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February 17, 2016

North Carolina Department of Environmental Quality
Attn: Mr. Larry Frost
Division of Waste Management
Solid Waste Section
2090 U.S. Highway 70
Swannanoa, NC 28778

Permit No.	Scan Date	DIN
Duke Energy/Asheville	February 17, 2016	25636

RECEIVED
February 17, 2016
Solid Waste Section
Asheville Regional Office

Re: Ash Transportation Information Plan Submittal
Asheville Plant
Buncombe County, North Carolina

Dear Mr. Frost,

Attached you will find the Ash Transportation Information Plan (Rev. 1) for the Duke Energy Asheville Plant located in Buncombe County. This information is being submitted in response to a verbal request from the Solid Waste Section (Section).

In addition to ash hauling via truck from the Asheville Plant to the Waste Management landfill in Homer, Georgia, Duke Energy will soon be hauling ash to the Cliffside Industrial Landfill in Mooresville, NC. As such, this document replaces Revision 0 sent to you in November 2015. If the destination for truck transport of Asheville Plant ash were to change, the attached will be updated and submitted to you as a revision prior to the change in destination being implemented.

This submittal is for information only and does not require a formal response from the Section. Please do not hesitate to contact me at 919-546-7863 or john.toepfer@duke-energy.com if you have any questions, comments, or concerns.

Sincerely,

John Toepfer, P.E.
Lead Engineer
Waste and Groundwater Programs

Mr. Larry Frost Letter
February 17, 2015

Attachments: Asheville Plant Ash Transportation Information Plan Rev 1; 02/16/2016

cc (via e-mail): Ed Mussler, NCDEQ
Ed Sullivan, Duke Energy
Jeremy Pruett, Duke Energy
Richard Baker, Duke Energy
Steadman Sugg, Duke Energy

Ash Transportation Information Plan

Asheville Steam Electric Generating Plant

Arden, North Carolina

Buncombe County



Rev. 1

CCP Implementation

Ash Basin Closure

February 16, 2016

1.0 Asheville Plant Ash Transportation Information

This ash transportation plan (Plan) outlines the scope of work and route information for the support of excavation and transportation activities from the 1982 Ash Basin (Figure 1) located at the Duke Energy Asheville Steam Electric Generating Plant (Asheville Plant), to the following locations:

1. R&B Landfill located in Homer, Georgia.
2. Cliffside Industrial Landfill in Mooresboro, North Carolina. Permit No. 8106.

Excavation and loading services at the Asheville Plant are provided by Charah. Transportation services are provided by Charah, Waste Management (WM), and/or their subcontractors. The work area is located on the existing transport roads constructed within the 1982 Ash Basin. Ash from the facility will be transported by truck to the R&B Landfill by WM and the Cliffside Industrial Landfill by Charah. This plan is an amendment from the Coal Ash Excavation Plan acknowledged by the North Carolina Department of Environmental Quality (NCDEQ) on February 2, 2015. Additional information regarding this scope of work will be provided in the subsequent update.

Figure 1 - Asheville Plant Stockpile Loadout Operations



2.0 Excavation and Loading

Charah will excavate coal combustion products (CCPs) from the 1982 Ash Basin and load highway dump trucks for offsite removal. Excavation, loading, and transportation activities at the facility will be conducted in accordance with Duke safety requirements and governmental regulatory standards.

2.1 General truck loading activities

General truck loading activities include, but are not limited to, the following tasks:

