

August 28, 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.

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 for 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 and from four samples to the east, north, west, and south of this location. 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 four 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

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Ranajit Sahu, CEM Project Manager

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

Attachments:	Figure 1 – Southern RIBs Sub-Area Proposed Remediation Areas
	Figure 2 – Southern RIBs Sub-Area Confirmation Sample Locations
	Table 1 – Proposed Confirmation Sample Analyses

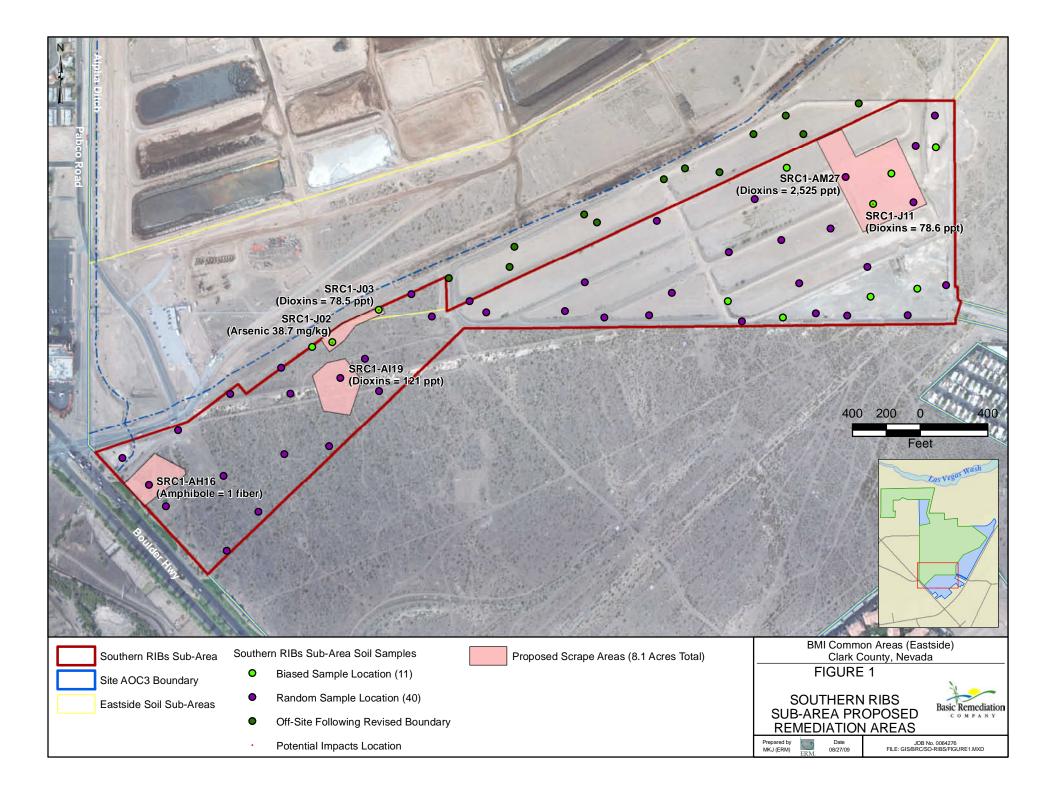
#### **References**

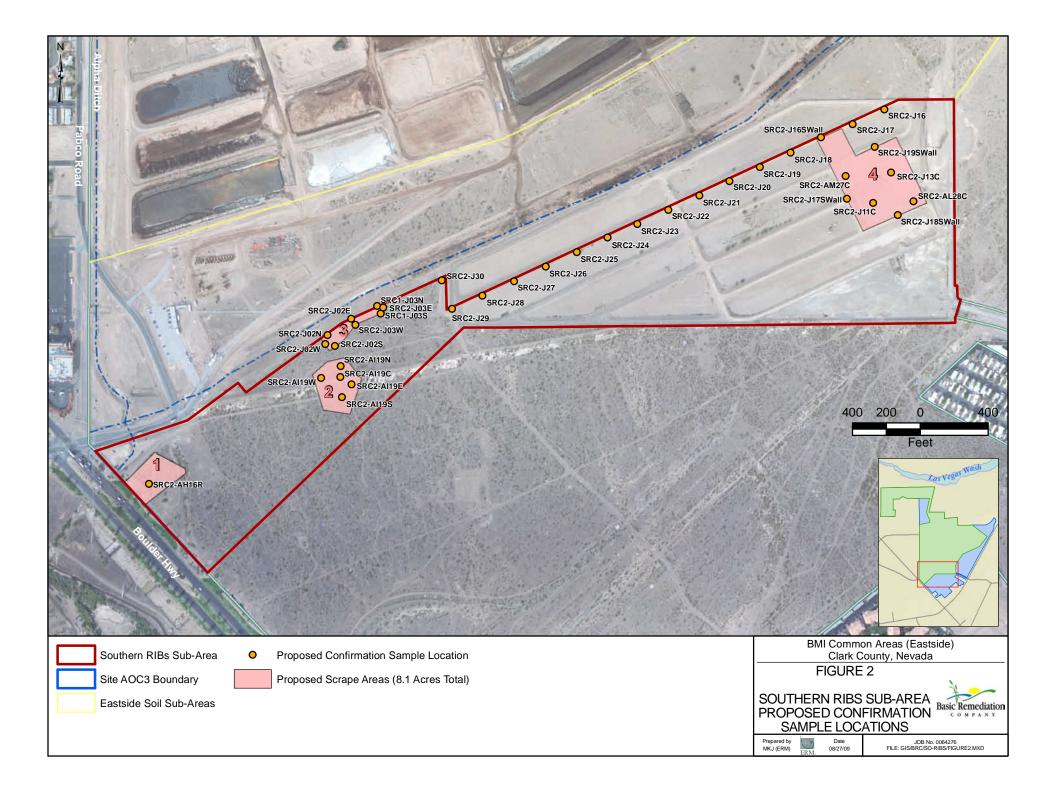
- Basic Remediation Company (BRC) and MWH. 2005. BRC Health and Safety Plan, BMI Common Areas, Clark County, Nevada. October.
- Basic Remediation Company (BRC), ERM, and MWH. 2008. BRC Field Sampling and Standard Operating Procedures, BMI Common Areas, Clark County, Nevada. December.
- Basic Remediation Company (BRC) and ERM. 2009. BRC Quality Assurance Project Plan. BMI Common Areas, Clark County, Nevada. April.

