



September 11, 2012

Via Email

Ms. Shannon Harbour, PE
Special Projects Branch
Bureau of Corrective Actions
Nevada Division of Environmental Protection
901 S. Stewart Street, Suite 4001
Carson City, Nevada 89701

Re: Scope of Work for Response to NDEP Comments on the May 18, 2012 Sale Parcels Risk Assessment, Nevada Environmental Response Trust Site, Henderson, NV

Dear Ms. Harbour:

In letters to the Nevada Environmental Response Trust (the "Trust") dated August 7 and August 10, 2012, the Nevada Division of Environmental Protection (NDEP) provided comments on the *Revised Closure and Post-Remediation Screening Health Risk Assessment Report for Parcels C, D, F, G, and H*, prepared by Northgate Environmental Management, Inc. ("Northgate") and dated May 18, 2012 (including four associated Data Validation Summary Reports [DVSRs]). ENVIRON has prepared this scope of work to detail the efforts associated with responding to NDEP comments and preparation of revised Sale Parcels risk assessment deliverables to NDEP. This scope of work includes preparation and submittal to NDEP of the following deliverables:

- 1) Two annotated response to comment (RTC) letters — one for each of NDEP's letters.
- 2) A Revised Soil Pathways Health Risk Assessment (HRA) for Parcels C, D, F, G, and H.
- 3) Four revised DVSR reports.
- 4) A Soil and Soil Gas Sampling and HRA Work Plan for Sale Parcels C, D, F, G, and H.
- 5) A DVSR for the soil and soil gas samples.
- 6) A HRA for vapor intrusion and outdoor air pathways for Sale Parcels C, D, F, G, and H.

ENVIRON proposes that Northgate be retained to prepare the RTC letters, the revised soil pathways HRA report, and the revised DVSRs, each of which would be reviewed by ENVIRON prior to submittal to NDEP. We propose, however, that ENVIRON be responsible for preparing the work plan and DVSR for soil and soil gas sampling, and the HRA in response to NDEP's request (in Comment #12) for using both groundwater and soil gas data for the analysis.

Soil Pathways HRA, DVSRs, and RTC Letters

Northgate has provided ENVIRON with two scopes of work to: 1) respond to NDEP comments and prepare a revised soil pathways HRA report (SOW 24); and 2) prepare four revised DVSR reports (SOW 23). ENVIRON proposes to coordinate with Northgate and the Trust during this effort, as well as provide a critical technical review of Northgate's draft deliverables.

Work Plan, Vapor Intrusion Sampling, and HRA

In their comments, NDEP recommended conducting a vapor intrusion risk assessment specifically for Sale Parcels C, D, F, G, and H in conjunction with the soil pathway risk assessment. To fully address NDEP's comment, as well as additional comments provided in an August 30, 2012 call between ENVIRON and NDEP, ENVIRON's proposed scope of work includes four tasks:

(1) preparation of a work plan, (2) soil and soil gas sampling, (3) preparation of a DVSR, and (4) preparation of a HRA for the vapor intrusion and outdoor air pathways.

