TA16

ENVIRONMENTAL RESTORATION PROJECT
TELEPHONE COMMUNICATION RECORD

Date: 09/04/02	**Time:** AM 1:30 PM	**Recorded By:**	Sharon Wirth (IT/Shaw Environmental)
To: Kirby Olson	**From:** MDA P Closure Team	**Telephone: No:**	(505) 262-8936

Affiliation: New Mexico Environment Department, Hazardous Waste Bureau

Other Parties:
Ken Bostick, LANL
Rich Mirenda, LANL
Paul Schumann, LANL
Mark Tardiff, Neptune and Co., Inc.
Mike Nagy, IT/Shaw Environmental

Discussion:
The purpose of the meeting was to present to the NMED (Kirby Olson) the approach to the assessment of ecological risk for the MDA P closure certification, given findings of the site setting and revised conceptual model made during a site visit by the MDA P team (August 28, 2002) and obtain verbal approval from NMED to proceed with the proposed approach.

Rich Mirenda began with introductions of the attendees followed by a brief summary of the agenda. The agenda included: introduce the findings from the site visit; summarize the proposed approach to the ecological risk assessment; discuss technical issues, if needed; and receive preliminary agreement from NMED to proceed with the proposed approach.

Sharon Wirth provided the summary of the team's findings and observations made during the site visit (August 28, 2002). The following was emphasized as the most important observation: the site is currently composed of two distinct areas, each with different implications for transport and exposure to ecological receptors. The first area consists of undisturbed or reclaimed areas (~5.1 acres of the nearly 9.25 acre site), which essentially border the main excavation area to the south, east, and west. This area has a thriving plant community that is comprised primarily of grasses and ruderal species representative of successional or transitional areas; evidence of animal activity (tracks and scat of small and large mammals) was also apparent. The second area consists of a single, large, and continuous area of exposed tuff (~4.25 acres of consolidated tuff or unconsolidated tuff with large boulders), from which topsoil and unconsolidated tuff was removed during the Phase I excavation activities; few or no plants or evidence of biological activity were observed in this area.

The approach to the ecological risk assessment proposed treating the two areas differently, to account for differences in the transport and potential exposure to ecological receptors between the areas. It was proposed that exposure within the biological zone be assessed using the typical risk assessment methodology (i.e., comparison of concentrations of chemicals of potential concern [COPCs] to ecological screening levels [ESLs] to calculate hazard quotient/hazard index [HQ/HI] values for terrestrial receptors that may use this area). In contrast, it was proposed that little-to-no exposure to receptors can be expected in the exposed tuff area because of the relative inaccessibility and low bioavailability of the COPCs in the tuff and the complete lack of developed soils or plant communities. It was noted that if exposure did occur, it was not expected to occur at a level that would cause population-level effects.

Kirby Olson asked if the transport of COPCs to the adjacent Cañon de Valle and subsequent exposure of receptors down gradient of the MDA P Area would be considered. The reply given by Sharon Wirth was that, yes, transport from the exposed tuff area was determined to be the most significant mechanism for exposure of receptors, and that the focused Cañon de Valle study results were being used to provide a context for the potential risk to receptors impacted by the off-site transport. The identification of COPCs in the exposed tuff zone that might impact Cañon de Valle receptors would be made by first screening against background and then screening against ESLs; COPCs that fail the ESL screen would be identified as chemicals of potential ecological concern (COPECs) for the exposed tuff zone.

? what will they use for background? They MUST use NMED approved background

Mark Tardiff explained the approach for using the focused Cañon de Valle study results to evaluate potential risk to ecological receptors in the Cañon de Valle to MDA P COPECs. The basic methodology proposed includes comparing the COPEC concentrations from the MDA P Area to those in Cañon de Valle; if no adverse effects were observed for the Cañon de Valle receptors and the MDA P COPEC concentrations are similar to, or lower than, those in Cañon de Valle, then the conclusion will be made that no adverse effects are expected for ecological receptors due to COPEC concentrations at the MDA P Area within the exposed tuff zone.

Do you agree with this approach? Have we approved the Cañon de Valle study and do we agree with the values used for cañon de Valle & background (we need to since they will be

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I am not sure I agree with this. If the samples truly are tuff they would have been identified as tuff and not soil.

Lastly, Rich Mirenda proposed that all confirmation samples within the exposed tuff zone be treated as tuff, regardless of matrix/media designation at the time of the sampling. The reasoning provided was that the sampling team designated fine materials as "soil," even though in the exposed tuff zone, these fine materials are weathered tuff, likely due to mechanical degradation of the surface during the Phase I excavation activities.

If it was labeled soil then it should be evaluated as soil

Kirby Olson had no further questions and provided agreement to proceed with the MDA P risk assessment as presented in the meeting.

What happened to the text?

Action Items:

Kirby Olson agreed to follow up with the EPA to see if there was any guidance or precedence for assessing risk to receptors based on COPCs in large areas incapable of supporting viable biological populations.

Jeff Yurk with Region 6 EPA agreed that the exposed tuff area of the site doesn't need a quantitative ecological risk assessment including generation and review of hazard quotients. The preferred approach is a qualitative ecological risk assessment; this would consist of a written discussion in the report documenting that the various exposure pathways are not complete at this site. The discussion would include the information similar to what was discussed in the conference call: that the contaminants are immobilized in the porous rock, that vegetation is not present in sufficient quantities to result in uptake through food chain, that receptors are unlikely to frequent an exposed area without food or protective cover, etc.

Distribution:

Kirby Olson, NMED
Victoria Maranville, NMED
Ken Bostick, LANL
Rich Mirenda, LANL
Paul Schumann, LANL
Kelly VanDerpoel, LANL
Ellena Martinez, LANL RRES-R
Nadine Martinez, LANL Records Processing Facility
Nancy Riebe, LANL Remedial Actions Focus Area
Mark Tardiff, Neptune and Co., Inc.
Mike Nagy, IT/Shaw Environmental
Sharon Wirth, IT/Shaw Environmental
Woody Woodworth, DOE

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