

10 May 2018

Mr. William Cook Solid Waste Management Program Georgia Environmental Protection Division 4244 International Parkway, Suite 104 Atlanta, Georgia 30354

Subject: Coal Combustion Residuals (CCR) Management Plan Annual Report Greenbow, LLC – Turkey Run Landfill Permit Number: 099-019D(MSWL) Meriwether County, Georgia

Dear Mr. Cook:

On behalf of Greenbow, LLC, Geosyntec Consultants (Geosyntec) has prepared this Coal Combustion Residuals (CCR) Management Plan Annual Report (Annual CCR Report) for the Turkey Run Landfill (Landfill) located in Meriwether County, Georgia. This Annual CCR Report is prepared in response to the *Annual Coal Combustion Residuals (CCR) Management Plan and Dust Control Report Guidance Document* (Annual Reporting Guidance Document) issued by Georgia Department of Natural Resources, Environmental Protection Division (EPD) dated May 2018.

Georgia EPD had previously issued a *Guidance Document for Coal Combustion Residuals (CCR) Management Plans* (CCR Guidance Document) dated 22 December 2016. Subsequently, a minor permit modification application consisting of a CCR Management Plan was prepared for the Landfill. The minor permit modification consisting of the CCR Management Plan for the Landfill was approved by Georgia EPD on 22 May 2017. The Annual Reporting Guidance Document was issued by Georgia EPD on 2 May 2018.

This Annual CCR Report describes operational and maintenance activities from the previous year and demonstrates compliance with the approved CCR Management Plan for the Landfill. This Annual CCR report does not propose any revisions to the Landfill's Design and Operations (D&O) Plan. This Annual CCR Report consists of responses to requests within the Annual Reporting Guidance Document, and an annual Fugitive Dust Control Report (Attachment A). The report is based on information provided by Waste Management (WM) Landfill personnel and Landfill operations. Below is a summary of the operational and maintenance activities from the previous year and description of compliance with the approved CCR Management Plan and with the CCR

Guidance Document. The requirements outlined in the Annual Reporting Guidance Document are *italicized* and the corresponding responses are provided below.

ANNUAL REPORTING GUIDANCE DOCUMENT GENERAL REQUIREMENTS

Owners or operators of Municipal Solid Waste (MSW) Landfills and Commercial Industrial Landfills that have incorporated an approved CCR Management Plan into the facility's Design and Operation (D&O) Plan must submit an Annual CCR Management and Dust Control Report (Report) for Georgia Environmental Protection Division's (EPD) review no later than May 7 of each year. If no changes to CCR management practices at the site have occurred during the past calendar year (i.e., January 1 through December 31), a Professional Engineer's (P.E.) seal is not required for the Annual Report. If operational changes have occurred that deviate from the existing approved D&O Plan, a P.E. seal will be required.

Response:

A CCR Management Plan for the Landfill was approved by Georgia EPD on 22 May 2017. The Landfill facility is continuing to accept CCR material and dispose of CCR comingled with non-CCR waste.

This document represents the Annual CCR Report. An annual Fugitive Dust Control Report is included as Attachment A. As described below, CCR management practices at the Landfill were observed to be consistent with the approved CCR Management Plan during the past calendar year. Also, as described below, revisions to the approved D&O Plan of the Landfill are not proposed. As such, a Professional Engineer's (P.E.) seal is not required for this Annual Report.

The Report must describe operational and maintenance activities from the previous year to demonstrate compliance with the approved CCR Management Plan, and any non-compliance issues and corrective actions taken or that will be taken in the future.

Response:

This document represents the Annual CCR Report and describes the operational and maintenance activities from the previous year and demonstrates compliance with the approved CCR Management Plan.

The operational and maintenance activities and compliance for the previous year, with respect to the CCR management practices, are reported based on documents and information provided by WM Landfill personnel and Landfill operations. The activities and compliance are discussed below. For the components where changes to the design and operations were not required and are not proposed, the CCR Management Plan approved by Georgia EPD is incorporated by reference.

Based on the annual Report review, Georgia EPD will either issue written approval to continue CCR management under the existing plan or will request the facility to amend their Plan and revise the Design Consistency Report, if necessary. Facilities requested to amend their CCR Management Plan must submit an amended Plan within 90 days of EPD's request or cease receipt of CCR beyond the 90 days until submittal of an amended Plan is made.

The CCR Management Plan must be modified and submitted along with the annual Report if changes in either operating procedures or the facility design are necessary to comply with the requirements for CCR management.

