SUPREME COURT OF THE STATE OF NEW YORK
COUNTY OF YATES

In the Matter of the Application of

SIERRA CLUB, COMMITTEE TO PRESERVE THE FINGER LAKES by and in the name of PETER GAMBA, its President; and COALITION TO PROTECT NEW YORK by and in the name of KATHRYN BARTHOLOMEW, its Treasurer; and SENECA LAKE GUARDIAN, A WATERKEEPER AFFILIATE by and in the name of YVONNE TAYLOR, its Vice President,

Petitioners,

For a Judgment Pursuant to Article 78 of the Civil Practice Law and Rules,

–against–

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION, BASIL SEGGOS, COMMISSIONER, GREENIDGE GENERATION, LLC and LOCKWOOD HILLS, LLC,

Respondents.

AFFIDAVIT OF MARY ANNE KOWALSKI

Index No. 2017-0232

State of New York,
County of Seneca, ss.:

MARY ANNE KOWALSKI, being duly sworn, deposes and says:

1. I am a member of Seneca Lake Guardian, a Waterkeeper Affiliate ("SLG"), a petitioner in the above-captioned proceeding. The mission of Seneca Lake Guardian is to participate in the development of projects, undertakings, studies, and other activities in coordination with members of the general public, public entities and civic bodies for the primary purpose of properly and appropriately preserving and using Seneca Lake and the Finger Lakes in a manner conducive to the environment and to the progress and general welfare of the communities around Seneca Lake and the Finger Lakes region.

2. I am a resident of Romulus, New York, a town in Seneca County, New York

located on the eastern shore of Seneca Lake. I live at 5733 Lake Hill Drive in the Lakeshore Landing Homeowners Association (HOA). The HOA Community property, including a beach, boat launch and pavilions on Seneca Lake. I bought my property in 2006. I made it my year-round residence in 2007.

3. My property is located across Seneca Lake from the Greenidge Generating Station and I can see the plant from the HOA beach and dock. .

4. I and other SLG members will be adversely affected by the actions complained of in the verified petition. The air we breathe and the water we use from Seneca Lake may be contaminated or otherwise harmed by water and air discharges from operation of Greenidge Station and from the Lockwood coal ash **landfill**. Those of us who live on the shore of the lake near the plant will be harmed by huge discharges of warmed water from Greenidge Station that may raise the surface temperature of the lake and increase the likelihood of harmful algae blooms and result our exposure to the risks of breathing droplets of water with toxic algae into our lungs or absorbing toxic algae through our skin.

5. I am also a member of the Committee to Preserve the Finger Lakes and of the Sierra Club. I was elected to the Executive Committee of the Finger Lakes Group of the Sierra Club in January 2018.

6. I served on the board of the Seneca Lake Pure Waters Association ("SLPWA") from 2008 to 2017, serving as president from 2011 to 2016. During that time I helped plan and give oversight to SLPWA's water quality monitoring volunteer program.

7. I am a consultant and serve as a public member on the State Board for Clinical Laboratory Technology. In that capacity, I assist the Board and the State Education Department in implementing the licensure of clinical laboratory technologists, technicians and

cytotechnologists.

8. Prior to my retirement, I was employed by various entities at the New York State Department of Health (hereinafter DOH) from 1977 to 2001. From February 1982 through March 2000, I served as the Director of Regulatory Affairs / Health Program Director for the Wadsworth Center for Laboratories, the DOH's public health and research laboratory located in Albany New York. In that position, I was responsible for legislation, legislation, regulation, freedom of information and public and media relations for the Wadsworth Center, including clinical and environmental laboratories, animal research facilities, blood and tissue banks, blood and breath alcohol testing and business practices between clinical laboratories and ordering providers. I was responsible for enforcement activities for approximately 1350 clinical labs and blood banks, 1000 environmental labs, 180 animal research facilities and 800 tissue banks, including coordination with other units within the DOH and state government. I helped prepare regulations including the development of the regulations on clinical laboratory fraud and abuse, on semen and other tissue bank licensure, ignition interlock devices and comprehensive programs of clinical and environmental laboratory standards. I represented the Wadsworth Center in dealings with other parts of the department, other state and federal government offices, Congress and the Legislature, the public and the press; ensure that the center's position and interests are known and protected. I helped direct investigations of illegal activities in all areas of laboratory operation and participate with the Attorney General, local District Attorneys, the Federal Bureau of Investigation, the Office of the Inspector General of the Department of Health and Human Services, and the State Special Prosecutor for Medicaid Fraud in criminal and civil prosecutions.

9. Because of my concerns with water quality in Seneca Lake and the Keuka Outlet,

I have been following the proposal for new operations at the Greenidge Station, and have been concerned that the environmental review given to those impacts in negative declaration and amended negative declaration the New York State Department of Environmental Conservation ("DEC") prepared for the project does not address the impacts those new operations will have on the operations of the Lockwood coal ash landfill adjacent to the station.

10. I have been researching the operations and operating status of the Lockwood landfill for several years and have ascertained the following.

11. The landfill was shut down in 2011 at the same time that Greenidge Station was shut down. The landfill was shut down pursuant to a layup plan prepared by Daigler Engineering and submitted to DEC in May 2011. A true and correct copy of the lay-up plan is attached as **Exhibit A.**

12. The lay-up plan makes clear the "integral connection" between operations at Greenidge Station and the landfill. The layup plan states on page 1-1:

> 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. . . .
>
> The Greenidge Power Generating Station is in the process of entering a protective layup status. . . . As an integral element of power station operations, the Lockwood Ash Disposal Site is also being prepared for protective layup.

