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December 30, 2015

Mr. James D. Dotchin Chief, Bureau of Industrial Cleanup Nevada Division of Environmental Protection 2030 East Flamingo Road, Suite 230 Las Vegas, Nevada 89119

Subject: NERT Work Plan (#2015-130) for the preparation of the General Site-Wide Work Plan including updating the HASP, QAPP, FSAP and obtaining site access – NERT Remedial Investigation, Downgradient Study Area, Henderson, Nevada

Dear Mr. Dotchin:

As requested by the Nevada Division of Environmental Protection (NDEP), AECOM is pleased to provide this scope of work to prepare a General Work Site-Wide Work Plan to support of the Downgradient Study Area component of the Nevada Environmental Response Trust (NERT) Remedial Investigation (RI) in Henderson, Nevada. The objective of the General Site-Wide Work Plan (Work Plan) is to describe the overall approach to investigations to be conducted in the Downgradient Groundwater RI Study Area (Regional Study Area), procedures to implement each investigation, a schedule of anticipated investigations, and site-wide documents including a Health and Safety Plan (HASP), Quality Assurance Project Plan (QAPP) and Field Sampling and Analysis Plan (FSAP). Obtaining access to investigation areas within the Regional Study Area is also included in this Work Plan. This work plan includes a brief summary of the scope of work and a preliminary budget estimate and schedule to develop the General Site-Wide Work Plan and obtaining access.

SCOPE OF WORK

The scope of work to be performed under Task Order 2015-130-01 includes:

- Preparation of a General Site-Wide Work Plan with integration of all site-specific Work Plans (developed under other specific Work Plans), including:
 - Groundwater sampling
 - Initial surface water (grab samples)
 - Surface water sampling
 - Geophysical surveys (pilot test and full-scale)
 - Well installations and subsurface flux investigations, including aquifer and tracer testing as applicable
- Adaptation/updates of the established NERT RI work plans, including the HASP, QAPP and FSAP;
- Obtaining site access agreements where required and preparing an Environmental Assessment (EA) as required for access to US Bureau of Land Management (BLM) and US Bureau of Reclamation (USBR) properties;
- Preparation of a NERT Downgradient Investigation budget forecast for calendar year 2016 (CY2016);

 Preparation of an overall Microsoft Project schedule for the NERT Downgradient Investigation. Note that quarterly schedule updates will be performed in co-ordination with NERT's schedule updates and are covered under Work Plan 2015-101.

The General Site-Wide Work Plan is expected to be "living document" and as such will be updated and supplemented as needed. Additional details are provided below.

Health and Safety Plan

AECOM will prepare a site-specific HASP for the anticipated field activities at the Downgradient Study Area. AECOM will review the NERT HASP and incorporate its requirements/text in the site-specific HASP where appropriate. These activities include groundwater well gaging and sampling, surface water flow measurements and sampling, use of boats for obtaining surface water data, installation of groundwater monitoring wells, and conducting geophysical surveys. The HASP will be prepared consistent with OSHA guidelines. The HASP will provide an assessment of known hazards and evaluations of the risks associated with the planned activities. Available Downgradient Study Area information will be examined to select and implement appropriate warnings and safeguards for field personnel and property occupants. In addition, AECOM will prepare job safety analysis (JSAs) for each significant job task associated with site activities to ensure that procedures are in place to safely conduct this scope of work.

We understand that NDEP does not review or approve HASPs; however a copy of the HASP will be provided to NDEP for their use as needed when visiting the Downgradient Study Area to observe AECOM field activities.

Field Sampling and Analysis Plan

AECOM will revise and update the NERT FSAP to address the planned groundwater sampling activities. The FSAP will be expanded to include surface water sampling, geophysical assessment activities, pump tests and tracer tests as needed. Detailed sampling and data gathering methods will be described in Standard Operating Procedures (SOPs). The FSAP will describe sampling equipment and procedures as well as sample handling and analysis. The FSAP will be prepared consistent with the National Contingency Plan guidelines. The Draft FSAP will be provided to NDEP for review and comment. The FSAP will be revised as needed and provided to United States Environmental Protection Agency (EPA) and NERT for review and comment. AECOM will revise these documents as appropriate and provide NDEP and NERT with final documents in portable document format (pdf).

