



August 31, 2009

Mr. Brian A. Rakvica, P.E.  
Nevada Division of Environmental Protection  
Bureau of Corrective Actions  
2030 E. Flamingo Road, Suite 230  
Las Vegas, Nevada 89119-0818

**Subject: Confirmation Sampling Plan for Soil, Southern RIBs Sub-Area, Henderson, Nevada**

Dear Brian:

Basic Remediation Company (BRC) appreciates the opportunity to submit this Confirmation Sampling Plan to characterize remediation of impacted soil at the Southern RIBs sub-area. The Southern RIBs sub-area (hereinafter "the Site") is one of several sub-areas of the BMI Common Areas (Eastside) located in Clark County, Nevada. The Site, with a revised northern boundary, encompasses an area of approximately 84.5 acres (Figure 1). The Site is located outside of any known areas used for any waste disposal associated with the BMI Common Areas; however, the eastern half of the Site comprises an area formerly used by the City of Henderson as Rapid Infiltration Basins (RIBs) associated with municipal wastewater treatment. This Confirmation Sampling Plan is based on the Removal Action Work Plan (RAWP) for the Site, approved by the Nevada Division of Environmental Protection (NDEP) on April 3, 2009. This revision of the Confirmation Sampling Plan, Revision 1, incorporates comments received from NDEP, dated August 29, 2009, on Revision 0 of the Confirmation Sampling Plan.

The conclusion that remediation of soil at each of the Sites was needed is based on the findings of the field investigations carried out in accordance with the Sampling and Analysis Plan (SAP) for the Southern RIBs sub-area. The overall goal of this Confirmation Sampling Plan is carry out the confirmation sampling for the remediation that was performed in conformance to the RAWP. In addition, because the majority of the elevated chemical concentrations were found along the northern Site boundary, the eastern portion of this boundary (along the RIBs) was moved to the south, such that most of these sample locations are now located within the Staging sub-area.

All sampling will be completed under the direction of a State of Nevada Certified Environmental Manager. Figure 1 identifies the original sample locations and constituents triggering the remediation at the Site. The remediation areas are also shown on Figure 1.

### **Confirmation Sampling**

Confirmation surface soil sampling will be collected at the original sample location and from four samples in the corners of the polygon remediation area around sample location SRC1-AH16. Because additional samples collected around sample location SRC1-AI19

confirmed the presence of dioxins/furans in this area, confirmation samples will be collected at the original sample location, from five samples in the corners of the polygon remediation area, and from one sample in the center of the polygon remediation area. For the northern Site boundary remediation area, confirmation samples will be collected at the east and west edges of the remediation area, and along the north and south remediation edges at both original sample locations and mid-way between the two locations. For the area east of the RIBs, confirmation samples will be collected at the original sample locations within this area, and because this remediation area is bounded by berms, sidewall samples will be collected from halfway up the excavated berm at five sample locations. Proposed confirmation sample locations are shown on Figure 2.

As noted above, because the majority of the elevated chemical concentrations were found along the northern Site boundary, this boundary was moved to the south, such that these sample locations are now located within the Staging sub-area. In order to characterize the revised northern boundary, 15 sample locations, spaced 200 feet apart, are included in this Confirmation Sampling Plan. These proposed sample locations are shown on Figure 2.

Field activities will be conducted in accordance with applicable standard operating procedures (SOPs; BRC, ERM and MWH 2008). The BRC Quality Assurance Project Plan (QAPP; BRC and ERM 2009) and Health and Safety Plan (HASP; BRC and MWH 2005) prepared for the BMI Common Areas will be used for confirmation soil sampling. Table 1 presents the proposed analyte list for each of the confirmation sample locations.

Following collection and analysis of confirmation soil samples, the data will be discussed with the NDEP. If results are considered acceptable, a risk assessment will be conducted to evaluate the potential risks to future on-site human receptors at each Site. The receptors identified to be evaluated in the risk assessment will be consistent with the proposed development of the Site.