13. The landfill has a solid waste management facility permit ("Part 360"). According to the lay-up plan, the landfill's Party 360 permit allows the disposal of fly ash, bottom ash, water/wastewater sludge and mill rejects. *Id*.

14. The landfill has a State Pollution Discharge Elimination System ("SPDES") permit to discharge treated, mixed leachate and stormwater into Keuka Outlet.

15. On February 18, 2015, DEC and the owner of Lockwood executed a consent order. The consent order states that DEC "has determined that groundwater at the site contains substances in excess of the duly promulgated water quality standards for, inter alia, total dissolved solids, boron, manganese, magnesium, iron, sodium and sulfate," and that DEC "believes that the Leachate Pond is a source of the substances and has contributed and continues to contribute to a contravention of duly promulgated water quality standards in violation of ECL § 17-0501 and 6 NYCRR § 360-1.14(b)(2)." A true and correct copy of the consent order is attached as **Exhibit B**.

16. The stated objective of the consent order is "to eliminate the discharge of leachate to groundwater from the Leachate Pond and to provide for a satisfactory monitoring regime for groundwater impacted by the discharge." Id. p. 4. To effect this objective, the consent order requires that the owner of the landfill, LHLLC submit an engineering report "which details a plan that will, to the extent technically practicable: (1) segregate stormwater from leachate at the site; (2) re-route leachate to an on-site holding tank or other suitable holding facility approved by the Department; (3) treat and dispose of leachate at the site or at an appropriate offsite facility; and (4) remove and dispose of contaminated sediment in the Leachate Pond. Id. at 5.

17. Transfers in ownership of the landfill are described in the consent order:

> EIGHTH. AES Greenidge, LLC previously owned and operated the Landfill between May 1999 and December 28, 2012. AES Greenidge, LLC filed for bankruptcy on December 30, 2011, and on December 28, 2012, GMMM Lockwood LLC purchased the Landfill from AES Greenidge, LLC. . .
>
> TENTH. On February 28, 2014, the membership interest in GMMM Lockwood LLC was. transferred to Lockwood Hills, and notification of the transfer was provided to the Department; applications for transrer of the SPDES and Part 360 Permits to Lockwood Hills from GMMM Lockwood LLC were filed with the Department on April 22, 2014 and approved on December 22, 2014.

18. Despite long standing violations and discharges to ground water, in January 2016, DEC proposed to renew Lockwood's discharge permit (SPDES) administratively, which would have allowed the landfill to continue discharging without any review. A true and correct copy of DEC's notice in the Environmental Notice Bulletin ("ENB") on January 13, 2016 announcing the administrative renewal of the permit is attached as **Exhibit C**.

19. The US Environmental Protection Agency ("EPA") and the public objected and Lockwood was placed on DEC's No Administrative Renewal List ("NARL"). A true and correct copy of the EPA email to DEC instructing DEC to place the landfill on NARL is attached as **Exhibit D.** A true and correct copy of CPFL's letter to DEC regarding this issue is attached as **Exhibit E**.

20. DEC then added the landfill to NARL but gave it a very low score on DEC's Environmental Benefit Permit Strategy (EBPS) priority rankings list, 576 / 687, which placed the landfill near the bottom of the NARL list.

21. I filed an email with DEC complaining about the low ranking on July 29, 2017 detailing the factors that should have been considered. A true and correct copy of my email to DEC is attached as **Exhibit F**.

22. After filing my complaint, I received an email from DEC advising me that the ranking had been revised and the landfill's EBPS score changed to 47. A true and correct copy of the email I received from DEC is attached as **Exhibit G**.

23. I have not received a response from DEC regarding my subsequent FOIL requests for the permit review documents for the landfill's SPDES permit.

24. Regarding the actions that are required in the consent order, I have learned that the initial engineering plan for the stormwater segregation system submitted by Lockwood to

DEC was rejected and, to date, the only plan that has been approved and implemented is for the stormwater collection system. A copy of the DEC letter disapproving the initial engineering plan is attached as **Exhibit G**.

25. The new stormwater management system was scheduled to be completed in November 2017. However, as far as I have been able to ascertain, as of today, neither the stormwater management system nor any of the other changes required by the consent order have been completed.

26. As I understand it, the landfill's leachate is still not contained in a tank or other suitable holding facility, the leachate is not treated and disposed of at the site or another suitable holding facility, and the contaminated sediment is still in the unlined leachate pond.

27. DEC's entering into a consent order with Lockwood Hills, DEC's failure to issue new or renewed permits for the landfill and allowing the landfill to operate under its old permits, and DEC's failure to prepare a full environmental impact statement address for the new permits issued to at Greenidge Station that addressed the landfill's acceptance of new waste from Greenidge Station and the impacts that has on the landfill's leachate leakage problems have deprived the public of an opportunity to participate in the process of preparing plans for clean up of the landfill and are causing significant harm to Seneca Lake and local residents.

