LAYUP PLAN

AES
Greenidge

LOCKWOOD ASH DISPOSAL SITE

Prepared on behalf of:

AES Greenidge, L.L.C.
590 Plant Road
P. O. Box 187
Dresden, New York 14441

Prepared by:

DAIGLER ENGINEERING P.C.
1711 Grand Island Blvd.
Grand Island, New York 14072-2131

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1 INTRODUCTION

1.1 BACKGROUND

AES Greenidge, L.L.C. (AES) owns a coal fired electrical generating plant on the west shore of Seneca Lake near the Village of Dresden in the Town in the Town of Torrey, Yates County, New York. In support of the power plant operation, AES also owns the Lockwood Ash Disposal Site located on Swarthout Road, across NYS Route 14 from the power plant. This land disposal facility is authorized by 6 NYCRR Part 360 Solid Waste Management Facility Permit No. 8-5736-00005/00003, which expires on September 4, 2018. Operations at the landfill are currently carried out under subcontract to City Hill Construction, Inc. (CHC) of Penn Yan, New York. CHC maintains a yard, shop, and permitted surface mine approximately two miles south of the facility.

The Lockwood Ash Disposal Site is approved by New York State Department of Environmental Conservation (NYSDEC) for the disposal of fly ash, bottom ash, water/wastewater sludge and mill rejects. The permitted area of the landfill is 44.2-acres, consisting of the soil lined original ash disposal site (OADS), and a four-stage, geosynthetic lined expansion of this original footprint. The landfill has been accepting coal combustion byproducts (CCBPs) produced at the Greenidge Station and other coal burning facilities since approximately 1979. To date, ash has been placed within about 30 of the permitted acres, including the OADS, Stage I, and Stage II. Stage III and IV are not yet constructed. Figure 1-1 illustrates the landfill stages and the major infrastructure of the site.

1.2 PROTECTIVE LAYUP STATUS

The Greenidge Power Generating Station is in the process of entering a protective layup status. Power generation at the site would only re-start if market conditions changed considerably. AES has announced a sale process that may result in another entity continuing to run the station, and intends to keep NYSDEC abreast of any developments in that regard

As an integral element of power station operations, the Lockwood Ash Disposal Site is also being prepared for protective layup. Consistent with tenets of landfill design and environmental protection, the Layup Plan must provide for a system that will contain and isolate the wastes, securely route leachate for treatment, reduce infiltration, control erosion, contain sediments and properly route storm water drainage. The primary means of achieving this goal is to provide for and maintain a cost effective interim cover and drainage system for the landfill.

While the Lockwood Ash Disposal Site will be under protective layup, AES will maintain a discreet area inside the landfill containment system for more limited disposal of permitted materials from other approved sites, including a small amount of coal pile runoff (CPR) treatment sludge from the Greenidge Station when the CPR plant is operational. This operational area is located in the western portion of Stage I and II, and will be covered with an approximate six-inch thick cover soil layer for ready removal in the event CCBPs require disposal. All runoff from this un-vegetated area will be directed to the contact sediment basin for treatment.

On notice of the pending layup to the Region 8 NYSDEC engineer responsible for the Lockwood Ash Disposal Site, the NYSDEC is requiring that a written plan be prepared and submitted to the Department for review and approval. During a March 29, 2011 meeting at the Plant, the NYSDEC engineer laid out the following requirements for the layup:

- Provide for a suitable cover soil layer such that all CCBPs are adequately contained;
- Adequately manage surface water drainage and control runoff;
- Establish acceptable vegetative cover before the end of the growing season; and,
- Prepare a plan that will be consistent with the final closure plan to reduce future closure time and cost liability.

1.3 PURPOSE OF REPORT

In accordance with the requirements of the NYSDEC, AES retained Daigler Engineering, PC (DE) to prepare the requested documentation. In general, the following actions were undertaken to complete the Layup Plan:

- Obtained the April 2011 topographic survey for current fill topography;
- Complete a field investigation intended to define the existing soil cover thickness and vegetation conditions; and,
- Prepare a layup period drainage, erosion and sediment control plan.

