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FUGITIVE DUST CONTROL PLAN

FEDERAL CCR RULE LOT 15 LANDFILL BALTIMORE, MARYLAND

Prepared by:



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Project Number: MR1352
Document Number: MD20173

Revision 1
January 14, 2021

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1. PURPOSE

The purpose of this plan is to outline the procedures to be completed to comply with the Air Criteria requirements specified in 40 CFR Part §257.80(b), which pertain to the preparation and implementation of a Fugitive Dust Control Plan. Pursuant to the Rule, the Fugitive Dust Control Plan will address the items listed in §257.80(b)(1) through (b)(7), as follows:

- (1) The CCR fugitive dust control plan must identify and describe the CCR fugitive dust control measures the owner or operator will use to minimize CCR from becoming airborne at the facility. The owner or operator must select, and include in the CCR fugitive dust control plan, the CCR fugitive dust control measures that are most appropriate for site conditions, along with an explanation of how the measures selected are applicable and appropriate for site conditions. Examples of control measures that may be appropriate include: locating CCR inside an enclosure or partial enclosure; operating a water spray or fogging system; reducing fall distances at material drop points; using wind barriers, compaction, or vegetative covers; establishing and enforcing reduced vehicle speed limits; paving and sweeping roads; covering trucks transporting CCR; reducing or halting operations during high wind events; or applying a daily cover.
- (2) If the owner or operator operates a CCR landfill or any lateral expansion of a CCR landfill, the CCR fugitive dust control plan must include procedures to emplace CCR as conditioned CCR. Conditioned CCR means wetting CCR with water to a moisture content that will prevent wind dispersal, but will not result in free liquids. In lieu of water, CCR conditioning may be accomplished with an appropriate chemical dust suppression agent.
- (3) The CCR fugitive dust control plan must include procedures to log citizen complaints received by the owner or operator involving CCR fugitive dust events at the facility.
- (4) The CCR fugitive dust control plan must include a description of the procedures the owner or operator will follow to periodically assess the effectiveness of the control plan.
- (5) The owner or operator of a CCR unit must prepare an initial CCR fugitive dust control plan for the facility no later than October 19, 2015. The owner or operator has completed the initial CCR fugitive dust control plan when the plan has been placed in the facility's operating record as required by § 257.105(g)(1).
- (6) Amendment of the plan. The owner or operator of a CCR unit subject to the requirements of this section may amend the written CCR fugitive dust control plan at any time provided the revised plan is placed in the facility's operating record as required by § 257.105(g)(1). The owner or operator must amend the written plan whenever there is a

change in conditions that would substantially affect the written plan in effect, such as the construction and operation of a new CCR unit.

(7) Pursuant to 40 CFR § 257.80(b)(7), the owner or operator must obtain a certification from a qualified professional engineer that the initial CCR fugitive dust control plan, or any subsequent amendment of it, meets the requirements of this section.

2. REGULATORY REQUIREMENTS

Regulation (Federal/State)	Citation
CCR Rule	40 CFR Part §257.80
Air Quality (CAA)	40 CFR Part §§50-61
Prohibition of Fugitive Emissions	COMAR 26.04.10.03

3. DEFINITIONS

Environmental Professional – shall be an employee of Lot 15 or its owner/operator in charge of verifying that weekly inspections have been performed and in case of any fugitive dust emissions logged in the inspections or through citizen complaints, the environmental professional shall be in charge of following up and ensuring that the dust emissions are managed.

Fugitive air contaminant – An air contaminant of the outdoor atmosphere not emitted through a flue, including, but not limited to, industrial process losses, stockpile losses, entrained dust and construction/demolition activities.

Fugitive emissions – Refers to those emissions which could not reasonably pass through a stack, chimney, vent or other functionally equivalent opening.

4. RECORDS MANAGEMENT

Consistent with the requirements of 40 CFR Part §257.105(b) and (g), records associated with the implementation of this fugitive dust control plan will be retained for a period of 5-years. In addition, the plan will become part of the facility’s Operating Record. The facility’s Operating Record posting requirements are also consistent with the public records website posting requirements of §257.107(g). These include the following dust control records/ documents:

- A. The posting of this plan and subsequent plan amendments; and
- B. The annual CCR fugitive dust control report required by §257.80(c), which includes:

- a description of the actions taken by the owner or operator to control CCR fugitive dust;
- a record of all citizen complaints; and
- a summary of any corrective measures taken.