Modifications which substantially alter the design of the facility, management practices, the types of wastes being handled, or the method of waste handling, and due to the nature of the changes would likely have an impact on the ability of the facility to adequately protect human health and the environment will require a major modification.

Modifications that do not substantially alter the permit conditions, that do not reduce the capacity of the facility to protect human health or the environment, or that enable a permittee to respond in a timely manner to common variations in the type and quantities of wastes managed, technological advancements, or changes necessary to comply with new Rules where these changes can be implemented without substantially changing design specifications or management practices in the permit will require minor modification.

If the facility does not change operational practices, add additional customer or types of CCR, exceed the approved CCR/non-CCR ratio, or otherwise deviate from the approved D&O Plan, no modification will be required. In this case, submission of the Annual Report will comply with the intent of this guidance.

Response:

The operational and maintenance activities and compliance with the approved CCR Management Plan are described below. CCR management practices at the Landfill adhered to the CCR Management Plan during the previous year. Additional customers or types of CCR were not added during the previous year. Further, as described below, the CCR to non-CCR ratio for waste accepted at the Landfill was below the maximum permitted CCR to non-CCR ratio. No additional design calculations are presented as part of this Annual CCR Report. The design calculations and analysis presented in the original CCR Management Plan approved by Georgia EPD are considered to be current and valid. As such, no modifications are proposed to the approved CCR Management Plan and submission of this Annual CCR Report is considered to comply with the requirements of the Annual Reporting Guidance Document.

The facility must place the written EPD approval in the facility's operating record.

Response:

A written EPD approval of the CCR Management Plan is placed at the Landfill facility. Upon issuance of approval by EPD, the Landfill facility will place the written EPD approval for continued acceptance of CCR beyond 22 May 2018.

ANNUAL CCR MANAGEMENT PLAN AND DUST CONTROL REPORT COMPONENTS

The Annual CCR Management and Dust Control Report must include at a minimum the information listed below.

- 1. CCR and Non-CCR Waste received during the previous year
 - a) CCR Monofill
 - *i. List of type(s) and source(s) of CCR*
 - *ii.* Annual amount of CCR

iii. Daily maximum amount of CCR

- b) Comingled CCR and Non-CCR Waste
 - *i.* List of type(s) and source(s) of CCR, and other types of non-CCR waste, such as, municipal, industrial, or commercial solid waste
 - *ii.* Annual amount of CCR
- iii. Daily maximum amount of CCR
- *iv.* Annual amount of non-CCR waste
- v. Daily maximum amount of non CCR waste
- vi. Maximum ratio of CCR to non-CCR waste

The maximum ratio of CCR to non-CCR disposed of during the previous year must not exceed the maximum considered in the design calculations.

Response:

Requirement 1. a. CCR Monofill is not applicable as CCR is not monofilled at the Turkey Run Landfill.

The Landfill facility accepted CCR and disposed of CCR comingled with non-CCR waste during the previous year and has continued to do so in 2018.

Section 1 of the Operations Plan narrative on Sheet 32 of the D&O Plan approved by EPD as part of the CCR Management Plan indicates the estimated daily and annual amounts of CCR and non-CCR waste.

(i) The types and sources of CCR were listed in the approved CCR Management Plan. No new types and sources were added during the previous year.

- (ii) Annual amount of CCR obtained at the Landfill was 27,524 tons. This amount is below the estimated annual maximum CCR amount of 51,650 tons noted in Section 1 of the Operations Plan narrative on Sheet 32 of the D&O Plan.
- (iii) Daily maximum amount of CCR obtained at the Landfill was 277 tons. This amount exceeds the estimated daily maximum CCR amount of 180 tons noted in Section 1 of the Operations Plan narrative on Sheet 32 of the D&O Plan. It is noted, however, that this single exceedance did not cause exceedance in the annual CCR amount (as noted above in (ii)), and consequently, did not cause the overall CCR to non-CCR ratio (noted below in (vi)) to exceed the permitted maximum ratio that was used for demonstration of design consistency.
- (iv) Annual amount of non-CCR waste obtained at the Landfill was 403,572 tons. This amount is below the estimated annual maximum non-CCR waste amount of 464,850 tons noted in Section 1 of the Operations Plan narrative on Sheet 32 of the D&O Plan.
- (v) Daily maximum amount of non-CCR waste obtained at the Landfill was 2,846 tons. This amount exceeds the estimated daily maximum non-CCR amount of 1,620 tons noted in Section 1 of the Operations Plan narrative on Sheet 32 of the D&O Plan. It is noted, however, that this single exceedance did not cause exceedance in the annual non-CCR waste amount (as noted above in (iv)) received at the Landfill facility. It is further noted that the daily maximum tonnages indicated in the D&O Plan are estimates and the Landfill may, on certain days, receive higher than the estimated daily maximum. This is not expected to cause changes to the design of the Landfill facility.
- (vi) The maximum CCR to non-CCR ratio (by weight) approved for the Landfill in the CCR Management Plan is 1:9. Based on the annual tonnages for the year 2017, the Landfill accepted 6.4% CCR (i.e., CCR to non-CCR ratio [by weight] of approximately 1:14.66) which is below the approved ratio for the Landfill.

