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21 August 2009

Mr. Brian Rakvica
Nevada Division of Environmental Protection
2030 E. Flamingo Ave
Suite 230
Las Vegas, Nevada 89119

Subject: **Final Leachate Monitoring Plan, Basic Remediation Company, Corrective Action Management Unit**
Response to Nevada Division of Environmental Protection Comments dated 29 July 2009
Geosyntec Project: SC0313

Dear Mr. Rakvica,

On behalf of Basic Remediation Company (BRC), Geosyntec Consultants, Inc (Geosyntec) is pleased to provide this letter in response to the comments presented by the Nevada Division of Environmental Protection (NDEP) in their 29 June 2009 letter on the Final Leachate Monitoring Plan, Basic Remediation Company, Corrective Action Management Unit (Attachment A).

For ease of review, comments provided by NDEP in Attachment A are provided in italics below with Geosyntec's responses following.

1. *Section 3.1, Control Panels, please consider and discuss the use of hard wired power. In this manner the transducers could be continuously monitored and potentially could be monitored remotely. Please discuss the feasibility of all available power supplies such as: Basic Power, NV Energy, or dedicated solar panels.*

   BRC has carefully considered the possible use of hard-wired and solar power for the control panels. Based on the relatively low control panel electrical demands and solar panel materials available to meet these needs, BRC will install solar panels to provide power to the control panels. The use of solar is deemed more economical than hardwiring given the long lengths of electrical cable and conduit that would be needed to power the control panels versus a relatively small solar panel installed at each sump riser.

2. *Section 3.2 Transducers, BRC states "The depth reading of the transducer is accurate from 0 to 55-inches..." The Technical Specifications, Section 15400 (DCN 26), subpart 2.02.D*

indicates that the transducer shall be capable of reading 0 to 72-inches of leachate head. Please clarify.

The initial specification for the transducer indicated accuracy from 0 – 55" and 0 – 690' (0 – 2 pounds per square inch [psi] to 0 – 300 psi) which provided general accuracy for all models of the transducer. The manufacturer provided further clarification that the model installed has accuracy from 0 to 138.4 inches (0 – 5 psi). The text was updated accordingly.

3. *Section 3.3 and 3.4, Phase V Side Slope Riser Details are not presented in the Figures section. We understand that these sumps have not been constructed. Please clarify that the plan will be revised or amended upon completion of the Phase V sumps.*

   The text currently states "This report will be updated following construction of the Phase V sumps." The text has been revised to state "This report will be amended following construction of the Phase V sumps."

4. *Section 4.1 Leachate Depth Monitoring, monitoring requirements of the LCRS and vadose sumps should have a separate set of standards. Vadose zone sump leachate accumulation should be 0 gallons per day (gpd).*

   Noted. This section has been revised accordingly.

5. *Section 4.1 Leachate Depth Monitoring, Daily, please clarify whether the upper limit for pumping twice weekly should be less than 2,000 gpd or 1,000 gpd. In addition, please clarify if the 2,000 gpd refers to a total volume pumped or a per-sump basis. NDEP requests that BRC revise the plan to consider this number on a per-sump basis.*

   The upper limit for pumping twice a week is 1,000 gpd. The text has been revised to reflect this and that all limits are on a per-sump basis.

6. *Section 4.1 Leachate Depth Monitoring, please clarify how monitoring following rain events in excess of 0.25-inches will be handled when monitoring is in the quarterly and annual monitoring phases.*

   Post 0.25-inch storm monitoring during quarterly and annual monitoring events will be conducted daily for 3 days following the storm event. If monitoring indicates a rise in leachate generation, monitoring will continue per frequency specified previously. For example: monthly while greater than 0 gpd and less than 130 gpd; weekly while greater than 130 gpd and less than 570 gpd; etc. The text has been revised to include post-storm monitoring during quarterly and annual monitoring phases.