The public website can be found at the following web address: www.talenenergy.com

5. CCR FUGITIVE DUST CONTROL MEASURES

The following procedures shall be implemented at the Lot 15 Landfill to maintain dust control during the landfill operations.

- A. Dust will be avoided and controlled by watering access roads and other landfill areas as needed, via water truck or firehoses if available. If necessary, tarps as an alternative cover may be used to aid in controlling dust production.
- B. Liquids to be used for dust control will be primarily potable water, stormwater, or groundwater. Leachate may also be used to avoid and control dust as approved by the MDE, within the active working areas only.
- C. The amount of liquids to be applied will be such that the potential for surface water runoff is minimized while the potential for dust generation is eliminated.
- D. At the active working area, liquids will be applied via water truck to maintain optimum moisture content for compaction and dust control.
- E. After the end of each working day, the active working area will be hydro-mulched. Hydro-mulch is a moist-applied mulch that contains tackifying agents, which enable it to adhere to the surface on which it is applied. The same liquids used for dust control will be used to moisten the mulch and combine it with the tackifying agents before application.
- F. If watering and hydro-mulching do not provide sufficient dust control in the active working area, an additional option would include placement of an approximately four-inch thick layer of soil cover (primarily retrieved from the landfill property).
- G. CCRs will be moistened prior to loading at the plant sources as needed, to prevent the potential for airborne CCR during placement. Targeted moisture content will be 20% to control dust and prevent free water flow. Because of the short transportation distance from the power plants to the disposal site, the potential for loss of moisture during transportation is minimal.

- H. Hauling trucks will be covered with tarps to prevent fugitive dust emission. After a truck is loaded, the driver will extend a heavy-duty tarp over the entire dump body, covering the material to avoid and control the potential for blowing dust during transit.
- I. After disposal of CCR at the active working area and prior to exiting the site, trucks transporting CCR will travel through the truck and wheel wash system to prevent fugitive dust when the trucks leave the site. If the truck/wheel wash system is not operable (e.g., when there is a risk of freezing or when undergoing maintenance), alternative measures will be used to prevent dusting from the trucks (e.g., inspections and use of brooms, as needed, to manually clean the trucks and wheels before they leave the working face).

6. CONDITIONED CCR

CCR will be placed moist (targeted moisture content of 20%) to facilitate compaction and to avoid and control dust as explained in the previous section.

7. WEEKLY MONITORING PROCEDURE

- A. Assigned personnel will perform, at a minimum, weekly perimeter inspections and “areas of interest” associated with Lot 15 Landfill and will utilize the Weekly Fugitive Dust Inspection Log Sheet (see Attachment 1) as a tool to perform and document that the inspection was performed. The inspection will focus on the following fugitive emissions sources associated with the operation of Lot 15 Landfill:
 - 1. Non-vegetated, active CCR disposal areas (see Attachment 2 – Lot 15 Weekly Monitoring Program Survey Map).

Controls of any observed dust from these areas might include the following.

 - (a) Mobilize water spray tanker to wet down area.
 - (b) Mobilize hydro-mulcher to reduce the exposed working phase.
 - (c) Apply a chemical dust suppressant to exposed surface.
 - 2. Vehicular traffic on or around the perimeter of Lot 15.

Controls of any observed dust from this area might include the following.

 - (a) Mobilize water spray tanker to wet down area.
 - (b) Apply a chemical dust suppressant to exposed surface.
- B. Personnel will Complete the Inspection Log Sheet as follows:

- Month and Year – The person completing inspection will fill-in the date the inspection was performed to include the month, day and year in the following format – mm/dd/yyyy (Example – 04/17/2015).
 - Name – Complete first and last name of the person performing the fugitive dust observation inspection (Example: John Doe).
 - Start and End Time – Complete the time that the inspection began and the time that the inspection concluded utilizing 24-hour time (Example: Start 07:00 – End 08:30).
 - Wind Speed and Direction – The approximate wind speed in mph and direction the wind is moving towards (Example: Speed – 5 mph, Direction – South East).
 - Fugitive Dust Emissions – YES or NO. YES means that fugitive dust emissions were detected from a source and NO means that none were detected. If YES, the comments portion should be completed to identify the source of fugitive dust emissions and corrective action measures that were taken to mitigate the source of the fugitive dust emissions. Example: YES, Comments – Fugitive dust emissions were observed from the Cell 2. The ash area coordinator was notified and the water tanker truck was mobilized to wet down the area. This area will continue to be wetted down until the storage pile size is reduced. No dust emissions were observed leaving the Lot 15 boundary. This observation was reported to the environmental professional.
 - Comments / Corrective Actions – Describe any YES entries made on the log and what actions were taken as a result of the observations towards mitigating the issue. Use additional pages if necessary.
- C. The person performing the inspection will inform the plant Environmental Professional if any YES entries are made on the inspection log sheet. This is necessary since some types of deviations may require reporting to the regulatory agency in a specified period of time after observing the deviation.
- D. The plant Environmental Professional should in-turn determine if notification is required and also inform environmental consultant so that the deviation is documented on the Annual CCR Fugitive Dust Control report.
- E. The plant Environmental Professional will verify that the monthly inspection forms have been completed no later than 15-days after the start on the month for the preceding month's observations.