In summary, the annual CCR and non-CCR amounts during the previous year did not exceed the estimated maximum amounts. The CCR to non-CCR ratio at the Landfill during the previous year did not exceed the maximum permitted ratio. Further, this Annual CCR Report <u>does not</u> propose to change the maximum CCR to non-CCR ratio for the Landfill.

- 2. Waste Placement, Cover, and Recovery
 - a) Management and maximum area of the working face
 - *b)* Waste placement and compaction for CCR lifts and comingled waste.
 - c) Leachate outbreaks frequency, corrective actions taken, and if there is a need to install drainage layers such as chimney drains
 - *d)* Daily cover of comingled CCR and non-CCR waste
 - e) Statement verifying that daily inspection reports are kept on-site in accordance with the current D&O Plans.
 - f) Management of solidification operation using CCR as a solidification agent, and sample records of paint filter tests, if applicable
 - g) Recovery of previously disposed CCR for beneficial reuse, if applicable.

Response:

Responses to waste placement, cover, and recovery are described with respect to the operational activities performed during the previous year.

- a) Management of the working face and maximum area of the working face were maintained in accordance with the Operations Plan (Sheet 32 of the D&O Plan) of the approved CCR Management Plan.
- b) Procedures for placement of waste, including (i) controlled unloading of CCR material at the working face; (ii) comingling of CCR and non-CCR waste; and (iii) placement and compaction of comingled waste were followed in accordance with the Operations Plan (Sheets 32 and 32A of the D&O Plan) of the approved CCR Management Plan.
- c) No leachate outbreaks were observed in the previous year and hence no corrective actions were necessary.

- d) Procedures for placement of daily cover over CCR comingled with non-CCR waste were followed in accordance with the Operations Plan (Sheets 32 and 32A) of the approved CCR Management Plan.
- e) Standard procedures established by WM including routine Random Load Inspections for incoming loads of waste (including CCR) were performed at the Landfill. Logs of the Random Load Inspections are maintained at the Landfill facility. The daily inspection reports are placed at the Landfill facility in accordance with the approved D&O Plans.
- f) Not Applicable. Consistent with the approved CCR Management Plan, the Landfill facility did not use CCR for liquid waste solidification.
- g) Not Applicable. Consistent with the approved CCR Management Plan, the Landfill facility did not recover previously disposed CCR material for beneficial re-use.

3. Fugitive Dust Control

- a) Actions taken to control CCR fugitive dust from CCR disposal unit, roads, conditioning areas, and solidification operation; and effectiveness of those actions
- b) Records of Citizen Complaints specifically related to CCR Management, if applicable
- c) Recommendations to improve dust control measures in the future, if applicable to CCR Materials

Response:

a) The Landfill facility has an approved Title V Operating Permit (Permit Number: 4953-199-0025-V-03-0) from the Air Protection Branch of the Georgia EPD. In accordance with the permit conditions, the facility has developed and emplaced a Dust Suppression Plan. Dust control measures described in the Dust Suppression Plan were utilized at the Landfill. In addition, dust control measures incorporated into the Operations Plan (Sheets 32 and 32A) of the approved CCR Management Plan were utilized and have adequately addressed the CCR waste acceptance.

An Annual Fugitive Dust Control Report has been included as Attachment A.

- b) No citizen complaints relative to CCR fugitive dust were received during the previous year.
- c) As described above and in the Annual Fugitive Dust Control Report, the dust control measures currently being utilized at the Landfill have adequately addressed the CCR acceptance. No additional recommendations are made at this time.
- 4. Leachate Collection and Removal System (LCRS)

a) Any known issues with the LCRS that are directly attributed to CCR

Response:

During the previous year, no known issues were observed relative to the Leachate Collection and Removal System (LCRS) that were directly attributed to CCR.