The purpose of this Report and the Attachments is to present the information gathered in the design of the Layup Plan, and identify the steps needed to safely and securely manage the materials disposed at the site during the protective layup period.

2 SITE CONDITIONS AND INFRASTRUCTURE

Following is a brief description of the primary elements of the land disposal operation. A more complete presentation of the details of the facility design and its operations is available in the most recent Part 360 permit renewal application dated February 2007.

2.1 APPROVED WASTES, ORIGIN AND COMPOSITION

The landfill is approved for the disposal of CCBPs from various AES power plant operations including those at Greenidge, Hickling, Westover, Cayuga, and Jennison Stations. Coal bottom ash from Garlock, Inc. and coal fly ash from Eastman Kodak are also approved for disposal at the facility. The approved design capacity for this facility is 750 tons per day.

Coal combustion by-products and their admixtures consist largely of fly ash, bottom ash, bottom ash fines, pyrites, lime, polymer, sludges from the on-site sludge dewatering pond and wastewater treatment sludges. This waste primarily derives its chemical composition from the parent coal, and the principal constituents are oxides of silica, aluminum and iron.

The disposed material also contains unburned carbon, oxides of calcium, magnesium, phosphorous, potassium, sulfur sodium and small amounts of titanium. The waste water treatment plant sludge is a mixture of calcium sulfate and metal hydroxides resulting from the lime precipitation of coal pile drainage, maintenance cleaning waste waters and miscellaneous waste water collected and treated at the plant's waste water treatment facility.

2.2 LANDFILL BASELINER SYSTEM

To date, about 30 acres of the permitted 44.2-acre landfill area have been constructed, and waste has been disposed in those constructed areas. Landfill construction involved the excavation of native soils, the installation of ground water depression drains and the installation of basal liner and leachate collection systems.

2.2.1 Original Ash Disposal Site

The "Original Ash Disposal Site" (OADS) was constructed in two phases, the first in 1979 and the second in 1981. The OADS basal liner is constructed above a series of groundwater drain trenches, and consists of a two-foot thick compacted soil barrier and overlying two-foot thick layer of bottom ash, which acts as the leachate drainage layer. A network of leachate collection pipes are installed in the drainage layer. Currently, the OADS is closed with a soil based final cover system

2.2.2 Stage I

Stage I was constructed in 1989 and 1990 including a double liner constructed above natural soil deposits and a single geomembrane overfill liner atop the wastes in the OADS. The basal liner and underlying groundwater drainage trenches are constructed within natural soil deposits. The geomembrane overfill liner atop the OADS consists of the following components, in ascending order:

- A geotextile cushion layer;
- A 50 mil polyvinyl chloride (PVC) geomembrane liner;
- A geotextile cushion layer; and,
- A one-foot thick drainage layer including a leachate collection pipe network.

The basal liner in Stage I that is constructed on natural soil deposits above the underlying groundwater drainage trenches consists of the following components:

- A two-foot thick compacted soil liner;
- A secondary leachate collection and removal system composed of a four-inch thick sand layer;
- A geotextile cushion layer;
- A 50 mil polyvinyl chloride (PVC) geomembrane liner;
- A geotextile cushion layer; and,
- A two-foot thick drainage layer with an embedded leachate collection pipe network.

2.2.3 Stage II

Stage II was completed in 1992 as a double lined cell with a groundwater drainage trench system and basal liner consistent with the liner system in Stage I that is constructed on natural soil deposits.

2.3 Leachate Management

Leachate is defined as surface water runoff that falls on the waste material and subsequently enters the surface water drainage system, and liquid contained and collected by the basal liner systems. Leachate management at the site focuses on the conveyance of collected leachate to the sedimentation pond for treatment and subsequent discharge through a State Pollution Discharge Elimination System (SPDES) outfall.

