's COPCs are administratively limited to perchlorate and chlorate east of Pabco Road. Based on the particle tracking evaluation presented in Figures 9-7b and 9-7c of the RI Report for OU-1 and OU-2, any chloroform in this area would have originated from the Eastside Sub-Area. Accordingly, and to the extent NDEP requires additional delineation of chloroform in this area east of Pabco Road, such delineation should be performed by BRC.</p> <p>Also please note, NERT is aware that BRC has decommissioned monitoring wells DBMW-4 and DBMW-5 as of April 7, 2022.</p>	<p>In light of the limited and administrative responsibilities placed on NERT, this is considered an acceptable response, pending review of the revised report and the regulator's agreement regarding the administrative boundaries.</p>	<p>Acknowledged.</p>
<b>3. Essential Corrections</b>			
<p>1) Specific Comment #1 Figures. There is a discrepancy in Figure 2b between the main map and the associated inset map. The figure should be internally consistent. The cluster of wells to the east side of the inset map appears to lack a monitoring well that is displayed within that area on the primary map. Please</p>	<p>The NERT SAP will be updated to resolve the discrepancy in Figure 2b between the inset and main map as follows:                  1. ART-6 was shown as a monitoring well in the main map while the inset layer did not include this location. ART-6 is not a monthly monitoring location and therefore it will be removed from the main map.</p>	<p>Points 1 and 2 above will be acceptable, pending review of the revised report. As for the chloroform plume maps, the supplied maps are appreciated. It is agreed that the groundwater chloroform plume does not belong on every figure previously included in the report. However, the context provided by a general figure of the trespassing groundwater VOC</p>	<p>The requested figures depicting the chloroform plume have been included in the NDEP Directed One-Time VOC Sampling Plan submitted alongside this SAP Rev. 3 and Response-to-Comments.</p>

<p>ensure that the inset map and is accurate and shows all relevant well locations. The inset map should show more specificity than the larger/zoomed-out map, not less.</p> <p>Many of the proposed added locations are justified in Table 1b for the purpose of improving the known boundaries of trespassing groundwater plumes. Including a figure of the chloroform plume, and possibly others, would help visualize how the chosen additions would contribute to this goal. It might be helpful to have the chloroform plume on every relevant figure of well locations and/or a figure of wells by purpose. However, the request here is to include a figure showing the location of the trespassing plume, and to include the Alpha and Beta ditches on that map as well.</p>	<p>2. The Alpha and Beta Ditches will be added to the relevant figures as suggested.</p> <p>With respect to the chloroform plume, the goal of the RI was to delineate the nature and extent of contamination in OU-1 and OU-2. It is the opinion of NERT that the RI Report for OU-1 and OU-2 achieved that goal and the comments received from NDEP on the report do not indicate otherwise. However, as requested by NDEP, the Trust has prepared the attached Figures 1 and 2 that present the well locations in Table 1b on maps with the most recent chloroform plume (2021) for depth intervals of 0 to 55 ft bgs and 55 to 90 ft bgs. Since the SAP includes all COPCs that are monitored across the NERT RI Study Area, and not just chloroform, the Trust does not believe it is necessary to add these maps to the SAP.</p>	<p>plume referenced in the report and Table 1b would help evaluate the added wells.</p>	
<p>2) Specific Comment #2 Table 2. Cross-referencing the monitoring well locations shown in Figures 6a through 6e to Table 2 indicates that most (or perhaps all) of the wells east of the Pabco Road will not be monitored for volatile organic compounds (VOCs) as part of the monitoring program. Chloroform is included in the VOCs List provided in Table 8. Elevated chloroform levels have been measured at many of these wells east of Pabco Road including locations near the road (e.g., POU-3, DBMW-1, DBMW-3, DBMW-4, DBMW-5) and those farther to the northeast (e.g., DBMW-12). Including VOC measurements as part of the annual sampling plan would further the goal stated in Section 2.1.2 ("defining the extent of key monitored constituents; perchlorate, chlorate, chromium, and chloroform"). Please justify why monitoring for VOCs in these areas is not included in the monitoring plan.</p>	<p>As indicated above, NERT's COPCs are administratively limited to perchlorate and chlorate within the Eastside Sub-Area, east of Pabco Road. To eliminate any ambiguity of the stated goal of the NERT SAP, the SAP will be updated throughout to provide justification regarding the selection of constituents to be monitored east of Pabco Road. Accordingly, and to the extent NDEP requires additional delineation of chloroform in this area east of Pabco Road, such delineation should be performed by BRC.</p>	<p>This is acceptable pending review of the revised report. It is noted that it has been administratively determined that NERT has no mandate to monitor constituents other than perchlorate and chlorate east of Pabco Road.</p>	<p>Acknowledged.</p>
<p>3) Specific Comment #3 Table 2 and Figures 7a-7e. A cross reference between the monitoring wells in Figures 7a-7e to Table 2 shows most of the wells in the Tuscany residential village will not monitor for VOCs. Please justify why monitoring for VOCs in these areas is not included in the monitoring plan.</p>	<p>Based on the particle tracking evaluation presented in Figure 9-7c of the RI Report for OU-1 and OU-2, the Tuscany residential village is located downgradient of the Eastside Sub-Area. Accordingly, if chloroform is present in groundwater below the Tuscany residential village it would have originated from the Eastside Sub-Area. Since NERT's COPCs are administratively limited to perchlorate and chlorate within the Eastside Sub- Area the same restriction applies to the Northeast Study Area and the Downgradient Study Area east of Pabco Road which includes the Tuscany residential village. Accordingly, and to the extent NDEP requires additional VOC data in</p>	<p>This is acceptable pending review of the revised report. It is noted that it has been administratively determined that NERT has no responsibility for VOCs in the Tuscany village area.</p>	<p>Acknowledged.</p>