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.

August 28, 2009

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





## 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-AH16R	830774.2006	26720345.61	36.04998	-114.99264		Asbestos
2	SRC2-AI19C	831904.1573	26720976.36	36.0517	-114.9888		Dioxins/furans; PCB congeners
	SRC2-AI19E	831969.9361	26720931.72	36.05157	-114.98858		Dioxins/furans; PCB congeners
	SRC2-AI19N	831905.9098	26721039.56	36.05187	-114.9888		Dioxins/furans; PCB congeners
	SRC2-AI19S	831912.6494	26720857.59	36.05137	-114.98878		Dioxins/furans; PCB congeners
	SRC2-AI19W	831789.6515	26720970.48	36.05168	-114.98919		Dioxins/furans; PCB congeners
3	SRC2-J02E	831968.2841	26721320.19	36.05264	-114.98858		Dioxins/furans; PCB congeners; Metals
	SRC2-J02N	831827.7757	26721223.87	36.05238	-114.98906		Dioxins/furans; PCB congeners; Metals
	SRC2-J02S	831872.1979	26721159.39	36.0522	-114.98891		Dioxins/furans; PCB congeners; Metals
	SRC2-J02W	831815.4817	26721170.94	36.05223	-114.9891		Dioxins/furans; PCB congeners; Metals
	SRC2-J03E	832156.6346	26721385.04	36.05282	-114.98794		Dioxins/furans; PCB congeners; Metals
	SRC2-J03N	832120.0488	26721396.18	36.05285	-114.98806		Dioxins/furans; PCB congeners; Metals
	SRC2-J03S	832141.5231	26721350.05	36.05272	-114.98799		Dioxins/furans; PCB congeners; Metals
	SRC2-J03W	831991.4559	26721284.28	36.05254	-114.9885		Dioxins/furans; PCB congeners; Metals
4	SRC2-AL28C	835285.6839	26722013.95	36.05449	-114.97734		Dioxins/furans; PCB congeners
	SRC2-AM27C	834886.8917	26722161.8	36.0549	-114.97869		Dioxins/furans; PCB congeners
	SRC2-J11C	835049.373	26722003.85	36.05447	-114.97814		Dioxins/furans; PCB congeners
	SRC2-J13C	835154.8178	26722182.92	36.05496	-114.97778		Dioxins/furans; PCB congeners
	SRC2-J16SWall	834740.0882	26722390.2	36.05553	-114.97918	Sample to be collected halfway up the side of excavated berm	Dioxins/furans; PCB congeners
	SRC2-J17SWall	834894.0385	26722027.84	36.05454	-114.97867	Sample to be collected halfway	Dioxins/furans; PCB congeners
	SRC2-J18SWall	835193.7851	26721931.81	36.05427	-114.97766	up the side of excavated berm Sample to be collected halfway up the side of excavated berm	Dioxins/furans; PCB congeners
	SRC2-J19SWall	835058.4626	26722334.86	36.05538	-114.9781	up the side of excavated berm Sample to be collected halfway up the side of excavated berm	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
North Boundary	SRC2-J16	835114.7717	26722555.03	36.05598	-114.97791		Full Sub-Area Soil Analyte List
	SRC2-J17	834928.0611	26722467.9	36.05574	-114.97854		Full Sub-Area Soil Analyte List
	SRC2-J18	834560.8636	26722299.86	36.05529	-114.97979		Full Sub-Area Soil Analyte List
	SRC2-J19	834380.3767	26722214.28	36.05506	-114.9804		Full Sub-Area Soil Analyte List
	SRC2-J20	834199.8898	26722131.82	36.05483	-114.98101		Full Sub-Area Soil Analyte List
	SRC2-J21	834022.5147	26722046.24	36.0546	-114.98162		Full Sub-Area Soil Analyte List
	SRC2-J22	833838.916	26721962.22	36.05437	-114.98224		Full Sub-Area Soil Analyte List
	SRC2-J23	833656.8731	26721879.76	36.05415	-114.98286		Full Sub-Area Soil Analyte List
	SRC2-J24	833481.054	26721798.85	36.05393	-114.98345		Full Sub-Area Soil Analyte List
	SRC2-J25	833299.0112	26721713.28	36.0537	-114.98407		Full Sub-Area Soil Analyte List
	SRC2-J26	833115.4124	26721627.7	36.05347	-114.98469		Full Sub-Area Soil Analyte List
	SRC2-J27	832928.7018	26721540.57	36.05323	-114.98533		Full Sub-Area Soil Analyte List
	SRC2-J28	832741.9912	26721454.99	36.053	-114.98596		Full Sub-Area Soil Analyte List
	SRC2-J29	832562.1212	26721377.69	36.05279	-114.98657		Full Sub-Area Soil Analyte List
	SRC2-J30	832502.9518	26721546.23	36.05325	-114.98677		Full Sub-Area Soil Analyte List