Each cell includes a network of six-inch diameter PVC perforated lateral collection pipe that convey leachate flow to a 21-inch PVC header pipe. The header pipe in turn conveys leachate to the sedimentation pond for treatment and discharge. The leachate collection system piping is equipped with cleanout risers consisting of PVC pipe which are vertically installed and connected to the leachate piping and extending through to the ground surface. These cleanouts allow for periodic flushing (annually as a minimum) of the leachate collection pipes to help assure they are free and clear of any obstructions that may reduce liner system efficiency.

Leachate is collected from two separate and distinct base areas of the landfill, including the soil lined original ash disposal site (OADS), and the synthetic lined areas of Stage I and II. The currently approved disposal area in Stage I and II encompasses an approximate 19-acres.

Leachate collected from the original ash disposal area discharges to a pipe drain which conveys the leachate to the sedimentation basin. Leachate collected from the geosynthetic liner areas is also conveyed by a pipe header to the sediment basin located north of the original ash disposal area. This 130-foot wide, 550-foot long (1.6 acre) basin can contain up to about 5.5 feet of liquid, with a corresponding capacity of just under 3,000,000 gallons. The basin includes two inlet structures on the east bank, and one outlet structure on the west bank.

All leachate and contact storm water is held within the basin until the water surface reaches within 2.0 feet below the spillway. Once this level is reached, AES Creative Resource Laboratories of Johnson City, New York (an ELAP certified laboratory) obtains a composite sample of the stored water for analysis to confirm the SPDES effluent limitations will not be exceeded during basin discharge. Treated water from the basin is directed to the Keuka Lake Outlet via an approximate 600-foot long natural channel.

2.4 WASTE QUANTITIES AND REMAINING WASTE CAPACITY

Since about 1979 the landfill has been accepting CCBPs and disposing them in the OADS, in Stage I, and in Stage II. The OADS was in service between approximately 1979 through 1992, and it is estimated that 540,000 cubic yards of CCBPs and operational soils have been disposed therein. It is further estimated that as of December 30, 2010 about 1,157,000 cubic yards of CCBPs and operational soils have been disposed in Stage I and II. In total, about 1,697,000 cubic yards of CCBPs and operational soils are managed on site.

The remaining capacity for the currently constructed synthetically lined area and the 44.2-acre permitted area has most recently been determined using the scale waste receipts and waste density test data for 2010, assuming a five percent cover soil volume. As of December 29, 2010 the airspace computed for the completed Phase 1 filling plan[1] was 433,150 cubic yards. Conservatively assuming an effective landfill use rate of 100,000 tons per year (or 86,957 cubic yards per year), the life of Phase 1 under normal operations was projected through five years, or the end of 2015.

The airspace that would be available in the not yet constructed stages of the 44.2-acre landfill is approximately 2,450,000 cubic yards. Assuming a use rate of 100,000 tons per year the life of the not yet constructed stages is approximately 26 years.

[1] Phase 1 filling rises to a working surface at approximately elevation 710 within the currently approved fill area.

2.5 STORM WATER MANAGEMENT

For the Lockwood Ash Disposal Site, surface water drainage patterns are designed to segregate contact water and non-contact water. Contact water is defined as any runoff that has come in contact with the disposed CCBP's, and non-contact as runoff that has not.

Contact surface water runoff is conveyed to the contact water sedimentation pond and mixed with leachate emanating from the leachate collection system and any liquid from the leak detection system. The contact water sedimentation pond is authorized to discharge under SPDES Permit No. NY-0107069 at Outfall 001 as a controlled release batch discharge to the Keuka Lake Outlet. The SPDES Permit restricts the discharge rate as a function of stream flow rate in the Outlet, as measured and recorded through a data logger at the USGS Gauging Station in the Village of Dresden. Prior to any discharge, the collected contact water and leachate is sampled and analyzed to determine that the SPDES Permit discharge water quality requirements will be met. Discharge volumes are calculated for each batch release.

Non contact water is routed through the non-contact surface water drainage system to one of two sediment basins as shown on Sheet 1 in the Drawings.