Quality Assurance Project Plan

AECOM will revise and update the NERT QAPP to address the planned groundwater sampling, surface water sampling, and geophysical surveying activities. The QAPP will describe the project and team organization, functional activities, quality assurance and quality control procedures necessary to achieve the data quality objectives identified for the intended use of the data. The QAPP will be prepared consistent with the National Contingency Plan guidelines. The Draft QAPP will be provided to NDEP for review and comment. The QAPP will be revised as needed and provided to EPA and NERT for review and comment. AECOM will revise these documents as appropriate and provide NDEP and NERT with final documents in portable document format (pdf).

Site Access

AECOM will obtain access to areas were investigations will be conducted. Access requested will include access to existing groundwater monitoring wells, access to surface areas for geophysical investigations, access to drill soil borings or to install new monitoring wells. Property and well owners will be contacted to obtain permission for access. Based on email communication with Victoria Tyson and NDEP we understand that the Tuscany property owners do not require access agreements.

Access to BLM and USBR will likely require an environmental assessment (EA) be performed to allow access to their property. It is assumed that biological surveys (plant and animal) will be needed for the development of the EA. In addition, the EA will assess the potential for impacts to air quality, cultural resources, floodplains, mineral resources, hazardous wastes, water quality (surface and ground), wetlands/riparian zones, wild and scenic rivers, and wilderness areas. AECOM will work with NERT staff responsible for past access agreements and will use, where available, existing EAs prepared for areas at or near the Downgradient Study Area to the extent possible to assess the potential impacts in the investigation areas. At this time it is assumed that EAs can be prepared without the need for additional technical studies or field surveys.

Calendar Year (CY) 2016 Budget Forecast

As requested by NDEP, AECOM will prepare a preliminary forecast of expenditures for anticipated activities in CY2016 in support of the NERT Downgradient Investigation. The forecast will be broken down by quarter for CY2016 for each NERT work plan number.

Project Schedule

An overall project schedule for the NERT Downgradient Investigation will be developed to plan and track project progress. It is anticipated that Microsoft Project will be the software used to develop and update the project schedule. The elements and structure of the schedule will be discussed with NDEP and NERT so the document can be tailored to meet all needs. Quarterly schedule updates will be performed in co-ordination with NERT's schedule updates and are covered under Work Plan 2015-101.

Reporting

A General Site-Wide Work Plan describing the approach, investigations, and investigation procedures will be prepared for the Downgradient Study Area. The General Site-Wide Work Plan will include a HASP, QAPP, and FSAP. A copy of the HASP will be provided to NDEP but no NDEP review or approval of this document is requested. The QAPP and FSAP will be provided to NDEP, EPA and NERT for review and comments as described above. This General Site-Wide Work Plan is expected to be "living document" and as such will be updated and supplemented as needed. The budget estimate provided is expected to cover additions and revisions to the document through June 2016.

The EA documents, if needed, for access to BLM and USBR properties will be provided to NDEP for review and comment. AECOM will revise these documents as appropriate and provide NDEP, EPA, NERT, BLM, and USBR with final documents in portable document format (pdf).

<u>Deliverables</u>: General Site-Wide Work Plan including HASP, QAPP, FSAPs, project schedule, CY2016 budget forecast and EAs.

PRELIMINARY SCHEDULE AND ESTIMATED COSTS

The following summarizes the General Site-Wide Work Plan schedule and estimated cost by activities

Activity	Approximate Schedule	Estimated Cost
Development of the General Site-Wide Work Plan	December 2015 – June 2016	\$13,424
Development of the HASP	December 2015 – January 2016	\$8,390
Development of the QAPP	December 2015 – February 2016	\$10,160
Development of the FSAP and SOPs	December 2015 – February 2016	\$11,025
Regional Study Area Access and EAs	December 2015 – March 2016	\$39,295
Task Order Management	December 2015 – July 2016	\$12,890
	Work Plan Total	\$95,184

EAs will be provided within 8 weeks of obtaining access for the biological surveys from BLM and USBR.

A detailed breakdown of the cost is included in **Table 1**. Scope of work and cost details for each task order have been uploaded in the NDEP BMI financial database. If this work plan meets with your approval, please send AECOM your authorization at your earliest convenience.

If you have any questions regarding this work plan, or if AECOM may be of further assistance, please contact Carmen Caceres-Schnell at (805) 764-4031 or either of the undersigned. Sincerely,

Sally W. Biloclean

Sally Bilodeau, CEM Project Manager

Harry Van Den Berg, PE Principal-in-Charge

Attachments: Table 1 – Detailed Cost Breakdown