7. *Section 4.1 Leachate Depth Monitoring, please discuss how often and by what methods NDEP will be notified of the monitoring results following the completion of construction.*

   NDEP notification will depend on monitoring frequency, as follows:

Reporting Frequency	Monitoring Frequency	LCRS Leachate Accumulation Rate (gpd)
Monthly	Daily	>2000
Monthly	Every other day	1000 – 2000
Monthly	Twice weekly	570 – 1000
Monthly	Weekly	130 – 570
Monthly	Monthly	0 – 130
Quarterly	Quarterly	0
Annually	Annually	0

   If liquid is detected in a previously dry vadose zone sump, NDEP will be notified within one day of the detection. Following the initial notification, vadose zone monitoring reporting will be as follows:

Reporting Frequency	Monitoring Frequency	LCRS Leachate Accumulation Rate (gpd)
Weekly	Daily	>130
Weekly	Every other day	86 – 130
Weekly	Twice weekly	37 – 86
Weekly	Weekly	8 – 37
Monthly	Monthly	0 – 8
Quarterly	Quarterly	0
Annually	Annually	0

   The text has been revised in Section 5 to include reporting frequency.

8. *Section 4.2 Sample Collection, please discuss what will be the timeliness and by what methods NDEP will be notified of the sample testing results.*

   Results of sample analyses will be provided to NDEP during reporting of monitoring events. Section 5 has been revised to include the sample result reporting frequency.

9. *Section 4.2 Sample Collection, sampling frequency should be modified to include sampling of the LCRS sumps if there is continued increase in the vadose zone sump of a similar landfill cell Phase.*

   If liquid levels continue to increase following the initial detection and sampling of the vadose zone and LCRS sumps, samples will be collected monthly from the LCRS sump. The text has been revised to include this requirement.

10. *Section 4.2 Sample Collection, please discuss what procedures are in place to insure that the leachate retained within the LCRS and vadose zone monitoring sump discharge pipes, due to the check valves, will not contaminate the collected samples.*

    Prior to sample collection, if liquid was previously pumped from the sump, the remaining liquid in the discharge piping will be purged. A sample will be collected after the following minimum volumes are removed from the pipes:

Sump	Volume (gallons)
Phase I Vadose	3.24
Phase I LCRS	7.5
Phase II Vadose	3.63
Phase II LCRS	8.4
Phase IIIB Vadose	1.66
Phase IIIB LCRS	3.8

    If the volume of leachate or liquid required for sample collection is unavailable following the pipe purge, samples will not be collected. The text has been revised to include purge volumes and sampling requirements.

11. *Section 4.2 Sample Collection, samples should be collected in LCRS sumps, when generating liquid, following the completion of construction since the design premise is based on a dry landfill.*

    The LCRS sump will be sampled monthly, if sufficient liquids are present to collect a sample, while LCRS monitoring is daily, weekly, or monthly. The LCRS sump will be sampled during each monitoring event, if sufficient liquids are present to collect a sample, while LCRS monitoring is quarterly or annually. The text has been revised to include this requirement.

12. *Section 4.2 Sample Collection, the plan states that sample collection in the vadose sumps will be performed when liquid was not previously present or increases in depth by 1-inch or more. However, the leachate removal section indicates that the minimum level to be maintained in all of the sumps will be 8-inches. Please clarify this matter in the sample collection section of the plan.*

    Samples will be collected if enough liquid is present to operate the pump, purge the pipe, if necessary, and collect samples.

13. *Section 4.3 Leachate Removal, regarding the vadose zone sumps, leachate removal from the sumps will be required if depth is recorded at greater than 12-inches. If sampling events are taking place due to leachate accumulation, the vadose zone sumps should be pumped to the minimum liquid level during each sampling event.*

    The vadose zone sump will be pumped to the minimum liquid level after each sampling event. The text has been revised to clarify this.