2.6 ENVIRONMENTAL MONITORING

The Lockwood Ash Disposal Facility Environmental Monitoring Program (EMP) addresses on-site and off-site groundwater, surface water and leachate quality monitoring, identifying the location of all environmental, facility, and other monitoring points, the sampling schedule, analyses to be performed, statistical methods, and reporting requirements. The EMP also includes a contingency water quality monitoring plan which specifies trigger mechanisms for its initiation. Monitoring points of compliance are shown in Figure 1-1.

3 FOCUSED SITE INVESTIGATION

To help prepare an adequate Layup Plan, an updated topographic survey and a focused field reconnaissance were completed.

3.1 UPDATED MAPPING

The updated mapping inside and immediately adjacent the approved fill limits was prepared by Richard Willson, PLS of Penn Yann, New York from select field measurements of ground surface elevation and road edges obtained on mid April 2011. Mr. Willson provided DE a digital terrain model (DTM), and electronic (.csv) files for each three dimensional ground surface coordinate used to develop the map.

3.2 FIELD RECONNAISSANCE

DE completed a shallow cover soil investigation on April 12 and April 25, 2011 to define the general site conditions, cover soil types and thickness, surface water runoff patterns, potential for migration of surface leachate and the nature and extent of any current site condition that might have the potential to allow a future release from the landfill. The wet weather conditions during the April 12 site reconnaissance were helpful in establishing the potential for fugitive leachate, and to define surface water drainage patterns and discharges. It is noted here that due to the inorganic nature of the CCBP fill, explosive gas was not considered a potential concern.

3.3 COVER SURFACE CONDITIONS

3.3.1 Grading and Slopes

Given the progress of filling at the site, areas along the east and west slopes have obtained final grade. No signs of slope instability were observed. Minor, moderate, and severe soil erosion was observed however in most areas of the landfill. As is expected, the more severe erosion is found on the longer and steeper slopes.

3.3.2 Soil Types and Thickness

To determine the texture, thickness and consistency of the existing cover soils, 16 shallow soil probes and 15 shovel holes were advanced and logged across the permitted waste disposal area.

A 24-inch long 1¼-inch diameter replaceable tip stainless steel soil recovery probe was used to sample the soil cover above the waste ash. Given the amount of gravel contained in the soil matrix, the use of this probe was difficult, and a round nose shovel was then used to more easily excavate the exploratory holes. In some areas, it was possible to establish existing soil thickness in erosional rills. Each hole was logged to identify soil color, texture, consistency, moisture condition and thickness.

The existing cover soil layer consists predominantly of three types throughout its thickness: a moist compact silt with coarse-medium-fine (cmf) gravel; a sandy silt or silty sand; and, a moist, stiff clay and silt with a trace to little cmf gravel. The thickness of the cover soils where present ranged from a low of 1½-inches to more than 20-inches. In most locations the cover soil unit does not include a topsoil layer.

3.3.3 Sinkholes

Three sinkhole type features were found during the site reconnaissance, in the locations illustrated on Figure 4-1. These sinkholes suggest some piping of fines at depth, possibly related to previous woodchuck burrows. Previous observations of the clear nature of the leachate, and the lack of ash sediment buildup in the main trunk of the leachate drain suggests this piping is not associated with the leachate collection pipe system. No obvious surface discharge was found on the slopes or at lower elevations that would point to fugitive leachate or a specific cause of the sinkholes.

Copies of the field logs and sketches are included in Attachment 1. Figure 4-1 shows the plotted location of the exploratory holes.

3.3.4 Vegetation

The approximate extent of vegetation on the cover soil surface was determined during the field reconnaissance. This information is presented as an approximate percentage of vegetative cover across 19 distinctly identified areas of the landfill. Vegetation sustained on the landfill cover soil ranges from sparse to vigorous, with most areas of the landfill having to be re-seeded to improve the viability of the cover system. Figure 4-1 shows the 19 different areas of the landfill that were identified largely on the basis of the percentage of vegetative cover.

Table 4-2 summarizes the existing soil thickness and cover conditions found in each of the 19 areas.