8. CITIZEN COMPLAINTS

- A. As required under 40 CFR Part §257.80(b)(3), this fugitive dust control plan includes a procedure to log citizen complaints received by the owner or operator involving fugitive dust events associated with the CCR units located at the facility. The following procedure will be implemented in the event that a citizen complaint is received associated with fugitive dust emissions generated from Lot 15.
1. Attachment 3 of this document will be used to log the citizen complaint. The person completing the Fugitive Dust Complaint Log will record the following information on the log form:
 - Date and Time the Complaint was received;
 - Name of the Facility Representative taking the call and completing the log form;
 - The Full name of the complainant (first and last). If the complainant does not want to provide their name, the word “Anonymous” should be used;
 - Complainant Address and Phone Number – write “Refused to Provide” if they do not provide this information at the time of the call; and
 - Nature of the Complaint – Record all details associated with the complaint, such as: source of dust emissions, wind-speed and direction, was there any property damage associated with the dust emissions, where emissions observed off the property, where was the complainant located at the time of the call, did a facility representative confirm the alleged dust emissions, and any other details associated with the call.
 2. Within 1-hour after receiving a citizen dust complaint, a facility representative will start a fugitive dust observation / inspection of the source area in question. The Attachment 1 – Fugitive Dust Inspection Log will be completed to document the follow-up observations. It should be noted in the Comments section that the inspection was being performed as a follow-up to a citizen’s complaint.
 3. The facility representative completing the Complaint Log Form will inform the plant Environmental Professional as soon as reasonably possible. The plant Environmental Professional will be provided with the details of the complaint. This is necessary since the complaint could potentially result in a reportable incident to the regulatory agency.
 4. The plant Environmental Professional will in-turn contact the appropriate management personnel associated with Lot 15 and its parent company(ies).

- B. The citizen complaint log sheet will be included in the Citizen Complaint folder on the Operating Record Sharepoint site.
- C. The record of citizen complaints received in the 12-month period following the submittal of the Annual CCR Fugitive Dust Control Report will be included in the report.

9. REPORTING AND NOTIFICATION REQUIREMENTS

- A. As required under 40 CFR Part §257.80(c), an Annual CCR Fugitive Dust report will be completed. The initial report is due no later than 14-months after placing the initial CCR fugitive dust control plan in the facility's operating record. The deadline for subsequent plan completion is 12-months after completion of the previous. The report is considered to be complete after it becomes part of the facility's operating record (i.e., posted to the publicly available website). The annual report is required to contain the following items:
 - 1. All actions taken by facility to control fugitive dust generation from Lot 15. A copy of the Attachment 1 – Weekly Fugitive Dust Inspection Logs will be included to satisfy this item;
 - 2. A record of all citizen complains. A copy of the Attachment 3 – Fugitive Dust Citizen Complaint Logs will be included to satisfy this item; and
 - 3. A summary of any corrective measures taken to mitigate fugitive dust generation. A copy of the Attachment 1 – Weekly Fugitive Dust Inspection Logs will be included to satisfy this item.
- B. The Annual Report will be prepared and posted by the Environmental Professional or their designee.

10. PLAN REVIEW AND AMENDMENT

- A. 40 CFR Part §257.80(b)(6) requires the CCR Fugitive Dust Control plan be amended any time there is a change in conditions that would substantially affect the written plan in effect, such as the initiation of a new activity within the Lot 15 area that has the potential to generate fugitive dust emissions.
- B. While there is no specific plan review frequency, the plan should be reviewed by facility representatives at a minimum of annually on a calendar year basis. A record of the plan review will be documented in the Annual Fugitive Dust Control Report or recorded on the Record of Plan Review Log included as Attachment 4.