### **Schedule**

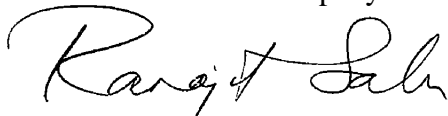
Once final approval of the Confirmation Sampling Plan is received from NDEP, field implementation activities can commence within two weeks. BRC will provide NDEP with at least two days notice prior to the initiation of field activities at the Site. It is anticipated that this work can be completed within one week, depending on field conditions. The confirmation soil samples will be submitted to the laboratories and placed on a standard turn around time.

### **Closing Remarks**

See attached for appropriate certification language and signature. Please direct any remaining questions or comments you may have to me at 626-382-0001.

Sincerely,

Basic Remedation Company



Ranajit Sahu, CEM  
Project Manager

cc: Jim Najima, NDEP, BCA, Carson City, NV 89701

Attachments: Attachment A – NDEP Comments and BRC's Response to Comments  
Figure 1 – Southern RIBs Sub-Area Proposed Remediation Areas  
Figure 2 – Southern RIBs Sub-Area Confirmation Sample Locations  
Table 1 – Proposed Confirmation Sample Analyses

### **References**

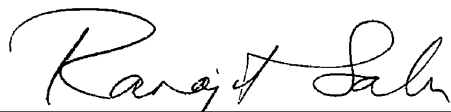
Basic Remediation Company (BRC) and MWH. 2005. BRC Health and Safety Plan, BMI Common Areas, Clark County, Nevada. October.

Basic Remediation Company (BRC), ERM, and MWH. 2008. BRC Field Sampling and Standard Operating Procedures, BMI Common Areas, Clark County, Nevada. December.

Basic Remediation Company (BRC) and ERM. 2009. BRC Quality Assurance Project Plan. BMI Common Areas, Clark County, Nevada. April.

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I hereby certify that I am responsible for the services described in this document and for the preparation of this document. The services described in this document have been provided in a manner consistent with the current standards of the profession and to the best of my knowledge comply with all applicable federal, state and local statutes, regulations and ordinances. I hereby certify that all laboratory analytical data was generated by a laboratory certified by the NDEP for each constituent and media presented herein.



Dr. Ranajit Sahu, C.E.M. (No. EM-1699, Exp. 10/07/2009)  
BRC Project Manager

August 31, 2009

Date

**Response to NDEP Comments dated August 29, 2009 on the Confirmation Sampling Plan for Soil, Southern RIBs Sub-Area, Henderson, Nevada dated August 28, 2009**

1. Figure 2, the NDEP has the following comments:
  - a. Remediation Area 1, it is requested that BRC add confirmation sampling locations to each corner of the polygon to confirm that the nature and extent of contamination has been addressed.