- Erosion and Sediment Control (E&SC) measures, where required, will be maintained throughout the project
- Storm water run-off is contained within the 1982 Ash Basin.
- Charah will conduct work in accordance with their Health and Safety Plan (HASP). Waste Management will work in accordance with their Material Transport Job Hazard Analysis (JHAs). The Charah HASP and Waste Management JHAs have detailed procedures to mitigate potential hazards anticipated for the project.
- Operators will use spotters, horn signals, and 3 part radio communications when staging dump trucks in the truck loading location. If communication is unclear, employees are instructed to call an all-stop until absolute clarity can be obtained.
- Federal Department of Transportation (DOT) certified and inspected highway trucks will be loaded with CCPs by at the designated loading location.
- Haul trucks will be proportionately loaded from the driver's side without pushing material in bed and allowing for the load to be fully covered by a tarp; for side dumps. Charah loads from the rear end for the more standard "end dump" dump trucks.
- Once the trucks are loaded and loader operator signals for truck to exit loading location, the operator will place the tarp to cover load.
- Trucks will be weighed on site utilizing the existing truck scales at which time a weigh ticket will be issued to the driver. The truck load will be confirmed to be within approved limits before leaving the site.
- Upon exiting the site, trucks will follow the Primary transportation route based on destination to Homer, Georgia or Mooresboro, North Carolina.
- In the event that unforeseen delays or adverse conditions make for unsafe travel, trucks will stop at approved stopping locations and will continue on route once approved. Any trucks that have not departed from site will remain at respective site until safe travel conditions are restored.

3.0 DOT and Environmental Controls

3.1 Truck Scale

Certified truck scales (Figure 2) at the Plant will be utilized to ensure that all haul trucks leaving the facility are within Federal DOT weight limits. Operations include but are not limited to:

- Trucks will approach the scale with caution and await clearing of any vehicles currently utilizing the scale. The green light will indicate that no weight is currently on the scale.
- The operator will confirm that the maximum weight that is be allowed to be exported from Asheville Plant.
- Once on the scale, the truck driver will position the truck adjacent to the cardkey reader allowing operation of the keypad without exiting the vehicle. The driver must come to a complete stop at the cardkey reader and apply the parking break to initiate scaling/ticketing and retrieval of a ticket. The new CCP scale has an RFID tag reader and WM trucks have RFID sensors attached. Additional trucks that will use the new scale can use the card reader or will have RFID tags attached.
- The vehicle number and destination location will be selected in the system and a ticket will be printed. The ticket will be kept for submission to management at the close of the day. Additionally, data will be maintained in a manual entry booklet to be turned into Waste Management or Charah management depending on who operates the truck.
- Scaling is complete at this point. The driver will exit the scale system and cautiously approach the truck wash station.

Figure 2 - Asheville Plant Truck Scale



3.2 Truck Wash

A truck wash station (Figure 3) will be utilized to ensure that all haul trucks leaving the facility are free of ash material. The truck wash station includes a manual wash pad followed by an automated wheel and undercarriage wash. Operations include but are not limited to:

- Ash debris will be washed from trucks at the truck wash area before leaving the site. Wash waters are captured and appropriately disposed of to prevent localized ash contamination.

- In the event of a malfunction with the automatic truck wash, the manual truck wash operation (high pressure washing) will be implemented.
- Visual communication with the truck wash station attendant will be initiated prior to approaching the wash pad location.
- Drivers will approach the wash pad location at walking speed and come to a complete stop as directed through visual or 3-way radio communication.
- Once verified by the wash station attendants as clean, tarp covers secure and turnbuckles snug, the truck will be directed to exit the wash pad and proceed to the automated truck wash station at walking speed.
- Trucks will proceed through the automated wash station and proceed to inspection area for review.
- Manifests are completed and truck exits facility.

Figure 3 - Asheville Plant Truck Wash



3.3 Dust Control

Water will be the primary method of dust suppression at the facility with application via water truck. An alternate polymer-based cover material may be utilized for dust suppression, if conditions require this added measure. Water will be applied to gravel transport roads, ash stockpiles and work areas via water truck as needed to mitigate fugitive dust.

3.4 Spill Prevention and Clean-up

Routine inspections occur during hours of operation to identify spills or areas of potential spills. Displaced ash will be removed within 24 hours.