3.4 SURFACE WATER

This focused investigation included observations to identify the general surface water runoff patterns at the site, and the condition of the drainage structures. Observations for surface water runoff patterns include inspections for signs of fugitive leachate, and an assessment of the potential for fugitive contact and non-contact runoff to discharge from other than the contact and non-contact drainage systems. Observations for the conditions of the drainage system included inspections for erosion, structural failure, and sediment buildup.

No fugitive leachate was observed during the two day field reconnaissance. It was noted that some contact water discharge had been conveyed to Non-contact Sediment Basin 1 at the southwest corner of the OADS; however, at this time the most recent working face area has been covered, minimizing any impact from that condition.

Non-contact runoff from the small watershed at the southwest corner of the landfill is now directed to a perimeter swale and off-site before entering a non-contact sediment basin. No signs of fugitive ash were observed in that channel.

Some erosion is noted in the recently graded channel for the new road subbase along the western margin of the landfill, and at steeper channels that do not include other than vegetative erosion protection. Corresponding buildup of fine and coarse grained sediments are present at the stilling basin for the steeply grade landfill access road on the east slope, and the culvert conveying non-contact runoff below the contact channel at the northeast corner of the OADS.

3.5 VECTORS

The site reconnaissance revealed the presence of numerous and active woodchuck burrow openings in the cover. Woodchucks prefer easy to dig sand-silt-clay and sandy loam soils, which comprise a significant amount of the cover for this landfill. The woodchucks burrow openings are approximately ten to 12 inches in diameter. Many burrows will have a drop hole near the main burrow opening up to two vertical feet in depth for quick escapes from the surface. Each woodchuck burrow characteristically will have up to four well hidden auxiliary entrances, without the presence of telltale soil mounds. Woodchuck tunnels are reported to reach up to 45 feet in length, and up to five feet in depth.

Approximately ten to fifteen openings were observed in the cover, but not were mapped. Many of the openings were demonstrated to have penetrated the cover soil, as evidenced by the accumulation of both soil cover and ash mounds at their mouth.

4 LAYUP PLAN

4.1 GRADING AND ACCESS

The grading configuration proposed for the Layup Plan is very nearly the now current grading as defined by the Willson survey. The current grading will be slightly modified as needed to consolidate ash, promote controlled surface water drainage and for access roadway construction. For instance, grades in the uppermost plateau will be slightly modified by placing a slightly thicker soil fill to promote surface water drainage away from the east slope and toward the proposed north slope downchute.

Primary access to the top of the fill will be afforded by the east slope incised road. It is proposed that a new connector road segment will be built at the top of the fill to connect the east slope incised road segment to the southwest slope roadway, creating the preferred looping road network.

Access to the intermittent fill area will be afforded by a re-construction of the current access road to this area. During operations, two temporary ash fill access ramps were built above the well covered western portion of Stage I. These two ash ramps, and the associated culverts that convey surface water runoff below them, will be excavated to expose the buried cover system. Ash fill from the ramps will be placed in the identified intermittent working face; the culverts will be reclaimed and re-used. While the easternmost of these two ramps and its culvert are the primary access to the intermittent working face and will be removed, the roadway will be restored at a lower elevation and become a drainage divide between the contact drainage shed and a non-contact drainage shed.

Recently, the operator built the base for a perimeter access road at the western edge of the approved fill area, whose primary purpose is to allow all weather access to the leachate pipe cleanouts for the jetting truck. The base for this road segment will be regraded and augmented as needed to allow a continuation of the gravel surfaced north perimeter road.

In addition to the above referenced operational road network, a perimeter roadway carries intermittent traffic from the site entrance gate to the historic borrow area located west of the landfill. This perimeter road forms a drainage divide separating upgradient stormwater flows from the controlled landfill related stormwater flows.

4.2 COVER SOIL

The soil based cover system proposed for protective layup is the intermediate cover system described in Section 8.2 of the facilities February 2007 Operation and Maintenance (O&M) Manual, as follows:

- Six to nine inches of clayey/silty soils, sandy soils or gravelly soils, or other NYSDEC approved materials;
- Three to four inches of soil suitable to sustain vegetative growth; and,
- Vegetation as needed to control fugitive dust and erosion.