	<p>this area, such data collection should be performed by BRC.</p>		
<p>4) Specific Comment #4 Sections B3.2 &amp; B3.3. The first bullet states: "a geospatial density analysis was performed to identify gaps in coverage. The geospatial analysis looked at how closely grouped transducer locations were in relationship to other transducer locations. The output from this assessment was a set of "heat maps" that identify "hot spots" (areas of high transducer coverage) and "cold spots" (areas where transducer coverage could be improved) throughout OU-3 for a given WBZ."  <ul style="list-style-type: none"> <li>Appendix B gives no quantitative or qualitative details about how the heat maps in the figures are produced other than saying that the analysis "looked at how closely grouped transducer locations were in relation to other transducer locations" (Section B3.2). A brief description of the calculation would improve the support for the heat maps and the decisions made based on them. Please provide details including the calculations and software used to develop the heat maps.</li> </ul> </p>	<p>The NERT SAP will be updated to include a detailed description of the tool used to generate the density heat maps in Appendix B.</p>	<p>This is acceptable pending review of the revised report.</p>	<p>Acknowledged.</p>
<p>5) Specific Comment #5 Section 2.1.2. The last paragraph of Section 2.1.2 states: "Groundwater wells added for chemical analysis will only be sampled during the annual or five-year events. These monitoring frequencies will provide sufficient data to evaluate performance metrics in forthcoming annual performance reports. More frequent monitoring is not expected to substantively improve the effectiveness of the monitoring program." This statement could be strengthened by adding some additional context for this expectation. For example, were temporal trends at monitoring locations evaluated for the contaminants of concern and found to not change significantly over the stated intervals? Additional information would help the reader understand, for example, why certain contaminants are measured monthly while others are measured annually, as shown in Table 2.</p>	<p>Section 2.1.2 of the NERT SAP will be expanded to specify that the basis for the sampling frequencies were the temporal trends identified in the 2016 Groundwater Monitoring Optimization Plan approved by NDEP. The trends observed in 2016 have remained consistent, as evidenced in subsequent annual reporting.</p>	<p>This will be sufficient if added to the text with references to the 2016 document and pertinent annual reports.</p>	<p>The SAP Rev. 3 includes this explanation of temporal trends to support the sampling frequencies chosen in Section 2.1.2.</p>
<p>6) Specific Comment #6 Section 2.1.3.1. Footnote 8: Please include a callout to Table 10 here, as this appears to be the only place in the document to find out which locations are yet to be installed; no distinction is made on the</p>	<p>Since the submittal of the SAP Revision 2 on December 9, 2021, all locations requiring the installation of a new well have been completed as part of the OU-3 RI field activities completed in late 2021. Table 10 of the NERT SAP will be updated to present the current status and construction information for all monitoring wells.</p>	<p>This is acceptable pending review of the revised report.</p>	<p>Acknowledged.</p>