The LCRS functionality and the results of the analysis for leachate head on the liner system presented in the approved CCR Management Plan are current and valid, and do not require revisions.

5. Storm Water - Management System

a) Narrative describing measures used to ensure that surface water contacting CCR and non-CCR waste has not been discharged into the stormwater management system

Response:

CCR is comingled with non-CCR waste at the Landfill. The working faces were managed to ensure that surface water contacting CCR and non-CCR waste was not discharged into the storm water management system. Comingled waste was placed and compacted away from the side slopes, and

management practices such as use of soil diversion berms and sloping the working face into the waste mass were adopted.

All contact water continues to be collected as leachate in the LCRS and does not get discharged into the stormwater management system.

6. *Waste Compatibility*

- a) Any incompatibility issues and corrective measures taken
- b) For a solidification process, if CCR is used as a solidification agent
 - *i.* List of type(s) and source(s) of CCR and types of liquid waste streams received for solidification prior to disposal
 - *ii.* Sample records of compatibility analyses

Response:

The sources of CCR for the Landfill facility are defined in Section 3 of the Operations Plan narrative on Sheet 32 of the D&O Plan. The material sources and the general physical characteristics of the CCR material have remained consistent with those indicated in the approved CCR Management Plan. Based on information provided by WM, no new sources of CCR were added in the previous year. As such, additional testing to verify characterization and compatibility have not been required. Chemical composition of typical CCR material and compatibility of CCR material with MSW was evaluated and presented in detail in Attachment D of the CCR Management Plan approved by Georgia EPD. The Waste Compatibility Analysis presented therein is considered current and valid.

Landfill operations have not observed issues relative to reactivity of CCR comingled with non-CCR material in the previous year. As such, no changes to the design or operations are necessary relative to CCR acceptance and waste compatibility.

If acceptance of a new type of CCR material necessitates changes to the facility's design or operations, a CCR Management Plan modification application will be submitted to the Georgia EPD.

- a) CCR to non-CCR waste incompatibility issues were not observed during the previous year.
- b) Not Applicable. CCR is not used as a solidification agent at the Landfill facility.
- 7. Groundwater Monitoring
 - *a) The Environmental Monitoring Unit will assess groundwater monitoring data and will determine if the groundwater monitoring plan requires revision.*

Response:

Appendix III and IV constituents (including boron) were incorporated into the facility's groundwater monitoring plan relative to acceptance of CCR material and in accordance with Solid Waste Management Rule 391-3-4-.14(21)(c) and 391-3-4-.14(25) as part of the CCR Management Plan approved by Georgia EPD.

Atlantic Coast Consulting (ACC) conducted the groundwater monitoring and prepared the *Groundwater Monitoring Report* (GWMR) for the Site. The GWMR reported a single volatile organic compound (VOC) occurrence of trichlorofluoromethane (TCFM) in the sample from GWC-40; however, historical detections of TCFM in samples from GWC-40 have previously been documented as existing prior to site development, in an Alternate Source Demonstration (ASD) dated March 5, 2013.

Low-level concentrations of barium were identified in all 13 groundwater samples, and low levels of cobalt, lead, vanadium, and zinc were noted in one or more samples. The only metal concentration constituting a verified SSI was cobalt; however, the ASD discussed in the GWMR documents that this SSI is not related to release from the waste unit. All detected metals concentrations were substantially less than relevant maximum contaminant levels. The GWMR recommends that the facility continue to implement the approved detection monitoring program for all wells at this time.

8. Emergencies

a) Any events or circumstances that represented an operational or environmental emergency and the corrective actions taken specific to the management of CCR.

Response:

The Landfill facility did not experience any events or circumstances that represented an operational or environmental emergency during the previous year.

9. Documentation of Notification to Local Governments

The owner or operator shall notify the local governing authorities of the county, and any city within the county, in which the landfill is located upon submittal of an amended Plan to EPD. Copies of the correspondence to local governing authorities must be provided to EPD with the amended Plan submittal.

Response:

The operational and maintenance activities at the facility relative to CCR disposal and management are in compliance with the currently approved CCR Management Plan. An amended Plan is not being issued as part of this Annual CCR Report submittal. As such, notifications to local governing authorities are not required at this time.

CONCLUSION

Landfill design considerations relative to CCR acceptance enlisted in the CCR Guidance Document dated 22 December 2016 were addressed in the CCR Management Plan and were approved by Georgia EPD. The demonstration of design consistency included in the approved CCR Management Plan is considered current and valid. As such, the landfill design does not need updates or revisions in connection with CCR material acceptance over the previous year.