- C. 40 CFR Part §257.80(b)(6) requires that revised or amended plans be posted to the facility's operating record. Facility personnel will coordinate with the environmental professional for the posting of revised / amended plans to the facility's operating record / publicly available website.
- D. Any revised or amended plans require re-certification by a qualified professional engineer. A certification of the preparation of this plan is included in Section 12.

11. ATTACHMENTS

Attachment 1 – Weekly Fugitive Dust Inspection Log

Attachment 2 – Weekly Monitoring Program Survey Map

Attachment 3 – Fugitive Dust Citizen Complaint Log

Attachment 4 – Record of Plan Review Log

12. PROFESSIONAL ENGINEER CERTIFICATION

I, Thomas B. Ramsey, a registered professional engineer in the state of Maryland certify that this Fugitive Dust Control Plan, prepared under my direct supervision fulfils the minimum requirements of 40 CFR §257.80(b)(1) through §257.80(b)(7).

Thomas B. Ramsey

Name of Professional Engineer

294523

Professional Engineer No

14 January 2021

Date Signed and Sealed



13. RECORD OF PLAN AMENDMENTS

Rev	00	Date	23 May 2015
Prepared by:	Jennifer Padgett, PE and David Espinoza, PhD, PE – Geosyntec Consultants		
Recommended by:			
Certified by:			
Comments:	Initial Plan Preparation and Posting to Facility Operating Record		

Rev	1	Date	14 January 2021
Prepared by:	Yovanna Cortes Di Lena, PhD, PE – Geosyntec Consultants		
Recommended by:	Adam Gray – Geosyntec Consultants		
Certified by:	Thomas B. Ramsey – Geosyntec Consultants		
Comments:	Plan Update and Posting to Facility Operating Record		

ATTACHMENT 1

Weekly Fugitive Dust Inspection Log

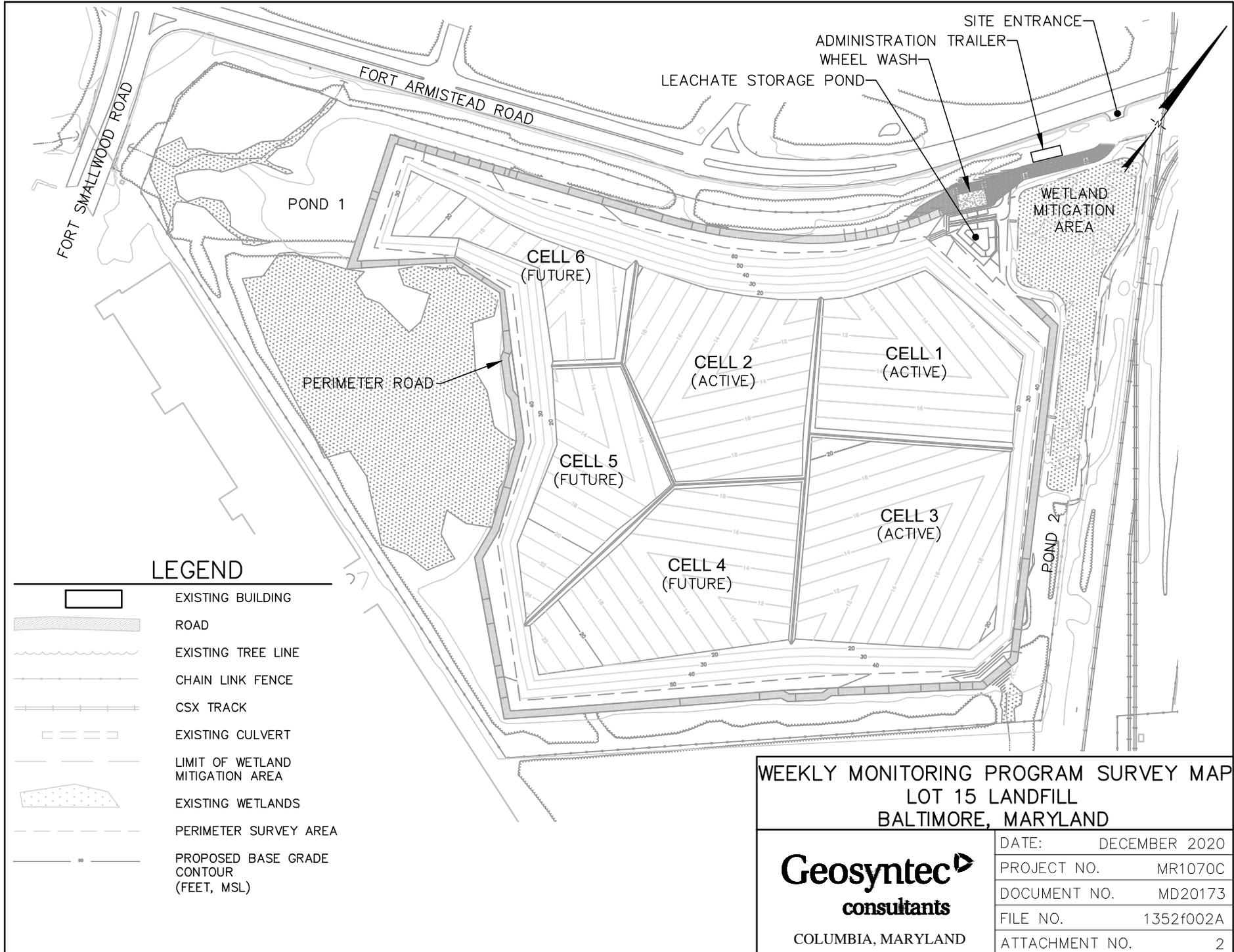
**Attachment 1 - Lot 15 Fugitive Dust Inspection Log
CCR Rule Fugitive Dust Control Plan**