MARY ANNE KOWALSKI

Sworn to before me this
25 th day of April, 2018

Mary E. Farnsworth
Notary Public

MARY E. FARNSWORTH
NOTARY PUBLIC, STATE OF NEW YORK
QUALIFIED IN SENECA COUNTY
REG. #01FA6084389
MY COMM. EXP. DEC 02, 20 18

Exhibit A

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

May 2011

LAYUP PLAN

AES Greenidge

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May 2011

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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.

Exhibit B

New York State Department of Environmental Conservation
Office of General Counsel, Region 8
6274 East Avon-Lima Rd, Avon NY 14414-9516
Phone: (585) 226-5369 • **Fax:** (585) 226-9485
Website: www.dec.ny.gov

Joe Martens
Commissioner

February 19, 2015

Danielle E. Mettler-LeFeir, Esq.
Hiscock & Barclay
2000 HSBC Plaza
100 Chestnut Street
Rochester, NY 14604

Re: Lockwood Hills, LLC
Consent Order
Case No. R8-20140710-47

Dear Ms. Mettler-LaFeir:

Enclosed is a fully executed Consent Order for the captioned matter. The effective date of the Consent Order is February 18, 2015. Please note that compliance requirements contained in the Consent Order begin within 60 days of the effective date. Let me know if you have any questions.

Sincerely,

Dennis P. Harkawik
Regional Attorney

Enclosure

bcc (w/attachment): Frank Ricotta
Scott Rodabaugh
Scott Foti
Mark Domagala
John Swanson

STATE OF NEW YORK: DEPARTMENT OF ENVIRONMENTAL CONSERVATION

---X

In the Matter of Violations of Articles 17 and 27 of the New York State Environmental Conservation Law by

Lockwood Hills LLC,

CONSENT ORDER

CASE NO. R8-20140710-47

Respondent.

---X

WHEREAS:

FIRST. The New York State Department of Environmental Conservation (the "Department" or "DEC") is and at all times mentioned herein has been a Department of the State of New York (the "State") with jurisdiction over the environmental policy and programs of the State pursuant to the provisions of the New York State Environmental Conservation Law ("ECL"), and Title 6 of the Official Compilation of Codes, Rules and Regulations of the State of New York ("6 NYCRR" or the "regulations").

SECOND. The Department is charged with the responsibility and authority to promote and coordinate the management of the water, land, fish, wildlife and air resources of the State to assure their protection, enhancement, provisions, allocation and balanced utilization, pursuant to ECL § 3-0301.

THIRD. The Department is charged with jurisdiction over the maintenance of the quality of the waters of the State, and over the discharge to such waters, including groundwater, pursuant to Article 17 of the ECL and regulations

promulgated pursuant thereto.

FOURTH. Pursuant to ECL Article 27 and the regulations promulgated pursuant thereto, the Department regulates solid waste management facilities in the State as defined at 6 NYCRR § 360-1.2(b)(158).

FIFTH. The Department is authorized to seek penalties and other appropriate sanctions for any violations of Articles 17 and 27 of the ECL, the regulations promulgated and permits issued pursuant thereto.

SIXTH. Lockwood Hills LLC ("Lockwood Hills") is a limited liability company authorized to do business in the State.

SEVENTH. Lockwood Hills is the owner and operator of a solid waste management facility, a wastewater treatment system, and related improvements at a location in the Town of Torrey, Yates County, New York, commonly known as the Lockwood Ash Landfill (the "Landfill"). The Landfill is permitted to accept for disposal water treatment plant sludge and coal combustion byproducts. Among the improvements at the Landfill is an unlined leachate and stormwater collection pond (the "Leachate Pond").

EIGHTH. AES Greenidge, LLC previously owned and operated the Landfill between May 1999 and December 28, 2012. AES Greenidge, LLC filed for bankruptcy on December 30, 2011, and on December 28, 2012, GMMM Lockwood LLC purchased the Landfill from AES Greenidge, LLC.

NINTH. The Landfill is subject to a State Pollution Discharge Elimination System permit (NY – 010 7069) (the "SPDES Permit") and a solid waste

management facility permit (8-5736-00005/00003-0) (the "Part 360 Permit") that govern certain operations at the Landfill. These permits, *inter alia*, allow and regulate the collection, management and discharge of treated, mixed leachate and stormwater at the site from the Leachate Pond.

TENTH. On February 28, 2014, the membership interest in GMMM Lockwood LLC was transferred to Lockwood Hills, and notification of the transfer was provided to the Department; applications for transfer of the SPDES and Part 360 Permits to Lockwood Hills from GMMM Lockwood LLC were filed with the Department on April 22, 2014 and approved on December 22, 2014.

ELEVENTH. The SPDES and Part 360 Permits as well as an Environmental Monitoring Plan and Site Analytical Plan dated February 2007, required groundwater, surface water and leachate monitoring and reporting

TWELFTH. . Based upon a review of information provided pursuant to the above Permits and Plan, the Department has determined that groundwater at the site contains substances in excess of the duly promulgated water quality standards for, inter alia, total dissolved solids, boron, manganese, magnesium, iron, sodium and sulfate.

THIRTEENTH. The Department believes that the Leachate Pond is a source of the substances and has contributed and continues to contribute to a contravention of duly promulgated water quality standards in violation of ECL § 17-0501 and 6 NYCRR § 360-1.14(b)(2).

FOURTEENTH. The discharge of leachate to groundwater from the Leachate Pond is not permitted or otherwise authorized by the Department.