The operational and maintenance activities at the Turkey Run Landfill facility relative to CCR disposal and management during the previous year were performed in compliance with the approved CCR Management Plan for the facility dated 22 May 2017. No new sources of CCR were added and the facility maintained the CCR to non-CCR ratio below the maximum permitted ratio.

The CCR management practices outlined in and required by the facility's D&O Plan have proven to be effective in adequately managing CCR disposal as required by the O.C.G.A's Solid Waste Management Rule 391-3-4-.07(5) and the CCR Guidance Document dated 22 December 2016. As such, no modifications are proposed to the approved CCR Management Plan and submission of this Annual CCR Report is considered to comply with the requirements of the Annual Reporting Guidance Document.

ANNUAL CCR REPORT SUBMISSION TIMELINE EXTENSION

As noted earlier, the CCR Management Plan for Turkey Run Landfill was approved by Georgia EPD on 22 May 2017 for one year. The approval letter from Georgia EPD requested an updated CCR Management Plan no later than 1 March 2018 and incorporation into the Landfill's D&O Plan in no less than one year on 21 May 2018.

Attachment B includes email correspondence with Georgia EPD relative to Annual CCR Report submission timeline extension. As indicated by Georgia EPD, the Annual CCR Report may be submitted no later than 11 May 2018.

CLOSURE

Geosyntec requests EPD review of the Annual CCR Management and Dust Control Report and provide approval for continued acceptance of CCR at the Turkey Run Landfill. If you have any questions, please do not hesitate to contact the undersigned.

Sincerely,

Rutuparna Joshi, P.E. Project Engineer

Enclosures: Attachment A – Annual Fugitive Dust Control Report Attachment B – EPD Correspondence: Annual CCR Report Submission Timeline Extension

Copy to: Shawn Carroll, Waste Management Tim Bassett, Waste Management John Workman, P.E., Waste Management Gabriel Gribble, Waste Management

ATTACHMENT A

Annual Fugitive Dust Control Report





ANNUAL FUGITIVE DUST CONTROL REPORT

PURPOSE

This annual Fugitive Dust Control Report is prepared in connection with an Annual Coal Combustion Residuals (CCR) Management Plan Report (Annual CCR Report) for the Turkey Run Municipal Solid Waste (MSW) Landfill (Landfill) located in Meriwether County, Georgia.

Effective 22 November 2016, the disposal of CCR or the use of CCR as a daily cover at a MSW landfill requires that, in accordance with Solid Waste Management Rule 391-3-4-.07(5), a CCR Management Plan be submitted to Georgia Environmental Protection Division (EPD) for review and approval. The Georgia EPD issued a Guidance Document dated 22 December 2016 (CCR Guidance Document) that details the components of the CCR Management Plan. The CCR Guidance Document requires facilities to submit an annual Fugitive Dust Control Report. Further, the Georgia EPD issued an *Annual Coal Combustion Residuals (CCR) Management Plan and Dust Control Report Guidance Document* (Annual Reporting Guidance Document) dated May 2018. The Annual Reporting Guidance Document also requires facilities to furnish requested information relative to control of fugitive CCR dust.

BACKGROUND

A CCR Management Plan for the Landfill was approved by Georgia EPD on 22 May 2017. As part of the CCR Management Plan, the Operations Plan of the Landfill was revised to include items pertinent to fugitive dust control including (i) inclusion of performance standard; (ii) inclusion of a Dust Control Plan; and (iii) dust control measures and procedures relative to emplacing CCR. The Operations Plan of the approved CCR Management Plan requires compliance with Air Quality Rule 391-3-1-.02(2)(n)1.

This annual Fugitive Dust Control Report provides the following for the prior year (requirements enlisted within the Annual Reporting Guidance Document are *italicized*):

GR6568/CCR Annual Fugitive Dust Control Report.docx

- a) Actions taken to control CCR fugitive dust from CCR disposal unit, roads, conditioning areas, and solidification operation; and effectiveness of those actions
- b) Records of Citizen Complaints specifically related to CCR Management, if applicable
- c) Recommendations to improve dust control measures in the future, if applicable to CCR Materials

DUST CONTROL MEASURES

The Turkey Run Landfill has an approved Title V Operating Permit (Permit Number: 4953-199-0025-V-03-0) from the Air Protection Branch of the Georgia EPD. In accordance with the permit conditions, the facility has already developed and emplaced a Dust Suppression Plan. In addition, as stated above, the Operations Plan of the Landfill was previously revised (in preparation of the CCR Management Plan) to include additional dust control measures. The dust control measures described in the Dust Suppression Plan and the Landfill Operations Plan were utilized during the previous year and have adequately addressed the CCR waste acceptance.