4.0 Ash Transportation

4.1 Ash Transport to R&B Landfill

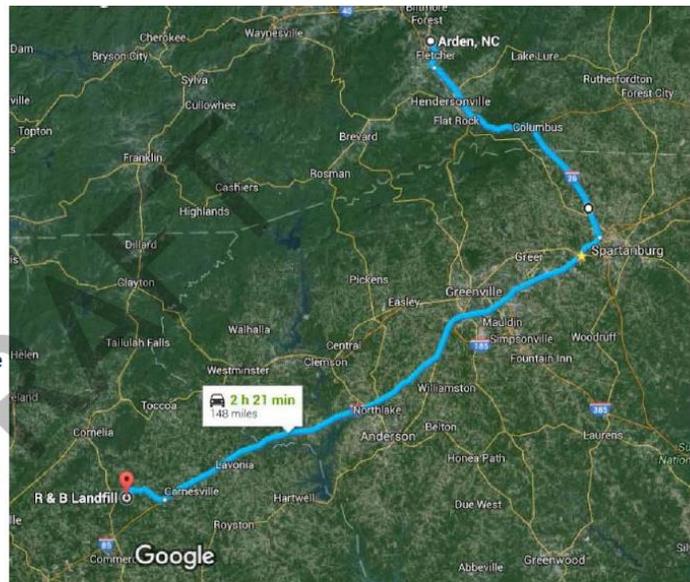
Waste Management (WM) will utilize NCDOT, SCDOT and GDOT maintained highways to transport CCPs from the Asheville Plant in Arden, North Carolina to the R&B Landfill in Homer, Georgia. The general transport route is shown in Figure 4.

General truck hauling activities include but are not limited to:

- Truck Foreman or designee will inspect trucks prior to leaving Asheville Plant.
- Truck drivers will maintain a sense of awareness, be fit for duty and free of external distractions (i.e. no operating of personal electronic devices while the truck engine is running) and use due care and diligence in their travels between sites to ensure safety of all parties.
- Truck drivers will adhere to all traffic laws and regulations
- In the event of detours along provided routes require Duke Energy CCP approval to deviate. Drivers must return to appropriate route as soon as possible. Drivers are to alert Dispatch immediately if a detour is encountered.
- In the event of an accident or incident resulting in displaced ash once off Duke Energy property, Waste Management, Charah and/or their subcontractors is responsible for cleanup, and has emergency responders on call.
- If an emergency or spill occurs, notifications will be made according to the Waste Management, Charah and/or their subcontractors emergency response plan which is summarized in the call tree included as Figure 7.

Figure 4 – Haul Route from Asheville Plant to Homer, Georgia

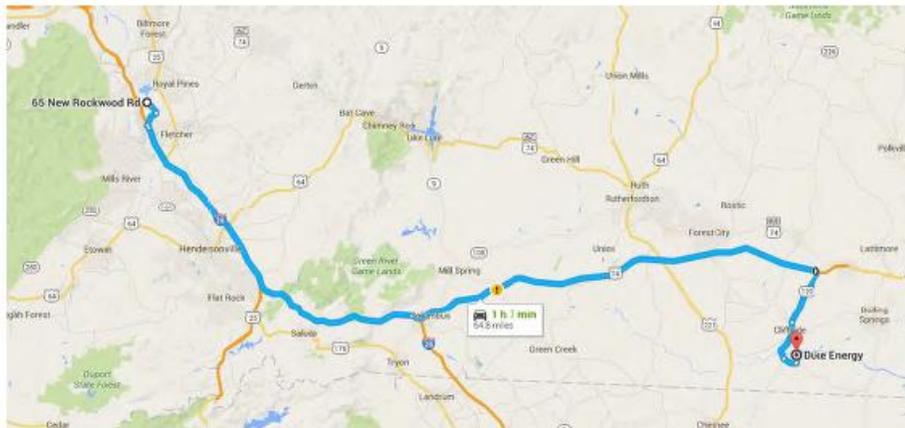
- Exit plant on New Rockwood Road.
- Turn left onto New Rockwood Road (0.3 miles)
- Proceed straight onto Bradley Branch Road at New Rock Road/Glen Bridge Road/Bradley Branch Road intersection. (0.7 miles)
- Turn right onto Airport Road/NC-280 (0.3 miles)
- Turn left to merge onto I-26 E/US-74 E ramp to Hendersonville (0.2 miles)
- Merge onto I-26 E/US-74 E (49.2 miles)
- Take Exit 18A to merge onto I-85 S toward Greenville (89.7 miles)
- Take Exit 160 for GA-51 toward Homer/Franklin Springs (0.3 miles)
- Turn right onto GA-51 W (7.4 miles)
- Turn left onto Bennett Road (1.0 mile)
- Final Destination is R&B Landfill at 601 Bennett Road



4.2 Ash Transport to Cliffside Landfill

Charah and their subcontracted trucking companies will utilize NCDOT maintained highways to transport CCPs from the Asheville Plant in Arden, NC to the Cliffside Industrial Landfill in Mooresville, NC. The general trucking route is shown in Figure 5.