Vegetation requirements are presented in Section 4.3.

As shown, a variety of soil textures can be used for intermediate cover. It is suggested that the finer grained clayey/silty soils be used on areas that have obtained final grade, thereby contributing to the isolation of the CCBPs. The coarser grained sandy soils are best used in areas where additional trafficking may occur, such as the upper plateau and the intermittent working area.

Soil suitable to sustain vegetative growth is soil with sufficient nutrients, and a proper pH for healthy plant growth. Nutrient deficiencies may be corrected using fertilizers. Excess acidity may be corrected with lime and excess alkalinity by the application of sulfur or other suitable acidifying compounds. Tests needed to evaluate a source material will establish the soils pH, the presence and amount of organic matter, inorganic matter (sand, silt and clay), and deleterious materials (rock, cinders, slag, roots). The pH of the soil should range between 6 and 7. Soil fertility shall be analyzed by a qualified laboratory to determine the need for nutrient amendment by the addition of fertilizers. Typical ranges of soil content and texture are shown in Table 4-1, and soils falling within these ranges will generally form a suitable topsoil.

Table 4-1
TYPICAL TOPSOIL CONTENT

CATEGORY	PERCENTAGE BY MASS
Deleterious Material*	5 maximum
Organic Material**	2 to 20
Sand**	20 to 60
Silt and Clay**	35 to 70

* on total sample
**on fraction of soil sample passing the No. 4 sieve.

Figure 4-1 presents the results of the field reconnaissance completed to define the amount of cover and the general ground conditions. Table 4-2 provides a summary description of the conditions for each area depicted in Figure 4-1, as well as a breakdown of the thickness measurements, and estimates the amount of additional cover soil and topsoil that will be needed in each area.

4.3 VEGETATION

Vegetative cover will be established using a seed mixture identified in Section 02936 of the Technical Specifications found in the facilities CQA/C!C Plan. Alternate seed mixtures will be reviewed by AES prior to approval. All seeding shall be completed in accordance with the requirements of Section 02936. Fertilizer shall be applied first in accordance with the recommendations of the laboratory. The seed bed soils will be tilled prior to seeding with any amendments (e.g. fertilizer) mixed into the upper two inches. Seed can be mechanically or hydraulically planted. Mulch shall be applied to retain moisture moderate soil temperature and reduce erosion.

The cover placement schedule allows for planting in the late summer and early fall months such that the site will obtain a good growth of vegetation before the onset of winter.

4.4 VECTOR CONTROL

A vector remediation program will be implemented by AES. To begin, a Nuisance Wildlife Control Operator (NWCO) licensed by NYSDEC will be retained to remove to eliminate the woodchuck population on the landfill. Once the woodchuck population has been controlled, routine inspections of the cover system will include observations for borrowing or any other signs degradation by wildlife. The NWCO will be recalled as necessary to control this vector.

4.5 SURFACE WATER DRAINAGE

The structural elements of the layup period stormwater management system will consist of a network of erosion resistant vegetated or rock lined swales and channels, rock lined downchutes and stilling basins, pipe culverts and manholes to convey stormwater from the landfill to one of three sediment basins. Channel linings in the form of vegetation and stone rip-rap have been selected based on flow velocity, and the potential for scour at channel intersections, drainage structures and the like.

The drainage control structures are designed to prevent ponding and erosion to the cover system for a peak discharge from the 24-hour, 25-year frequency storm. Where flow velocities erosive to grass lined channels will develop under storm conditions, stone lined swales or channels are specified. The system includes both contact and non-contact stone fill lined perimeter and roadside channels of varying widths and depths.

Sideslope diversion swales with a design slope of 0.015 will be constructed at vertical intervals of approximately 30-feet on steeper sideslope areas. The grass lined swales are positioned to intercept sideslope run-off for controlled diversion to downchutes. The diversion swales are designed to convey the 25-yr, 24-hr storm and safely convey the 100-yr, 24-hr storm with 0.25-feet of freeboard.