It is noted that based on the generator provided information for profiling of CCR accepted at the Landfill, the composition of CCR consisted of ash, coal, soils, and plant life. Based on the information provided by Landfill operations, the CCR accepted was primarily moist in nature and therefore, did not necessitate measures in addition to those already being utilized/adopted as described below.

Following dust control measures were adopted and adhered to in the previous year.

- Employing use of water trucks (i.e., equipment currently available at the facility) for potentially fugitive dust waste streams. Water truck logs are maintained onsite. Example water truck log is included as Appendix A.
- Moisture conditioning of CCR disposal areas with a water truck to control dust, on an as needed basis.
- Placement of daily and intermediate cover as described in the Operations Plan.

In addition, it is noted that following precautions (also noted in the Dust Suppression Plan) were taken to prevent dust from becoming airborne:

GR6568/CCR Annual Fugitive Dust Control Report.docx

Annual Fugitive Dust Control Report CCR Management Plan Turkey Run Landfill

- Maintenance of general erosion and sediment control measures for new cell construction areas, stockpile areas, and site facility areas (i.e., administration and operational buildings).
- Placement of temporary vegetation/grass for exposed and inactive areas, as needed.
- Use of gravel aggregate base roads to maintain dust control.
- Maximum speed limit signs are posted on the main entrance road and the primary access roads for waste hauling and construction vehicles.

As such, these dust control measures have proven to be effective at the Landfill facility.

CITIZEN COMPLAINTS

Waste Management documents citizen complaints using Waste Management's 1-800 Public Comment number.

No citizen complaints relative to CCR fugitive dust were received during the previous year.

CORRECTIVE MEASURES

Not Applicable.

<u>RECOMMENDATIONS TO IMPROVE DUST CONTROL MEASURES IN THE</u> <u>FUTURE</u>

As described above, the dust control measures currently being utilized at the Landfill have adequately addressed the CCR acceptance and are anticipated to continue to do so. No additional recommendations are made at this time.

APPENDIX A

Water Truck Log

GR6568/CCR Annual Fugitive Dust Control Report.docx

TURKEY RUN LANDFILL WATER TRUCK LOG

Date	Applied (water/polymer)	Driver's Initials	Active Access Roads
Example: 1/31/2010	water	A.K.M	Entrance and II.

ATTACHMENT B

EPD Correspondence: Annual CCR Report Submission Timeline Extension Marc,

This email is to confirm that the Annual CCR Management and Dust Control Reports for WM sites can be submitted to EPD no later than May 11, 2018.

Thanks,

Rima Naji Environmental Engineer Solid Waste Management Program

4244 International Parkway Suite 104 Atlanta, GA 30354 Office: (404) 363-1584 Email: <u>Rima.Naji@dnr.state.ga.us</u>

From: Marc Liverman [mailto:MLiverman@atlcc.net]
Sent: Tuesday, May 08, 2018 3:59 PM
To: Naji, Rima
Cc: Bassett, Tim; Carroll, Shawn
Subject: CCR Plan Update Submittal Date

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Rima,

Per our discussion, please verify that we can submit the updates for WM sites no later than Friday May 11th, 2018. We will do everything we can to get them to you sooner.

Thanks,

Marc Liverman, P.E. ATLANTIC COAST CONSULTING, INC. 7 E. Congress Street, Suite 801 Savannah, GA 31401 Mobile: 912-507-5755 Office: 912-236-3471

Rutuparna Joshi

From:	Hall, Chad <chad.hall@dnr.ga.gov></chad.hall@dnr.ga.gov>
Sent:	Friday, February 16, 2018 1:56 PM
То:	Carroll, Shawn
Subject:	[EXTERNAL] RE: CCR management plans

Shawn,

Most important item: you are right the we fell behind schedule of making site visits to every site under a CCR management plan. I very much appreciate the early work you've put in to meet a 3/1 deadline, but you can dial that back. While I don't expect this, I would hate for our staff to see something on their final site visit that requires a change that makes ACC go back and re-do everything.

I spoke to John Workman on the phone after the first flurry of emails, not sure if you two connected afterward. I gave him notice of an discrepancy from last year where we realized that we had required some things of Waste Industries, with regards to sampling, that we hadn't asked of Waste Management. We'll be asking for WM's plans for sediment pond sampling to be more like those we approved for Taylor County. That said, you might want to (and have Chris / ACC) take a look here https://epd.georgia.gov/coal-combustion-residuals-ccr-management-plans to start getting a feel for what we approved there.