FIFTEENTH. Each violation heretofore stated, is subject to the sanctions authorized by ECL Article 71, Titles 19 and 27.

SIXTEENTH. Representatives of Lockwood Hills and the Department have conferred and have agreed to execute this Consent Order (the "Consent Order") in settlement of the violations related to the groundwater discharges described and identified herein.

SEVENTEENTH. Lockwood Hills affirmatively waives the right to a hearing in this matter, consents to the issuance of this Consent Order and agrees to be bound by its provisions, terms and conditions.

NOW, being duly advised and having considered the matter, **IT IS ORDERED THAT:**

I. **OBJECTIVE.** It is the objective of this Consent Order for Lockwood Hills to eliminate the discharge of leachate to groundwater from the Leachate Pond and to provide for a satisfactory monitoring regime for groundwater impacted by the discharge. Towards those ends, Lockwood Hills shall perform the compliance requirements stated in this Consent Order and take such other and further steps necessary to attain the objectives of this Consent Order or as otherwise directed by the Department pursuant to its lawful authority.

II. **COMPLIANCE REQUIREMENTS: WATER QUALITY MONITORING.**

All groundwater, surface water and leachate monitoring already required under the SPDES Permit, Part 360 Permit, Environmental Monitoring Plan and Site Analytical Plan dated February 2007 shall continue as required by those respective documents.

III. **COMPLIANCE REQUIREMENTS: SEGREGATING AND MANAGING LEACHATE AND STORMWATER; REMOVING CONTAMINATED SEDIMENTS FROM LEACHATE POND; MODIFYING PERMITS.**

A. Within 6 months of the effective date of the Consent Order, Lockwood Hills shall submit an Engineering Report (the "Report") to the Department for its review and approval, which details a plan that will, to the extent technically practicable: (1) segregate stormwater from leachate at the site; (2) re-route leachate to an on-site holding tank or other suitable holding facility approved by the Department; (3) treat and dispose of leachate at the site or at an appropriate offsite facility; and (4) remove and dispose of contaminated sediment in the Leachate Pond.

B. The Report shall include a proposed schedule for implementation of the items contained in the Report, which schedule shall require implementation be completed no later than October 1, 2016.

C. Within 6 months of the Department's approval of the Report, Lockwood Hills shall submit to the Department for review and approval, engineering plans and

specifications for the implementation of the approved Report.

D. Following approval by the Department of the engineering plans and specifications, Lockwood Hills shall commence work according to the terms, conditions and schedule approved by the Department.

E. Within 60 days of completion of the work required by the approved Report, Lockwood Hills shall submit the following to the Department for its review and approval: (1) record drawings or other appropriate documentation which demonstrates that all work has been completed; and, (2) an engineering certification that construction and implementation of the approved Report has been completed in accordance with the approved Report. The Department will make its best effort to either approve the submission or provide reasons why it is inadequate within 60 days of its submission by Lockwood Hills.

F. Within 30 days after the Department approves the submission required in § III.E, Lockwood Hills shall apply for and diligently pursue a modification of its SPDES permit and Part 360 permit to reflect, as necessary and appropriate, implementation of this Consent Order.

IV. FINANCIAL ASSURANCE FOR IMPLEMENTATION OF THIS CONSENT ORDER. Within 60 days of the effective date of the Consent Order, Lockwood Hills shall provide the Department for its review and approval a detailed written estimate of the cost of performing all of the compliance activities described in paragraph III, above. Once the estimate is approved by the Department, Lockwood Hills shall establish a financial assurance mechanism, in a form consistent with 6 NYCRR

§360 – 2.19(e), in an amount no less than the written estimate approved by the Department. Any financial assurance mechanism established under this provision of the Consent Order must be approved by the Department and may be terminated once the Department approves the submission required in paragraph III.E, above. Should Lockwood Hills be unable or unwilling to timely perform the compliance activities required by the Consent Order, the Department shall have the option of using the financial assurance mechanism to fund such activities.

V. GENERAL CONDITIONS APPLICABLE TO SUBMISSIONS REQUIRED UNDER THIS ORDER. The following conditions apply to the submissions required under the Consent Order:

A. Should Lockwood Hills fail to make any submission in a timely fashion, or should the submission otherwise fail to comply with the requirements of the Consent Order, the Department may declare Lockwood Hills to be in violation of the Consent Order and pursue any other remedy against Lockwood Hills provided by law;

B. All submissions must be prepared by a professional engineer licensed in the state unless the Department specifies otherwise;

C. All submissions required under the Consent Order shall be made to the Regional Material Management Engineer in the Department's Region 8 office in Avon, NY;

D. Lockwood Hills shall diligently reply to all questions, comments and issues raised by the Department in its review of any submission; and

E. The terms and conditions of the Department's approval of any submission, including any schedule established thereby, constitute and become material parts of the Consent Order and are enforceable as such without further modification of the Consent Order.

VI. EFFECT OF PAYMENT OF PENALTY. Assessment and payment of any civil penalty imposed for failure to comply with this Consent Order shall not in any way alter Respondent's obligation to satisfactorily perform any action required by the Consent Order or affect any approvals issued by the Department in response to submissions required under this Consent Order.

VIII. RELEASE. Full compliance with this Consent Order shall release Respondent from all civil and administrative claims and liabilities arising out of the violations referenced in this Consent Order, up to the effective date of this Consent Order; provided, however, that this Consent Order shall not be construed as being in settlement of events for which the Department lacked knowledge on the effective date of this Consent Order, or for any future violations of Respondent's permits or the Environmental Conservation Law.

