APPENDIX B

REMEDIAL RESPONSE CONTINGENCY PLAN
Coal Ash Fill Site - B.B.S.S. Sand and Gravel Mine
Millersville, Maryland

1.0 INTRODUCTION

Excavated portions of a sand and gravel mine in Millersville, Maryland, owned by B.B.S.S., Inc., and operated by Reliable Contracting Co., Inc., and Constellation Power Source Generation, Inc. (CPSG), were reclaimed by controlled placement of coal ash produced by CPSG. Coal ash is a by-product of combustion of coal for electricity generation, and is beneficially utilized throughout the U.S. for a cement additive, highway base course, blasting grit, anti-skid material, structural fills, mine reclamation, and other uses. The U.S. Environmental Protection Agency (EPA) ruled in 1993 and confirmed in 2000 that coal ash should not be regulated as a hazardous waste.

At this site, numerous measures are incorporated in the site design to minimize potential for impacts on groundwater quality related to the placement of the coal ash structural fill. Monitoring will be conducted to confirm that the control measures are performing properly. However, in the event of an impact to groundwater, the operators are prepared to implement appropriate response actions. This plan describes response actions that will be implemented in the event of detection of impacts to groundwater quality.

2.0 GROUNDWATER MONITORING PROGRAM

Groundwater quality at the site is monitored in a network of wells shown on the Site Plan. Groundwater samples from the wells are collected at least quarterly and analyzed for the constituents listed in Table 1. In addition to the sampling for chemical analysis, water levels are measured in the monitoring wells at the initiation of each sampling event, to verify groundwater flow directions and seasonal variation of groundwater levels.

3.0 RESPONSE ACTION LEVELS AND REMEDIAL ACTIONS

Action levels trigger an assessment of whether a potential threat to human health or the environment exists, and whether such threat is associated with ash placement, and whether actions to mitigate that threat are necessary. The responses described below will be implemented if action levels are exceeded in groundwater.

For this project, action levels for groundwater are listed in Table 1. If an exceedance of any of these action levels is detected in a perimeter well, resampling of that well will be performed within 30 days of receipt of the laboratory results in which the exceedance was identified. Monthly monitoring will be continued for that well until MDE notifies CPSG in writing that it is no longer required. An evaluation will be performed to identify whether any sources other than the ash fill may be responsible for the exceedance. When an exceedance is confirmed and sufficient data has been analyzed to confirm that an adverse trend exists (related to the ash fill), remedial response actions will be taken.

There are several remedial response actions that could feasibly be employed. The best available technology or combination of technologies will be selected based on actual exceedences that occur. The details of the response action design (location, depth, extent, etc.) will depend on the location, nature, and extent of the exceedences. Some of the feasible remedial options applicable to groundwater are as follows:

- Provision of a water treatment system, an alternate water supply, or replacement well.
- Containment by a slurry cut-off wall.

- Extraction by pumping wells, with subsequent treatment.
- Collection by interceptor trenches, with subsequent treatment.
- Combinations of the above.

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TABLE 1

Monitoring Parameters and Action Levels for Groundwater

Reliable Ash Fill Site

Monitoring Parameter	Action Level (mg/L)	Rationale
Antimony	0.006	State of Maryland drinking water standard
Arsenic	0.01	State of Maryland drinking water standard
Barium	2	State of Maryland drinking water standard
Beryllium	0.004	State of Maryland drinking water standard
Cadmium	0.005	State of Maryland drinking water standard
Chromium	0.1	State of Maryland drinking water standard
Cyanide	0.2	State of Maryland drinking water standard
Fluoride	4	State of Maryland drinking water standard
Mercury	0.002	State of Maryland drinking water standard
Nitrate as Nitrogen	10	State of Maryland drinking water standard
Nitrite as Nitrogen	1	State of Maryland drinking water standard
Total Nitrate + Nitrite	10	State of Maryland drinking water standard
Selenium	0.05	State of Maryland drinking water standard
Thallium	0.002	State of Maryland drinking water standard
Sulfate	250	40 CFR 143.3
Chloride	Not Applicable	
Total Dissolved Solids	Not Applicable	
pH	Not Applicable	