Thanks for helping get the word out and looking forward to meeting.

Chad Hall, PhD, PE Manager Solid Waste Permitting Unit

Georgia Environmental Protection Division Solid Waste Management Program Atlanta Tradeport, Suite 104 4244 International Parkway Atlanta, GA 30354 (404) 362-4893

From: Carroll, Shawn [mailto:scarrol3@wm.com] Sent: Friday, February 16, 2018 1:42 PM To: Hall, Chad Subject: RE: CCR management plans

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Ha, it has been a flurry of CCR activity this Friday!

As you may have heard from Rutu, we are well into the process of getting all the updates and annual reports prepared. We went ahead and started the process for all of our sites on February 1, planning to meet the March 1 deadline. GeoSyntec is doing Turkey Run, and ACC is covering Superior, R&B and Pine Bluff. I actually reviewed the first ACC update/report this morning and Rutu was planning on submitting his draft next week.

I am trying to find a day the week of March 19 that ACC, GeoSyntec, and our folks can attend. Best if we can knock it out in one meeting to maintain consistency, and I will let you know. I just got off the phone with Workman, he said he would try to attend but to go ahead and schedule the meeting regardless.

In response to the email you sent Rutu at 12:42 this afternoon, I do offer the following comment followed by a request for clarification:

- For each of the GA sites in our South Atlantic Area (Superior, Turkey Run, R&B and Pine Bluff), we will be
 reporting that the initial approved Plans were adequate and no changes are deemed necessary. For those four
 sites we have had no new waste streams, no changes in operational practices, no impacts to operations, no dust
 control challenges or complaints, and no environmental monitoring impacts due to CCR. As such, like you we
 feel that just submitted the Annual Report should meet the intent of the rule with no need to submit revised
 D&O Plan sheets.
- 2. In your email to Rutu, the second sentence indicates that EPD will not be expecting deliverables by March 1 and that we can hold off submitting until after our meeting the week of the 19th. Please confirm if we interpreted correctly.

Thanks Chad, appreciate you guidance, and I look forward to meeting you in March.

Regards,

Shawn

From: Hall, Chad [mailto:Chad.Hall@dnr.ga.gov]
Sent: Friday, February 16, 2018 12:40 PM
To: Carroll, Shawn <<u>scarrol3@wm.com</u>>; Bassett, Tim <<u>tbassett@wm.com</u>>; Workman, John <<u>jworkman@wm.com</u>>;
Dolihite, Brian <<u>Bdolihite@wm.com</u>>
Cc: Cook, William <<u>William.Cook@dnr.ga.gov</u>>; Barnes, Gene(Atlanta GA) <<u>GBarnes4@wm.com</u>>
Subject: [EXTERNAL] RE: CCR management plans

Thanks and also see the attached from Geosyntec – their ears must have been burning. You guys can decide if it's easier to have Geosyntec at the same meeting with ACC, or if you want to handle Turkey Run at a separate meeting.

Chad Hall, PhD, PE Manager Solid Waste Permitting Unit

Georgia Environmental Protection Division Solid Waste Management Program Atlanta Tradeport, Suite 104 4244 International Parkway Atlanta, GA 30354 (404) 362-4893

From: Carroll, Shawn [mailto:scarrol3@wm.com]
Sent: Friday, February 16, 2018 12:24 PM
To: Hall, Chad; Bassett, Tim; Workman, John; Dolihite, Brian
Cc: Cook, William; Chris Klamke; Barnes, Gene(Atlanta GA)
Subject: RE: CCR management plans

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Chad, thanks for being flexible. Let me reach out to our folks, see what works for everyone, then I will send you an email with some proposed times/dates.

Thanks, and have a great weekend.

Shawn

Shawn P. Carroll Area Environmental Protection Manager scarrol3@wm.com

Waste Management - South Atlantic Area 3920 River Road Wilmington, NC 28412 Cell 910 274 8869

From: Hall, Chad [mailto:Chad.Hall@dnr.ga.gov]
Sent: Friday, February 16, 2018 11:25 AM
To: Carroll, Shawn <<u>scarrol3@wm.com</u>>; Bassett, Tim <<u>tbassett@wm.com</u>>; Workman, John <<u>jworkman@wm.com</u>>;
Dolihite, Brian <<u>Bdolihite@wm.com</u>>
Cc: Cook, William <<u>William.Cook@dnr.ga.gov</u>>; Chris Klamke <<u>cklamke@atlcc.net</u>>; Barnes, Gene(Atlanta GA)
<<u>GBarnes4@wm.com</u>>
Subject: [EXTERNAL] RE: CCR management plans

Shawn,

Absolutely, we can change weeks. I was just picking our first available dates after our visit to Superior. I think we're still in good shape bumping back one week.