IX. STANDARD PROVISIONS. Respondent shall further comply with the standard provisions recited on the attached blue cover, which constitute material and integral terms and conditions of the Consent Order and are hereby incorporated into the Consent Order by reference.

DATED: February 18, 2015
Avon, New York

JOE MARTENS, Commissioner
New York State Department of
Environmental Conservation

By _____
PAUL J. D'AMATO
Regional Director

CONSENT BY RESPONDENT LOCKWOOD HILLS LLC

Respondent Lockwood Hills LLC hereby consents to the issuance of the foregoing order, waives its right to a hearing herein, and agrees to be bound by the terms, provisions, and conditions contained herein.

LOCKWOOD HILLS LLC

BY Dale Irwin

TITLE Vice President

DATE 2/4/15 DCS

STATE OF New York)
) SS.:
COUNTY OF Yates)

On this 4 day of February, 2015, before me personally came Dale L. Irwin, to me known, who being by me duly sworn did depose and say that (s)he resides in 590 Plant Rd Dresden NY that (s)he is the Vice President of Lockwood Hills LLC, the limited liability company described in, and which executed the foregoing instrument, and acknowledged that (s)he signed his/her name thereto by order of the of said limited liability company.

BETTY M. DAGGETT
Notary Public State of New York
Yates County # 01DA6066162
Comm. Expires November 5, 2017

Betty M. Daggett
NOTARY PUBLIC

Exhibit C

Consolidated Public Notice For SPDES Permit Renewal

http://www.dec.ny.gov/enb/20160113_spdes.html

The Department of Environmental Conservation (DEC) has received applications to renew the State Pollutant Discharge Elimination System (SPDES) permits listed below. The DEC intends to issue permit renewals maintaining the current effluent limitations and monitoring and report requirements under the Environmental Benefit Permit Strategy (EBPS). The EBPS enables the DEC to renew SPDES permits administratively. A full technical review is undertaken in sequence as determined by the EBPS permit priority ranking system, and when necessary permit modifications are initiated.

Under the State Environmental Quality Review Act, renewal of a permit is a Type II activity and, therefore, not subject to the specific environmental impact analysis requirements of that law.

Additional information, i.e., current permit, fact sheet, renewal application, supporting documentation, the priority ranking fact sheet, and a description of the SPDES permit priority ranking system, may be obtained from or inspected at the NYSDEC central office in Albany. Substantive comments on the permit or on the priority ranking score, e.g., changes in discharge characteristics or facility operations that affect the discharge, and/or request for hearing must be submitted in writing no later than Friday, February 12, 2016 to:

Lindy Sue Czubernat
Division of Environmental Permits
NYSDEC
625 Broadway, 4th floor
Albany, NY 12233-1750
518-402-9165
DEPPermitting@dec.ny.gov

The SPDES permits listed below show the most up-to-date priority ranking. The receipt of new information or the issuance of permit modifications may change the priority ranking from that shown on the statewide SPDES permit priority ranking list published annually.

Region 8

Yates County

Permittee Name:	Lockwood Hills LLC
Facility Name:	Lockwood Ash Disposal Landfill
Facility Address:	Swartout Rd Torrey NY 13902
Facility Type:	Elec & Other Services Combined

(C)ity, (T)own, (V)illage:	Town of Torrey
Deadline for Comments:	Friday, February 12, 2016
DEC Number:	8-5736-00005/00001
SPDES Number:	NY0107069
Ranking Score:	N/A
Receiving Waters:	Keuka Lake Outlet
Water Classification:	C(T)
Type of Waste/Flow Rate:	Misc/ 0.2500 MGD

Contact and Additional Information

Exhibit D

From: Arcaya, Alyssa [mailto:arcaya.alyssa@epa.gov]
Sent: Friday, February 12, 2016 11:31 AM
To: Tang, Koon S (DEC); Baker, Brian (DEC)
Cc: dec.sm.DEPPermitting; Jackson, Wayne; Obrien, Karen
Subject: Proposed administrative renewal of NY0107069 (Lockwood Ash Disposal Landfill)

Hello Koon and Brian,

I'm writing with regards to the proposed administrative renewal of NY0107069 (the Lockwood Ash Disposal Landfill), which was public noticed on the ENB on January 13th. The EPA does not support administrative renewal of this permit for a variety of reasons. We were alerted to the proposed rollover of this permit by concerned members of the local community, who also expressed concerns about violations at the site and planned changes at the associated Greenidge power plant, which has disposed of coal ash at the landfill. We are aware of the Consent Decree requiring a schedule of treatment for the landfill leachate.

We believe the Lockwood Ash disposal site may be subject to the new Effluent Limitation Guideline for the Steam Electric Generating Point Source Category, which establishes new effluent limitations for coal ash landfills and surface impoundments, or coal ash pond overflows.

For these reasons, this facility should be placed on the No Administrative Renewal List by the requirements of NY TOGS 1.2.2 (pp. 21-22, Permit Processing Procedures Section IV: No Administrative Renewal List).

Please let me know if you would like to discuss.