- Task 1: Preparation of a Sampling and HRA Work Plan. ENVIRON will prepare a work plan for Sale Parcels C, D, F, G, and H, to include the following:
 - Development of a conceptual site model (CSM), which will include identification of potentially exposed populations, exposure pathways, and exposure routes.
 - Evaluation of available data and identification of data gaps, to include compilation of available data on soil properties, soil gas, and groundwater for the Parcels, adjacent Facility areas, and adjacent properties, as relevant to the analysis of the presence of volatile organic compounds (VOCs) in groundwater and soil. These data will be evaluated to determine which are appropriate for inclusion in vapor intrusion and outdoor air assessments based on sample depth and location.
 - Preparation of a soil and soil gas sampling plan. Based on our review, ENVIRON will propose sampling locations for soil (for determination of key physical properties needed for modeling) and soil gas to address any identified data gaps.
 - Preparation of a Health and Safety Plan.
 - Description of the conceptual approach and methodology for the HRA.
- Task 2: Soil and Soil Gas Sampling. ENVIRON will conduct soil and soil gas sampling to address data gaps identified under Task 1. ENVIRON assumes that up to four soil samples will be collected (one each in Parcels C/D, F, G, and H) and analyzed for physical properties (dry bulk density, grain density, moisture content, and grain size). ENVIRON notes that in comments on other reports, NDEP has identified the need for site-specific information and that no physical property data are available for any of the Parcels. ENVIRON also assumes that from 9 to 12 soil gas samples (C/D: 2-3 samples; F: 2-3 samples; G: 2-3 samples; and H: 1-2 samples) will be collected at a depth of 5 feet. This is a conservative estimate of the number of samples needed that will be refined based on our data review under Task 1.
- Task 3: Preparation of the DVSR. Consistent with NDEP requirements, ENVIRON will prepare a DVSR for the soil and soil gas sample analytical results.
- Task 4: Preparation of the HRA Report. ENVIRON will prepare an HRA for the vapor intrusion and outdoor air pathways. (Note that the outdoor air pathway will be evaluated only if risks for the vapor intrusion pathway exceed 1×10^{-6} .) The HRA includes the following subtasks:
 - Preparation of data summaries for Parcels C, D, F, G, and H.
 - Selection of Chemicals of Potential Concern (COPCs). The data summaries will be used to select COPCs for evaluation in the HRA. ENVIRON will then determine appropriate exposure point concentrations for each chemical at each Parcel.
 - Fate and Transport Modeling and Risk Calculations. ENVIRON will perform calculations using the Johnson and Ettinger Model and diffusion models to predict soil gas

concentrations and indoor air concentrations. The fate and transport modeling will include evaluations of site-specific data (soil properties) to determine modeling parameters. The predicted soil gas concentrations will be compared with soil gas data (where available). The predicted indoor concentrations (and outdoor air concentrations, if calculated) will be used to evaluate potential exposure risks for each parcel.

- Reporting and Response to Comments. ENVIRON will prepare a report that will either be included in the Revised Closure and Post-Remediation Screening Health Risk Assessment Report or submitted as a separate deliverable, depending on schedule. The ENVIRON report will include preparation of tables and figures documenting the calculations performed and justifying the results. Comments from the Trust and NDEP will be incorporated in the final document.

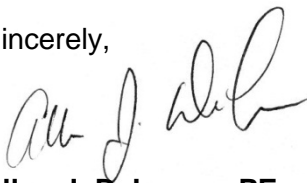
Anticipated Schedule

ENVIRON and Northgate are prepared to initiate this scope of work immediately upon receipt of budget authorization from the Trust and NDEP. This scope of work will be performed according to the following estimated schedule:

- Submittal of revised DVSRs and a DVSR RTC letter to NDEP by October 17, 2012.
- Submittal of the sampling and HRA work plan to the Trust for review by October 15, 2012.
- Field sampling to commence within two to three weeks of NDEP approval of the sampling and HRA work plan.
- Submittal of the DVSR for the newly collected soil and soil gas samples to NDEP within six weeks of completion of the soil and soil gas sampling.
- Submittal of the revised draft soil pathways HRA report and associated RTC letter to the Trust for review by November 30, 2012.
- Submittal of the draft vapor intrusion HRA report to the Trust for review by within three weeks of receipt of the soil and soil gas sampling analytical results.
- Submittal of a revised vapor intrusion HRA report and RTCs to NDEP within two weeks following receipt of comments from NDEP.

If you have any questions or comments regarding the above, please contact me at (510) 420-2565 or John Pekala at (602) 734-7710.

Sincerely,



Allan J. DeLorme, PE
Managing Principal

cc. Jay Steinberg, Nevada Environmental Response Trust Trustee
Andrew Steinberg, Nevada Environmental Response Trust
Tanya O'Neill, Foley & Lardner
Mark Travers, ENVIRON International Corporation
John Pekala, ENVIRON International Corporation