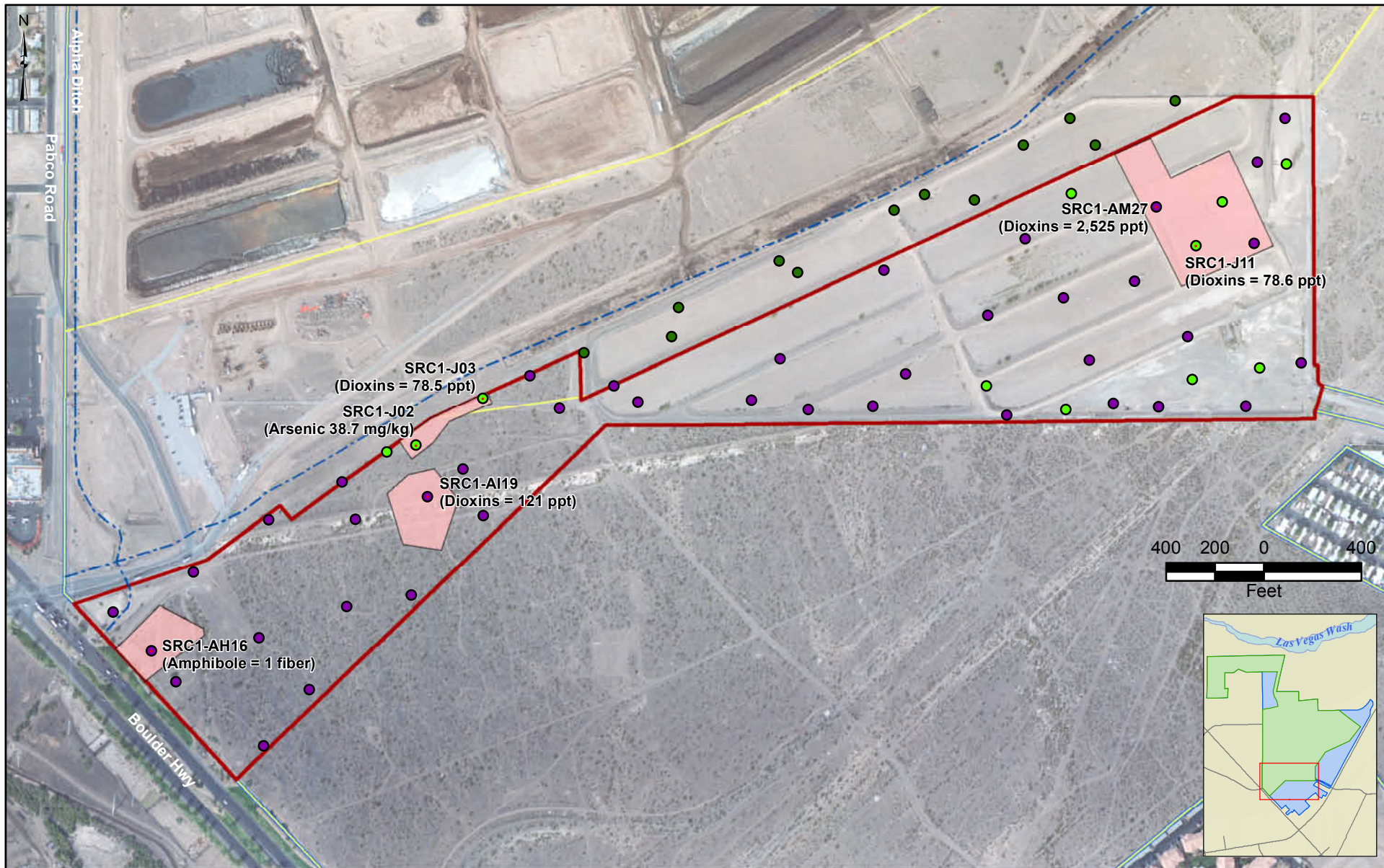
***Response:*** Four additional confirmation sample locations have been added to the corners of the polygon Remediation Area 1. The text, Table 1, and Figure 2 have been revised to reflect this change.

- b. Remediation Area 2, it is requested that BRC relocate the confirmation sampling locations to each corner of the polygon. In addition, please add a confirmation sampling point in the middle of the polygon. These changes are requested in order to confirm that the nature and extent of contamination has been addressed.

***Response:*** The confirmation sample locations have been moved to each corner of the polygon Remediation Area 2, with the addition of one corner confirmation sample location and one confirmation sample location in the middle of the polygon. The text, Table 1, and Figure 2 have been revised to reflect this change.

- c. Remediation Area 4, it is requested that BRC add an additional sidewall sampling location northwest of sample location SRC2-AM27C.

***Response:*** An additional sidewall confirmation sample location has been added northwest of sample location SRC2-AM27C in Remediation Area 4. The text, Table 1, and Figure 2 have been revised to reflect this change.