Rock-lined downchutes will be trapezoidal and will traverse down the steeper slopes where needed. In addition, stone lined drainage swales will convey stormwater down the 3:1 sideslopes to the perimeter drainage channels.

The non-contact perimeter channels will convey flows from downchutes and other tributary channels to the non-contact sediment basins, which will allow for settlement of suspended solids in the stormwater runoff.

The contact water sediment basin is operated as a batch discharge and is not subject to the hydraulic design completed for the non-contact basins.

5 LAYUP PERIOD MAINTENANCE AND MONITORING

Continuing environmental monitoring, monthly site inspections, and repair and maintenance of the cover system, drainage structures, and access roads as required is a key element of the Layup Plan. The Layup Plan includes continued routine inspection by a qualified individual to inspect all features of the disposal site plus supporting facilities, such as the sedimentation basins. The purpose of this inspection program is to verify the proper performance of the facilities and to prepare and file a site inspection report. If any site features are not functioning properly, the inspector would coordinate with the appropriate individual to remediate.

The landfill will be inspected monthly, and after any five year, 24-hour rainfall event. In addition, the leachate management system, groundwater monitoring wells, perimeter fencing and site roads will be inspected quarterly.

5.1 MAINTENANCE

Maintenance will include routine and as needed maintenance of the cover system; and as-needed maintenance of the remaining facility components. Routine maintenance of the leachate collection and conveyance system will consist of annual flushing of system pipes. The purpose of this flushing will be to identify clogged and/or failed pipes.

Spot repairs of the cover system may potentially require the replacement of both topsoil and subsoil, depending on the depth of soil loss. A dozer would be used to strip topsoil in the area where replacement of subsoil is found to be necessary. Subsoil would then be placed and compacted, followed by placement of topsoil suitable for the development of vegetative growth. The topsoil would then be properly seeded. Temporary stabilization measures would be put in place to prevent erosion while vegetation is developing. Seeding and erosion control will be executed in a manner consistent with the New York Guidelines for Urban Erosion and Sediment Control. The goal of these maintenance activities would be to restore a stable, uniform final cover slope to promote drainage.

While due to the non-putrescible nature of the landfilled waste, differential settlement of the cover system is expected to be rare, more significant repairs to the cover system will be undertaken if signs of differential settlement are found during routine inspections. Visual indicators include ponding water, subsidence and cracks in the cover. These areas will be regraded and reseeded, and the regraded area will be stabilized to prevent erosion. Regrading and stabilization activities will be executed in a manner consistent with the New York Guidelines for Urban Erosion and Sediment Control. The area of cover under which differential settlement was suspected to have occurred will be inspected weekly for a two month period before the normal inspection schedule is resumed.

5.2 RECORDKEEPING

Summaries of inspection and maintenance activities will be included in the facility's Annual Report. Records of inspections and maintenance activities will be kept for a minimum of seven years from the date they are completed. Records of inspections will include the following information:

- Date and time of the inspection;
- Name of the individual performing the inspection;
- Description of the inspection performed and observations recorded;
- Date and time of any remedial actions taken or repairs made; and,
- Appropriate photographic documentation as necessary.

5.3 ENVIRONMENTAL MONITORING

During the layup period, groundwater, surface water and leachate will be monitored on a routine basis in accordance with the EMP for operational conditions.

6 FINANCIAL ASSURANCE

AES maintains a surety trust dated April 25, 2011 in the amount of $4,546,221 for the 2010 operating year closure and post-closure costs. A signed electronic copy of the trust agreement was submitted to John Swanson of the NYSDEC Region 9 office on April 26, 2011.

The proposed Layup Plan reduces future closure time and cost by applying the six-inch minimum Soil Cover layer completely above the landfilled material, thereby providing for the first layer of final cover construction. As well, the extension of the cleanout risers and placement of the drainage channel on the western portion of the OADS will meet with the requirements of the closure design.

The surety amount for closure construction will be reviewed once the Layup Plan has been implemented to determine the appropriate reduction in cost liability. AES may petition the NYSDEC for a release of some portion of the fund, equal to the value of the closure work completed by the Layup Plan efforts.