Thanks,
Alyssa

Alyssa Arcaya
Acting Chief, NPDES Section
Clean Water Division, EPA Region 2
212-637-3730

Exhibit E

The Committee to Preserve the Finger Lakes

PO Box 505
Penn Yan, New York 14527-0505
http://preservethefingerlakes.org/

February 11, 2016

Lindy Sue Czubernat
Division of Environmental Permits
NYSDEC
625 Broadway, 4th floor
Albany, NY 12233-1750

Re: Comments on Administrative Renewal of Permit for Lockwood Ash Disposal Landfill SPDES # NY0107069

Dear Ms. Czubernat:

The Committee to Preserve the Finger Lakes ("CPFL") respectfully submits the following comments in opposition to the application of Lockwood Hills LLC ("Lockwood") to renew SPDES permit # NY0107069 for its Lockwood Ash Disposal Landfill ("Lockwood permit"), and in opposition to DEC's announcement that it plans to renew the Lockwood permit administratively.[1]

DEC entered into a consent order with Lockwood Hills LLC on February 18, 2015.[2] The consent order indicates that there are significant problems with the landfill. The order states that DEC "has determined that groundwater at the site contains substances in excess of the duly promulgated water quality standards for, inter alia, total dissolved solids, boron, manganese, magnesium, iron, sodium and sulfate.," and that DEC "believes that the Leachate Pond is a source of the substances and has contributed and continues to contribute to a contravention of duly promulgated water quality standards in violation of ECL § 17-0501 and 6 NYCRR § 360-1.14(b)(2). The order states:

> It is the objective of this Consent Order for Lockwood Hills to eliminate the discharge of leachate to groundwater from the Leachate Pond and to provide for a satisfactory monitoring regime for groundwater impacted by the discharge. Towards those ends, Lockwood Hills shall perform the compliance requirements stated in this Consent Order and take such other and further steps necessary to attain the objectives of this Consent Order or as otherwise directed by the Department.

---

[1] Consolidated Public Notice For SPDES Permit Renewal, Environmental Notice Bulletin, January 13, 2016, http://www.dec.ny.gov/enb/20160113_spdes.html#info

[2] Case No. R8-2014071 0-47, *In the Matter of Violations of Articles 17 and 27 of the New York State Environmental Conservation Law by Lockwood Hills LLC*, Consent Order, February 18, 2015.

It is our understanding that DEC recently requested changes to Lockwood's proposed engineering plan to address problems with the groundwater discharges.

In view of these outstanding and uncorrected violations, any renewal of the Lockwood permit, administratively or not, would be in clear contravention of the requirements of the Environmental Conservation Law (ECL). ECL § 17-0701.3 provides that no SPDES permit "shall be issued by the commissioner or by his designated representative until the requirements of title 8 of this article and the regulations promulgated thereunder have been satisfied." ECL § 17-0701.5.a requires that, before issuing a SPDES permit, DEC shall determine "that the discharge from the outlet or point source or modified disposal system will not be in contravention of the standards, criteria, limitations, rules and regulations adopted or applied by the department." Pursuant to these provisions, a SPDES permit cannot be renewed if there are outstanding permit violations.[3]

For this reason, we request that DEC deny Lockwood's renewal application.

Thank you for your consideration.

Respectfully,

Peter Gamba, President
The Committee to Preserve the Finger Lakes
PO Box 505
Penn Yan, New York 14527-0505
pgamba1007@aol.com

[3] See also Karl S. Coplan, "Of Zombie Permits and Greenwash Renewal Strategies: Ten Years of New York's So-Called 'Environmental Benefit Permitting Strategy,'" *26 Pace Envtl. L. Rev. 1* (2005), available at http://digitalcommons.pace.edu/lawfaculty/357/.

Exhibit F

From: Mary Anne Kowalski [mailto:mkowals1@nycap.rr.com]
Sent: Saturday, July 29, 2017 6:36 PM
To: Arcaya, Alyssa <arcaya.alyssa@epa.gov>; 'Brian.Baker@dec.ny.gov' <Brian.Baker@dec.ny.gov>; 'Koon Tang DEC Water Permits' <koon.tang@dec.ny.gov>
Cc: 'Czubernat, Lindy Sue (DEC)' <lindysue.czubernat@dec.ny.gov>; 'scott.rodabaugh@dec.ny.us' <scott.rodabaugh@dec.ny.us>; Jackson.wayne@epa.gov; Stuart Fox DEC' <stuart.fox@dec.ny.gov>; 'shayne.mitchell@dec.ny.gov' <shayne.mitchell@dec.ny.gov>; 'depprmt@dec.ny.gov' <depprmt@dec.ny.gov>; Obrien.karen@epa.gov

Subject: LOCKWOOD ASH DISPOSAL LANDFILL NY0107069 TORREY

Dear Mr Tang,

I am writing to request rescoring of the rank for the Lockwood Hills Ash Disposal Landfill (NY0107069). I understand that this is allowed in the procedure:

> *Any interested party may provide, at any time, substantive comments requesting a change in a permit's rank based on the grounds that newly discovered material information exists; that a material change in environmental conditions has occurred; or that relevant technology or applicable law or regulations have changed since the issuance of the existing permit. All such requests shall be in writing and contain facts or reasons supporting the request.*

The current listing http://www.dec.ny.gov/permits/6054.html means that Lockwood will not be assessed for about 10 years:

LOCKWOOD ASH DISPOSAL LANDFILL NY0107069 TORREY 27 576 / 687 Central (#8)
Factor: 14 Score: 27 Multiplier: 3 Points: 9 Reason: Longevity

Lockwood was added to the NARL at the direction of the EPA:

From: Arcaya, Alyssa [mailto:arcaya.alyssa@epa.gov]
Sent: Friday, February 12, 2016 11:31 AM
To: Tang, Koon S (DEC); Baker, Brian (DEC)
Cc: dec.sm.DEPPermitting; Jackson, Wayne; Obrien, Karen
Subject: Proposed administrative renewal of NY0107069 (Lockwood Ash Disposal Landfill)

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We believe the Lockwood Ash disposal site may be subject to the new Effluent Limitation Guideline for the Steam Electric Generating Point Source Category, which establishes new effluent limitations for coal ash landfills and surface impoundments, or coal ash pond overflows.

For these reasons, this facility should be placed on the No Administrative Renewal List by the requirements of NY TOGS 1.2.2 (pp. 21-22, Permit Processing Procedures Section IV: No Administrative Renewal List).

Please let me know if you would like to discuss.

Thanks,
Alyssa

Alyssa Arcaya
Acting Chief, NPDES Section
Clean Water Division, EPA Region 2
212-637-3730

The only factor that was considered in assigning the ranking was "Longevity," giving the landfill an inappropriately low ranking.

Simply based on the EPA Letter, the following factors should be added:

Factor Number	Factor Description
12	Public Concern (Demonstrated by the public contacting the EPA on the automatic renewa
7	Non-compliance - Permit is subject to a consent order (Complete Order Attached) 2015-2-19 *"The SPDES and Part 360 Permits as well as an Environmental Monitoring Plan and Site Analytical Plan dated February 2007, required groundwater, surface water and leachate monitoring and reporting.* *"Based upon a review of information provided pursuant to the above Permits and Plan, the Department has determined that groundwater at the site contains substances in excess of the duly promulgated water quality standards for, inter alia, total dissolved solids, boron, manganese, magnesium, iron, sodium and sulfate."*

7	Non-compliance - . DEC stated, in the 2015 Consent Order, that the Leachate Pond was a source of the substances and has contributed and continues to contribute to a contravention of duly promulgated water quality standards in violation of ECL § 17-0501 and 6 NYCRR § 360-1.14(b)(2). *The specific requirements in the Consent Order are:* *(1) segregate stormwater from leachate at the site;* *(2) re-route leachate to an on-site holding tank or other suitable holding facility approved by the Department;* *(3) treat and dispose of leachate at the site or at an appropriate offsite facility; and* *(4) remove and dispose of contaminated sediment in the Leachate Pond.* To date, only (1) has been partially completed (completion estimated November 2017) . Lockwood has asked for additional time to study leachate flow to design and install a leachate management system in 2019.
7	Non-compliance - Permit is in continuing violation of groundwater requirements based on 2016 groundwater monitoring reports (attached) for: *total dissolved solids, boron, magnesium, iron, sodium and sulfate.*
99	The landfill was inactive from 2011 when the AES Greenidge Plant closed until the Greenidge Generation power plant was opened. The permit needs to be reviewed due to the impacts of the reopened plant and the burning of natural gas and resinated wood (19%)
99	The Lockwood Ash Landfill needs to be reviewed under the new EPA Coal Ash rules and the Effluent Limitation Guidelines for Steam Electric Generating Point Source Categories

For these reasons, the Lockwood Hills Ash Disposal Landfill (NY0107069) should be rescored and the SPDES permit review done as soon as practicable. I look forward to hearing from you, hopefully with a more accurate score for the landfill.

Thank you for your consideration.

Mary Anne Kowalski
315-759-3761

Exhibit G

-------- Original message --------
From: "Maier, Peter T (DEC)" <Peter.Maier@dec.ny.gov>
Date: 8/25/17 3:16 PM (GMT-05:00)
To: mkowals1@nycap.rr.com
Cc: "Mitchell, Shayne (DEC)" <shayne.mitchell@dec.ny.gov>
Subject: Lockwood Coal Ash Landfill SPDES EBPS Score Update

Hello Mary Anne,

I am the SPDES permit writer assigned to the Lockwood Coal Ash Landfill (SPDES No. NY0107069). I am responding to your email to Koon Tang dated 07/29/2017 regarding an update in this facility's EBPS score. After reviewing your email and the facts surrounding the SPDES permit and the Consent Order related to this facility, I have updated the score to include public concern and the needed addition of EPA's new Coal Ash Rule to the permit. The current EBPS score for this facility is now 47. Regarding the exceedance of the groundwater standards, their Consent Order forces GMMM (the facility owner) to address these issues and since a remedial plan has been approved by the DEC, the EBPS score was not updated based on this criteria.

Please let me know if you have any questions regarding this update.