Figure 5 - Transportation Route From Asheville Plant to Mooresville, North Carolina



- Get on I-26 E/US-74 E from Bradley Brand Rd
 1. Head southeast on New Rockwood Rd toward Rosetta Ln
 2. Continue onto Bradley Branch Rd
 3. Turn right onto NC-280 W/Airport Rd
 4. Turn Left to merge onto I-26 E/US-74E toward Hendersonville
- Follow US-74 E to NC-120S in Colfax. Take exit 189 from US-74 E
 5. Merge onto I-26 E/US-74E
 6. Keep right at the fork to continue on US-74E, follow signs for Columbus/Rutherfordton/North Carolina 108.
 7. Take exit 189 for N Carolina 120
- Continue on NC-120 S. Take US-221 ALT S to McCraw Rd
 8. Turn right onto NC-120 S
 9. Turn left onto US-221 ALT S
 10. Turn left onto Duke Power Rd
 11. Continue onto McCraw Rd

Figure 6 - Transportation Route at Cliffside Industrial Landfill in Mooresville, NC

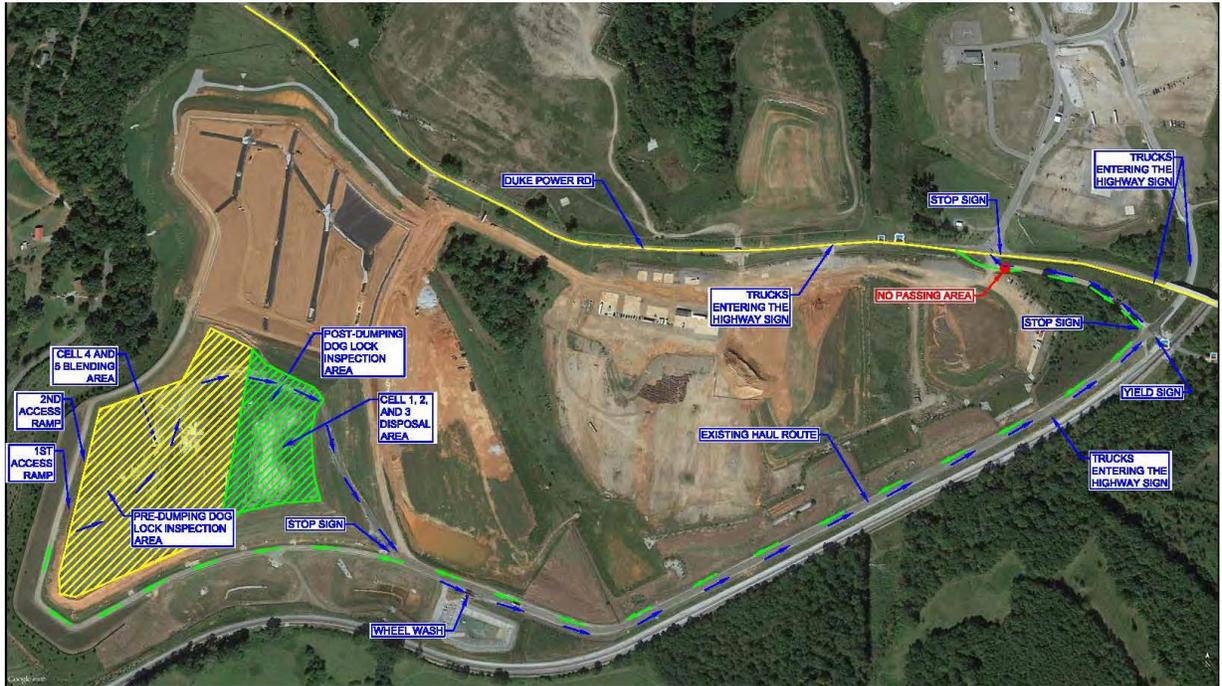


Figure 7 – Asheville CCP Ash Spill Response Tree