Date	Name of Person Performing Inspection	Start Time	End Time	Wind Speed & Direction	Fugitive Emissions Observed ¹ ? (Y or N)	Comments/Corrective Actions (if required)

Note: Lot 15 fugitive dust emissions inspection should include those areas identified in Section 7A of the Lot 15 fugitive dust control plan and indicated on the Lot 15 Weekly monitoring program survey map. Any "YES" entry in the "Fugitive Emissions Observed" column must include some level of follow-up, corrective action measure taken to mitigate the source of dust emissions. A description of the corrective action measure should be noted in the "Comments/Corrective Actions" columns of the form. **Any item with a "YES" entry in the "Fugitive Emissions Observed" column must also be reported to the plant environmental professional to determine if agency notification/reporting requirements apply.**

ATTACHMENT 2

Weekly Monitoring Program Survey Map



LEGEND

-  EXISTING BUILDING
-  ROAD
-  EXISTING TREE LINE
-  CHAIN LINK FENCE
-  CSX TRACK
-  EXISTING CULVERT
-  LIMIT OF WETLAND MITIGATION AREA
-  EXISTING WETLANDS
-  PERIMETER SURVEY AREA
-  PROPOSED BASE GRADE CONTOUR (FEET, MSL)

**WEEKLY MONITORING PROGRAM SURVEY MAP
LOT 15 LANDFILL
BALTIMORE, MARYLAND**

Geosyntec
consultants

COLUMBIA, MARYLAND

DATE:	DECEMBER 2020
PROJECT NO.	MR1070C
DOCUMENT NO.	MD20173
FILE NO.	1352f002A
ATTACHMENT NO.	2

ATTACHMENT 3

Fugitive Dust Citizen Complaint Log

**Attachment 3 - Lot 15 Fugitive Dust Complaint Log
CCR Rule Fugitive Dust Control Plan**

Date & Time Complaint Received	Name of Lot 15 Representative Taking Call	Complainant Name	Complainant Address	Complainant Phone Number	Nature of Complaint (Details Associated with Complaint ¹)

Note 1: Record all details associated with the complaint, such as: source of dust emissions, wind-speed and direction, was there any property damage associated with the dust emissions, were emissions observed off the property, where was the complainant located at the time of the call, did a Lot 15 employee confirm the alleged dust emissions? Any other details associated with the call.

IMPORTANT: Within 1-hour after receiving a citizen complaint, a person must complete a Fugitive Dust Inspection of the alleged source area and complete the Attachment

ATTACHMENT 4
Record of Plan Review Log

**Attachment 4 - Lot 15 Record of Plan Review
CCR Rule Fugitive Dust Control Plan**

Date of Plan Review	Plan Revision Number	Name of Person Performing the Review	Reason for Review (Annual or Other)	Did Review Lead to a Plan Revision? (Yes/No)	Comments ¹
Dec-20	00	Yovanna Cortes Di Lena	Annual	Yes	Weekly monitoring procedures were revised to include inspections of all non-vegetate active CCR disposal areas

Note 1: Specify reason for plan review and detail any changes that may have been made in the plan revisions, such as Section numbers, etc. Note: any review that leads to a plan amendment/revision requires that the plan be recertified by a Professional Engineer. The revised plan must be posted to the facility operating record and posted to the public web-site. Only the most recent plan should be available on the public web-site. A plan review is required at a minimum, on an annual calendar year basis.