- |  |  |   |
|--|--|---|
| <span style="border: 2px solid red; padding: 2px;"> </span> Southern RIBs Sub-Area     | <span style="color: green;">●</span> Southern RIBs Sub-Area Soil Samples | <span style="background-color: pink; border: 1px solid black; padding: 2px;"> </span> Proposed Scrape Areas (8.1 Acres Total) |
| <span style="border: 2px solid blue; padding: 2px;"> </span> Site AOC3 Boundary        | <span style="color: green;">●</span> Biased Sample Location (11)         |   |
| <span style="border: 2px solid yellow; padding: 2px;"> </span> Eastside Soil Sub-Areas | <span style="color: purple;">●</span> Random Sample Location (40)        |   |
|  | <span style="color: green;">●</span> Off-Site Following Revised Boundary |   |
|  | <span style="color: red;">•</span> Potential Impacts Location            |   |

BMI Common Areas (Eastside)  
Clark County, Nevada

FIGURE 1

# SOUTHERN RIBS SUB-AREA PROPOSED REMEDIATION AREAS



Prepared by  
MKJ (ERM)



Date  
08/27/09

JOB No. 0064276  
FILE: GIS\BRC\SO-RIBS\FIGURE1.MXD





**TABLE 1**  
**PROPOSED CONFIRMATION SAMPLE ANALYSES**  
**SOUTHERN RIBs SUB-AREA**  
**(Page 1 of 2)**

Area	Sample Location	Northing	Easting	Latitude	Longitude	Location Notes	Analyses
1	SRC2-AH16E	26720420.08105	830933.39357	36.05019	-114.99210	--	Asbestos
	SRC2-AH16N	26720497.25356	830811.02003	36.05040	-114.99251	--	Asbestos
	SRC2-AH16R	26720345.61085	830774.20058	36.04998	-114.99264	--	Asbestos
	SRC2-AH16S	26720269.04344	830754.79435	36.04977	-114.99271	--	Asbestos
	SRC2-AH16W	26720358.34305	830668.80213	36.05002	-114.99300	--	Asbestos
2	SRC2-AI19CN	26720976.35646	831904.15726	36.05170	-114.98880	--	Dioxins/furans; PCB congeners
	SRC2-AI19CS	26720912.36563	831888.15447	36.05152	-114.98886	--	Dioxins/furans; PCB congeners
	SRC2-AI19E	26720957.77640	831985.01873	36.05165	-114.98853	--	Dioxins/furans; PCB congeners
	SRC2-AI19N	26721051.89876	831922.36355	36.05191	-114.98874	--	Dioxins/furans; PCB congeners
	SRC2-AI19SE	26720802.74312	831942.81461	36.05122	-114.98868	--	Dioxins/furans; PCB congeners
	SRC2-AI19SW	26720812.27207	831822.33952	36.05125	-114.98908	--	Dioxins/furans; PCB congeners
	SRC2-AI19W	26720974.59086	831780.05348	36.05170	-114.98922	--	Dioxins/furans; PCB congeners
3	SRC2-J02E	26721320.19314	831968.28412	36.05264	-114.98858	--	Dioxins/furans; PCB congeners; Metals
	SRC2-J02N	26721223.86994	831827.77568	36.05238	-114.98906	--	Dioxins/furans; PCB congeners; Metals
	SRC2-J02S	26721159.39253	831872.19787	36.05220	-114.98891	--	Dioxins/furans; PCB congeners; Metals
	SRC2-J02W	26721170.93500	831815.48168	36.05223	-114.98910	--	Dioxins/furans; PCB congeners; Metals
	SRC2-J03E	26721385.04335	832156.63463	36.05282	-114.98794	--	Dioxins/furans; PCB congeners; Metals
	SRC2-J03N	26721396.17817	832120.04881	36.05285	-114.98806	--	Dioxins/furans; PCB congeners; Metals
	SRC2-J03S	26721350.04822	832141.52310	36.05272	-114.98799	--	Dioxins/furans; PCB congeners; Metals
	SRC2-J03W	26721284.27683	831991.45593	36.05254	-114.98850	--	Dioxins/furans; PCB congeners; Metals
4	SRC2-AL28C	26722013.95210	835285.68388	36.05449	-114.97734	--	Dioxins/furans; PCB congeners
	SRC2-AM27C	26722161.80186	834886.89169	36.05490	-114.97869	--	Dioxins/furans; PCB congeners
	SRC2-AM27SWall	26722263.02617	834772.12456	36.05518	-114.97907	Sample to be collected halfway up the side of excavated berm	Dioxins/furans; PCB congeners
	SRC2-J11C	26722003.85086	835049.37297	36.05447	-114.97814	--	Dioxins/furans; PCB congeners