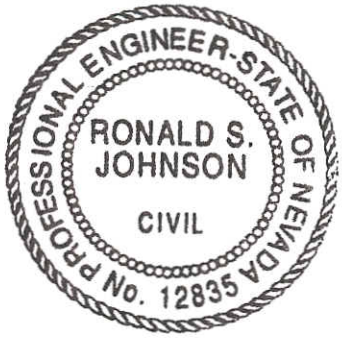
14. *Section 5.0, Record Keeping, as discussed above, BRC needs to clarify the frequency and mechanism of reporting to the NDEP.*

    Section 5.0 has been revised to clarify the record keeping and reporting requirements.

If you have any questions or require additional information, please contact us at (858) 674-6559.

Sincerely,

Gregory T. Corcoran
Design Engineer



Ronald S. Johnson, P.E.
Engineer of Record

Attachments: A – NDEP Letter dated 29 June 2009

B – Revised Final Leachate Monitoring Plan

Copies to: Lee Farris, BRC

Ranajit Sahu, BRC

Rob Valceschini, ASW

July 29, 2009

Mr. Mark Paris
Basic Remediation Company (BRC)
875 West Warm Springs
Henderson, NV 89011

Re.: Nevada Division of Environmental Protection Response to:
Final Leachate Monitoring Plan, Basic Remediation Company, Corrective Action Management Unit, Henderson, Nevada
dated July 2009 (received July 20, 2009)
NDEP Facility ID# H-000688

Dear Mr. Paris:

The NDEP has received and reviewed BRC's document identified above and provides comments in Attachment A. Please revise and resubmit the document by August 28, 2009. Please note that a fully annotated response-to-comments must be provided as an Appendix to the revised document.

Should you have any questions or concerns, please do not hesitate to contact me at (702) 486-2850 x247 or brakvica@ndep.nv.gov.

Sincerely,

Brian A. Rakvica, P.E.
Supervisor, Special Projects Branch
Bureau of Corrective Actions
Fax: (702) 486-5733

BAR:s

cc: Jim Najima, NDEP, BCA, Carson City
Barry Conaty, Holland & Hart LLP, 975 F Street, N.W., Suite 900,Washington, D.C. 20004
Brenda Pohlmann, City of Henderson, PO Box 95050, Henderson, NV 89009
Mitch Kaplan, U.S. Environmental Protection Agency, Region 9, mail code: WST-5, 75 Hawthorne Street, San Francisco, CA 94105-3901
Ebrahim Juma, Clark County Comprehensive Planning, PO Box 551741, Las Vegas, NV, 89155-1741
Robert Williams, Clark County Fire Department, 575 East Flamingo Road, Las Vegas, Nevada 89119
Ranajit Sahu, BRC, 311 North Story Place, Alhambra, CA 91801
Rick Kellogg, BRC, 875 West Warm Springs, Henderson, NV 89011
Rex Heppe, 2925 East Patrick Lane, Suite M, Las Vegas, NV 89120-2457
David Sadoff, AIG Consultants, Inc., 121 Spear Street, 3rd Floor, San Francisco, CA 94105
Leslie Hill, U.S. Department of Justice, PO Box 23896, Washington, DC 20026-3986
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Susan Crowley, Crowley Environmental LLC, 366 Esquina Dr., Henderson, NV 89014
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Mike Skromyda, Tronox LLC, PO Box 55, Henderson, Nevada 89009
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Robert Infelise, Cox Castle Nicholson, 555 California Street, 10th Floor, San Francisco, CA 94104-1513
Michael Ford, Bryan Cave, One Renaissance Square, Two North Central Avenue, Suite 2200, Phoenix, AZ 85004

Attachment A

1. Section 3.1, Control Panels, please consider and discuss the use of hard wired power. In this manner the transducers could be continuously monitored and potentially could be monitored remotely. Please discuss the feasibility of all available power supplies such as: Basic Power, NV Energy, or dedicated solar panels.
2. Section 3.2 Transducers, BRC states "The depth reading of the transducer is accurate from 0 to 55-inches…" The Technical Specifications, Section 15400 (DCN 26), subpart 2.02.D indicates that the transducer shall be capable of reading 0 to 72-inches of leachate head. Please clarify.
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