<p>figures between existing locations and those yet to be installed.</p>	<p>Furthermore, Footnote 8 in Section 2.1.3.1 will be deleted.</p>		
<p>7) Specific Comment #7 Figure 6a. Several monitoring well location labels on the figure are inconsistent with those given in Table 10 in that the labels on the figure omit the dash (e.g., POD7, POD8, POU3) while the identifiers in Table 10 include the dash (e.g., POD-7). Searching the document for information about these locations would be easier if the identifiers were consistent. Please update the identifiers in the figures to be consistent with the tables or vice versa.</p>	<p>Figure 6a and Table 10 of the NERT SAP will be modified for consistency.</p>	<p>This is acceptable pending review of the revised report.</p>	<p>Acknowledged.</p>
<p>8) Specific Comment #8 Figure B-9. Figure B-9 is missing the density layer in the figure legend. Please add this in so it matches the other figures in the series.</p>	<p>The NERT SAP will be updated to add the density layer to the legend in Appendix B, Figure B-9.</p>	<p>This is acceptable pending review of the revised report.</p>	<p>Acknowledged.</p>
<p>The NDEP letter had the following additional comment after Comment #8:</p> <p>NDEP: The wells NDEP has suggested for the chloroform analysis are provided in the attached table. It is acceptable that NERT refines the suggested wells for the VOCs including chloroform analysis if the refined wells have appropriate spatial and vertical distribution. This requirement is intended at least for the 2023 annual sampling event.</p> <p>NERT: The table provided has been amended and is attached (Table A-1). The status of each suggested location is indicated and any additional comments have been noted.</p>			

**TABLE A-1: LOCATIONS SUGGESTED BY NDEP AND CONSIDERED FOR VOC SAMPLING**  
**Nevada Environmental Response Trust Site**  
**Henderson, Nevada**