**TABLE 1**  
**PROPOSED CONFIRMATION SAMPLE ANALYSES**  
**SOUTHERN RIBs SUB-AREA**  
**(Page 2 of 2)**

Area	Sample Location	Northing	Easting	Latitude	Longitude	Location Notes	Analyses
4	SRC2-J13C	26722182.91843	835154.81781	36.05496	-114.97778	--	Dioxins/furans; PCB congeners
	SRC2-J16SWall	26722390.19982	834740.08820	36.05553	-114.97918	Sample to be collected halfway up the side of excavated berm	Dioxins/furans; PCB congeners
	SRC2-J17SWall	26722027.84139	834894.03847	36.05454	-114.97867	Sample to be collected halfway up the side of excavated berm	Dioxins/furans; PCB congeners
	SRC2-J18SWall	26721931.80605	835193.78511	36.05427	-114.97766	Sample to be collected halfway up the side of excavated berm	Dioxins/furans; PCB congeners
	SRC2-J19SWall	26722334.86344	835058.46260	36.05538	-114.97810	Sample to be collected halfway up the side of excavated berm	Dioxins/furans; PCB congeners
North Boundary	SRC2-J20	26722555.02893	835114.77173	36.05598	-114.97791	--	Full Sub-Area Soil Analyte List
	SRC2-J21	26722467.89731	834928.06113	36.05574	-114.97854	--	Full Sub-Area Soil Analyte List
	SRC2-J22	26722299.85778	834560.86362	36.05529	-114.97979	--	Full Sub-Area Soil Analyte List
	SRC2-J23	26722214.28208	834380.37670	36.05506	-114.98040	--	Full Sub-Area Soil Analyte List
	SRC2-J24	26722131.81824	834199.88979	36.05483	-114.98101	--	Full Sub-Area Soil Analyte List
	SRC2-J25	26722046.24255	834022.51472	36.05460	-114.98162	--	Full Sub-Area Soil Analyte List
	SRC2-J26	26721962.22278	833838.91597	36.05437	-114.98224	--	Full Sub-Area Soil Analyte List
	SRC2-J27	26721879.75893	833656.87313	36.05415	-114.98286	--	Full Sub-Area Soil Analyte List
	SRC2-J28	26721798.85100	833481.05399	36.05393	-114.98345	--	Full Sub-Area Soil Analyte List
	SRC2-J29	26721713.27531	833299.01115	36.05370	-114.98407	--	Full Sub-Area Soil Analyte List
	SRC2-J30	26721627.69962	833115.41240	36.05347	-114.98469	--	Full Sub-Area Soil Analyte List
	SRC2-J31	26721540.56801	832928.70180	36.05323	-114.98533	--	Full Sub-Area Soil Analyte List
	SRC2-J32	26721454.99232	832741.99120	36.05300	-114.98596	--	Full Sub-Area Soil Analyte List
	SRC2-J33	26721377.68979	832562.12124	36.05279	-114.98657	--	Full Sub-Area Soil Analyte List
	SRC2-J34	26721546.22993	832502.95180	36.05325	-114.98677	--	Full Sub-Area Soil Analyte List