Thank you,

Peter

Peter Maier, EIT
Assistant Engineer, Division of Water
New York State Department of Environmental Conservation
625 Broadway, Albany, NY 12233-3505
P: (518) 402-8103 | F: (518) 402-9029 | peter.maier@dec.ny.gov
www.dec.ny.gov |

Exhibit H

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Office of General Counsel, Region 8
6274 East Avon-Lima Road, Avon, NY 14414-9516
P: (585) 226-5311 I F: (585) 226-9485
www.dec.ny.gov

November 30, 2015

Danielle Mettler-LaFeir, Esq.
Barclay Damon
2000 HSBC Plaza
100 Chestnut Street
Rochester, New York 14604

Re: Lockwood Hills LLC Consent Order Case No. R8-20140710-47

Dear Ms. Mettler:

The Department has concluded its review of the Engineering Report for Leachate/Stormwater Segregation at the Lockwood Ash Disposal Site which was submitted as a condition of Consent Order R8-20140710-47. The submission was made by Ms. Bethany Acquisto of Daigler Engineering, PC on September 14, 2015. She is copied on this letter.

The proposed treatment surface impoundment would be a manually operated facility with limited process control. It would function similarly to the current settling surface impoundment that relies on stormwater inclusion to dilute leachate concentrations to achieve permit discharge limits. The proposal is not much more sophisticated than what is currently in place. The Engineering Report proposes to follow the design and operation procedures for another facility that treats coal combustion residuals (CCR) leachate at the Weber Ash Disposal Site Landfill, Town of Fenton, Broome County, New York. Department staff visited this site and reviewed documentation associated with it, since the facilities at Weber are the basis for the proposal at Lockwood.

The Weber treatment facility is primitive in terms of automation and controls. Everything is manually operated. Chemical addition is not metered. Mixing patterns appear to short circuit according to file photos, sampling is limited to only one grab sample prior to discharge, no samples are taken during the discharge, settled solids are not removed prior to discharge, solids carry over is not controlled or monitored, and the discharge has a bottom draw-off which will influence solids into the outfall. These are just some of the deficiencies that indicate that the operations are not the best treatment techniques available for physical chemical treatment of CCR wastewater. A wastewater treatment

process similar to that found at the Greenidge generating station is more representative of the current state of the art for treating this wastewater. The Engineering Report's proposed wastewater treatment facility appears to lack sufficient operational control to ensure compliance with permit limits.

Similarities between the Weber Landfill and Lockwood Landfill are overstated in the Engineering Report. Weber is approximately one-half of the acreage of Lockwood and it is closed. It has final cover and is not expected to be operated in the future. Under these circumstances, the leachate generation at Weber will be a much smaller volume than what is produced at Lockwood. The fact that Weber is closed means that its leachate volumes should be smaller and more predictable. That may make it allowable to be handled on a batch treatment basis with what appear to be rather casual controls.

On the contrary, the Lockwood Landfill has only received interim cover and the owner's plan is to reopen and operate again. During operation, the waste receiving cell will be open to precipitation and will generate a greater amount of leachate than the current rate. The leachate will likely be a higher strength waste because the dilution by mixing with stormwater will not be allowed. This dictates that a more structured collection, storage and treatment approach be employed to consistently achieve discharge permit requirements under varying loading conditions.

Department staff had anticipated that leachate would be collected in tanks and treated offsite in a SPDES permitted facility. If it is to be treated on-site, a process train similar to the Greenidge generating station wastewater and coal pile leachate treatment plant is needed. That facility has a recognizable and time proven physical chemical treatment process appropriate for reducing the chemicals present in the ash landfill leachate to SPDES effluent discharge limits.

In addition, the Engineering Report does not make provisions for maintaining a full level of leachate treatment during construction. It proposes to continue the commingling of leachate with stormwater as an interim measure in a newly constructed stormwater pond. This is not allowed by the SPDES regulations as dilution is not considered treatment. The construction detail for proposed Stormwater Basin 1 does not meet the technical requirements of a liner system for a CCR leachate impoundment. It can be used as a stormwater pond only.

Construction of the proposed Onsite Treatment System impoundment bottom would impinge upon the uppermost groundwater elevation. In order to meet necessary volume capacity, the depth of the impoundment retrofit must be deeper than the current Leachate Pond. For this installation to be approved by the Department, a variance from 6 NYCRR Part 360-6.5(a) would have to be granted. This regulation requires a minimum of five feet separation from the bottom of the liner system and the seasonally

high groundwater table. The Engineering Report states that the bottom of the impoundment's two foot thick clay liner will be submerged below the water table. The Department will not approve the variance as it would violate federal regulation 40 CFR 257.60(a). That regulation states that CCR surface impoundments must be constructed with a base that is located no less than 1.52 meters (five feet) above the upper limit of the uppermost aquifer. There is no variance provision. The proposed project does not comply with location restrictions.

The current proposal is unacceptable and must be revised. A different plan is needed. Consider collecting leachate in storage tanks and investigate the possibilities for off-site treatment. Another alternative that you can evaluate is the potential to collect leachate in storage tanks and transport it by tanker truck or pipeline to the Greenidge generating station wastewater treatment facility for processing. You can also investigate package plants or mobile skid mounted physical chemical treatment plants to provide reliable, technically modern process control. Avoiding the use of an open air surface impoundment for leachate storage has the added advantage of flexibility for the placement of stormwater management features and preserving space for other activities.

There are additional issues associated with leachate and stormwater volume calculations, effluent sampling parameters, and groundwater monitoring locations that Department staff question. We can discuss these issues with you prior to or during your preparation of a revised Engineering Report. In any case, please submit an acceptable Engineering Report to the Department within 60 days of the date of this letter. Let me know if you have any questions.

Sincerely,

Dennis P. Harkawik
Regional Attorney

Cc: Ms. Bethany Acquisto, Daigler Engineering, PC