Well	Status	Note
LG032	P&A	Replacement location "LG032R" is also P&A
M-057A	Active	Included in the SAP for annual VOC sampling as M-57A
M-1	P&A	
M-123	Active	Included in the SAP for annual VOC sampling
M-124	Active	Included in the SAP for annual VOC sampling
M-125	Active	Included in the SAP for annual VOC sampling
M-125D	Active	Included in the SAP for annual VOC sampling
M-126	Active	Included in the SAP for annual VOC sampling
M-127	P&A	
M-131	Active	Included in the SAP for VOC sampling every five years, starting in 2023
M-134	Active	Included in the SAP for annual VOC sampling
M-135	Active	Included in the SAP for annual VOC sampling
M-142	Active	Included in the SAP for annual VOC sampling
M-14A	Active	Included in the SAP for annual VOC sampling
M-14D	Active	Included in the SAP for VOC sampling every five years, starting in 2023
M-159	Active	Included in the SAP for annual VOC sampling
M-160	Active	Included in the SAP for annual VOC sampling
M-186	Active	Included in the SAP for annual VOC sampling
M-19	Active	Included in the SAP for annual VOC sampling
M-191	Active	Included in the SAP for annual VOC sampling
M-195	Active	Included in the SAP for annual VOC sampling
M-196	Active	Included in the SAP for annual VOC sampling
M-197	Active	Included in the SAP for annual VOC sampling
M-199	Active	Included in the SAP for annual VOC sampling
M-200	Active	Included in the SAP for annual VOC sampling
M-201	Active	Included in the SAP for annual VOC sampling
M-202	Active	Included in the SAP for annual VOC sampling
M-206	Active	Included in the SAP for annual VOC sampling
M-223	Active	Included in the SAP for annual VOC sampling
M-224	P&A	Replaced by M-224R
M-224R	Active	Included in the SAP for annual VOC sampling
M-225R	Active	Included in the SAP for annual VOC sampling
M-226	Active	Included in the SAP for annual VOC sampling
M-227	P&A	Replaced by M-227R
M-227R	Active	Included in the SAP for annual VOC sampling
M-228	P&A	Replaced by M-228R
M-228R	Active	Included in the SAP for annual VOC sampling
M-229	Active	Included in the SAP for annual VOC sampling
M-22A	Active	Included in the SAP for annual VOC sampling
M-230	Active	Included in the SAP for VOC sampling every five years, starting in 2023
M-234	Active	Included in the SAP for annual VOC sampling
M-240	Active	Included in the SAP for annual VOC sampling
M-245	Active	Included in the SAP for VOC sampling every five years, starting in 2023
M-249-100	Active	Included in the SAP for annual VOC sampling
M-251-100	Active	Included in the SAP for annual VOC sampling
M-263	Active	Included in the SAP for annual VOC sampling

**TABLE A-1: LOCATIONS SUGGESTED BY NDEP AND CONSIDERED FOR VOC SAMPLING****Nevada Environmental Response Trust Site****Henderson, Nevada**

<b>Well</b>	<b>Status</b>	<b>Note</b>
M-31A	Active	Included in the SAP for annual VOC sampling
M-35	Active	Included in the SAP for annual VOC sampling
M-50	P&A	
M-52	Active	Included in the SAP for annual VOC sampling
M-57A	Active	Included in the SAP for annual VOC sampling (NDEP also listed this location as M-057A)
M-66	Active	Included in the SAP for annual VOC sampling
M-67	Active	Included in the SAP for annual VOC sampling
M-68	Active	Included in the SAP for annual VOC sampling
M-72	Active	Included in the SAP for annual VOC sampling
M-73	Active	Included in the SAP for annual VOC sampling
M-74	Active	Included in the SAP for annual VOC sampling
M-81A	Active	Included in the SAP for annual VOC sampling
M-98	Active	Included in the SAP for annual VOC sampling
MC-MW-17	Active	Well is not owned by NERT
MC-MW-18	Active	Well is not owned by NERT
PG107	P&A	
RISB-31	Soil Boring	This is a soil boring location only (a well was never installed)
RISB-32	Soil Boring	This is a soil boring location only (a well was never installed)
RISB-33	Soil Boring	This is a soil boring location only (a well was never installed)
RISB-34	Soil Boring	This is a soil boring location only (a well was never installed)
RISB-35	Soil Boring	This is a soil boring location only (a well was never installed)
RISB-36	Soil Boring	This is a soil boring location only (a well was never installed)
RISB-37	Soil Boring	This is a soil boring location only (a well was never installed)
TR-6	Active	Included in the SAP for annual VOC sampling
U4U5-16	P&A	This was a temporary well that was immediately abandoned after sampling occurred
U4U5-2	P&A	This was a temporary well that was immediately abandoned after sampling occurred
U4U5-31	P&A	This was a temporary well that was immediately abandoned after sampling occurred
U4U5-74	P&A	This was a temporary well that was immediately abandoned after sampling occurred
U4U5-76	P&A	This was a temporary well that was immediately abandoned after sampling occurred

**Notes:**

NDEP = Nevada Division of Environmental Protection

NERT = Nevada Environmental Response Trust

P&amp;A = plugged/abandoned well

SAP = Groundwater Sampling and Analysis Plan, Revision 3 (pending NDEP review/approval)

VOC = volatile organic compound