That week is actually more open on our end, so we could probably find an open timeslot any day that week. Let us know one or two preferred dates/times and we can get this set.

Chad Hall, PhD, PE Manager Solid Waste Permitting Unit

Georgia Environmental Protection Division Solid Waste Management Program Atlanta Tradeport, Suite 104 4244 International Parkway Atlanta, GA 30354 (404) 362-4893

From: Carroll, Shawn [mailto:scarrol3@wm.com]
Sent: Friday, February 16, 2018 11:14 AM
To: Hall, Chad; Bassett, Tim; Workman, John; Dolihite, Brian
Cc: Cook, William; Chris Klamke; Barnes, Gene(Atlanta GA)
Subject: RE: CCR management plans

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Hey Chad, Shawn Carroll here.

John, Gene and I (and possibly Tim) have an Area staff meeting scheduled for the 14th and 15th of March.

Any chance we could do it during the week of March 19?

Thanks,

Shawn

Shawn P. Carroll Area Environmental Protection Manager scarrol3@wm.com

Waste Management - South Atlantic Area 3920 River Road Wilmington, NC 28412 Cell 910 274 8869

From: Hall, Chad [mailto:Chad.Hall@dnr.ga.gov]
Sent: Friday, February 16, 2018 11:10 AM
To: Bassett, Tim <<u>tbassett@wm.com</u>; Workman, John <<u>iworkman@wm.com</u>; Dolihite, Brian <<u>Bdolihite@wm.com</u>
Cc: Cook, William <<u>William.Cook@dnr.ga.gov</u>; Carroll, Shawn <<u>scarrol3@wm.com</u>; Chris Klamke <<u>cklamke@atlcc.net</u>;
Barnes, Gene(Atlanta GA) <<u>GBarnes4@wm.com</u>
Subject: [EXTERNAL] RE: CCR managment plans

Thanks Tim. I think we all agree we'd like to be under less time pressure this year, and I feel like a mid-March meeting puts us in a good position to get the reviews done by the late-May renewal dates.

Chad Hall, PhD, PE Manager Solid Waste Permitting Unit

Georgia Environmental Protection Division Solid Waste Management Program Atlanta Tradeport, Suite 104 4244 International Parkway Atlanta, GA 30354 (404) 362-4893

From: Bassett, Tim [mailto:tbassett@wm.com]
Sent: Friday, February 16, 2018 11:01 AM
To: Hall, Chad; Workman, John; Dolihite, Brian
Cc: Cook, William; Carroll, Shawn; Chris Klamke; Barnes, Gene(Atlanta GA)
Subject: Re: CCR managment plans

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Chad,

You are correct - we will be renewing all 5 WM sites. The primary consultant for preparing the plans is ACC so we might want them in attendance. As for the 14th, I'm available but I need to check with John and ACC to make sure they can attend.

Tim Bassett, REM, CSEM Environmental Protection Manager Waste Management - Atlanta Cell: 404-808-8098

From: Hall, Chad <<u>Chad.Hall@dnr.ga.gov</u>> Sent: Friday, February 16, 2018 10:49:19 AM To: Workman, John; Bassett, Tim; Dolihite, Brian Cc: Cook, William Subject: [EXTERNAL] CCR managment plans

John, Tim, and Brian,

Would you be available to talk about renewals of CCR management plans on March 15 (14th could work too.) That would be about 10 weeks before the renewal deadline. We could meet the week before, but people from our Program are planning to see Superior on the 3/9. I'd like to have their feedback before discussing whether revisions are needed to Superior's plan.

I am assuming, correct me if I'm wrong, that all five Waste Management sites in Georgia will be seeking renewal. We wouldn't necessarily have to meet the same day for Waste's northern and southern representatives, I was just thinking it might be easiest that way. If we need to divide meetings based on which consultants are working on given sites, we can do that too.

Let me know what might work.

Thanks,

Chad Hall, PhD, PE Manager Solid Waste Permitting Unit

Georgia Environmental Protection Division Solid Waste Management Program Atlanta Tradeport, Suite 104 4244 International Parkway Atlanta, GA 30354 (404) 362-4893

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