

A CMS Energy Company

Karn Generating Station 2555 North Weadock Hwy. Essexville, MI 48732

June 21, 2021

Mr. Chris Hare, District Supervisor Michigan Department of Environment, Great Lakes, and Energy – Air Quality Division Bay City District Office 401 Ketchum Street, Suite B Bay City, MI 48708

Via US Mail and e-mail HareC@michigan.gov

Ms. Lori Babcock, Senior Geologist
Michigan Department of Environment, Great Lakes, and Energy – Materials Management Division
Bay City District Office
401 Ketchum Street, Suite B
Bay City, MI 48708

Via US Mail and e-mail BabcockL4@michigan.gov

Re: Response to Violation Notice, Dated May 20, 2021 JC Weadock Disposal Area, Waste Data System Number 395457 Consumers Energy Company's D. E. Karn Plant (B2840),

Dear Mr. Hare and Ms. Babcock:

Consumers Energy Company (CE) provides this response to the above Michigan Department of Environment, Great Lakes, and Energy (EGLE) Violation Notice (VN) addressed to Colby Cottick, CE Fuel Handling and Technical Services Manager. The CE D. E. Karn Complex (site) is subject to air quality requirements detailed in Renewable Operating Permit (ROP) number MI_ROP_B2840-2014c as well as various other air quality rules such as Michigan Air Rules 901 (Part 55, R 336.1901) and 370 (Part 55, R 336.1370). In addition, the D. E. Karn Complex operates a Type III Coal Ash Landfill in accordance with the Solid Waste Disposal Area Operating License number 9640 ("Operating License") and the associated Coal Combustion Residual (CCR) fugitive dust control plan (FDCP).

As noted in the VN, EGLE conducted an inspection on May 4, 2021 of a residential property at 871 Tacey Road, Essexville, Michigan in response to a resident's complaint on May 3, 2021 that alleged CCR fugitive dust was leaving the J.C. Weadock Disposal Area ("Landfill") and impacting their property. The EGLE inspector observed accumulated dust at that residence that the EGLE inspector

believes originated from the landfill operations at the J.C. Weadock Landfill, as this dust is characterized as CCR in the VN.

CE also inspected the residence on May 3, 2021, and noted uncovered, tilled farmland immediately adjacent to the residence, which is another potential source of dust that is closer to the residence than the Landfill. As noted below, CE is aware of high winds at the site preceding the date in which EGLE received the residential complaint. These high winds had significant direction changes over the weekend which contributes to making it difficult to identify the source of dust on any residence. For these reasons, CE does not agree with the presumptive statement in the VN characterizing the dust as CCR.

Despite not knowing with certainty that the dust in question was from CE's site, the Company responded quickly to any complaint(s) received and worked to improve our operations to minimize any possibility of dust leaving our site boundaries.

CE was contacted by the homeowner in question on May 2, 2021, and site personnel responded to their concerns expeditiously. The following is a timeline of events leading up to the property owner complaint to both EGLE and CE as well as actions CE has taken or is planning to take to minimize any potential CCR fugitive dust impacts on local residential properties, mitigate potential impacts from our landfill operations, and limit the potential for future alleged fugitive dust events:

- 1. On Friday, April 30, 2021, high sustained winds from the northwest had the ability to move dust in and around the Landfill and the site was running a water truck in the Landfill. A CE contractor was hauling dewatered CCR material from B.C. Cobb in Muskegon, MI to the Landfill on this date. The Landfill operators had a water truck running in support of those operations. Landfill operations noted the high winds and redirected placement of the dewatered CCR to a location to cover dry material as it is a characteristically damper material. Isolated incidents of observed dust were logged on the fugitive dust log by operators in the Landfill during working hours. Based on the high winds and direction, CE notes that it is possible for CCR dust to reach the residence on this day, but it is not probable due to the distance from the Landfill to the residence.
- 2. On Saturday, May 1, 2021, high sustained winds from the south and south west were experienced in the area. The farm field directly to the south of the residence in question was a recently tilled field and is a likely contributor to any dusting conditions based on proximity to the residence inspected. CE believes it is highly unlikely that any CCR dust from the Landfill reached the residence on this day due to the wind direction.
- 3. On Sunday, May 2, 2021, winds slowed slightly from the prior two days and continued out of the south and south west. CE believes it is highly unlikely that any CCR dust from the Landfill reached the residence on this day due to the wind direction. CE received its first citizen complaint from a Tacey Road resident related to this incident, claiming they have been impacted by dust from the CE site for the past 3 days.
- 4. On Monday, May 3, 2021, CE employees investigated the complaint and began to reach out and meet with residents located on Tacey Rd. Additional work began to help reduce risk of any fugitive dust being generated from the Landfill and included an additional water truck arriving onsite on May 3. CE had numerous discussions with residents and immediately responded to their concerns as noted below in Item #7. CE makes every effort to be a good neighbor. In this situation, this means that CE often takes action to resolve a resident's concern if the resident believes that their property has been impacted by CE site operations, regardless of whether CE agrees or believes that to be true.

- 5. On Tuesday, May 4, 2021, out of an abundance of caution, CE halted all CCR hauling operations until the active work area of the Landfill could be reduced in size by strawing (see below) and applying approved dust suppression on areas not immediately receiving material. Additionally, Landfill operations modified placement activities to generally keep materials that are more likely to dust further to the interior of the Landfill.
- 6. Furthermore, on May 4-6, 2021, CE hired a contractor to crimp straw over the surface of the northeast corner of the Landfill, also known as Pond F area, with the exception of a five-acre working face for placement of new CCR material. As a best management practice moving forward, CE is committing to maintaining a smaller active area within the active portion of the Landfill. As each active area is brought up to final elevations, these completed grades will be crimped with straw pending final cover construction and a new active area will be opened to raise those grades to final elevation. CE provided EGLE staff details on the reduction in the active portion of the Landfill in an updated closure plan on May 19, 2021. CE can implement final cover construction once EGLE approves the updated closure plan at the J.C. Weadock Disposal Area.
- 7. May 4-7, 2021, to maintain a neighborly relationship and be responsive to complaints and concerns, CE began to clean and remove dust from the residential homes on Tacey Road, including the address set forth in the VN. CE contracted with several vendors to clean and wash interior and exteriors of homes, as well as detail cars claimed to be impacted by the dust. Additional detail on services and payment is available upon request.
- 8. On Wednesday, May 5, 2021, CE applied Dustnot™, a safe, synthetic dust suppression product to all grades within the entire Landfill, including access roads. This product has been used on the haul roads and perimeter roads in the past and will continue to be used on a more frequent and proactive basis to aid in fugitive dust control.
- 9. On Tuesday, May 11, 2021, to further improve Landfill fugitive dust control a vendor was onsite to develop a scope, schedule and budget for a mobile irrigation system that will cover any active area within the active portion of the Landfill to apply water and reduce the potential for fugitive dust. The irrigation system is scheduled to be constructed and inservice as soon as practicable.

Below are noted the primary actions that we have been and currently follow to reduce fugitive dust from landfill operations in accordance with our CCR FDCP:

- Conditioning the CCR to achieve the desired moisture content prior to placement in trucks
- Vacuum fans control dust during the process of placing CCR in the trucks
- Water trucks are available as needed during the placement of CCR in the landfill
- Inactive landfill areas are seeded
- Some areas are treated with a dust suppression chemical as needed including roadways
- The landfill trucks observe a 15 MPH speed limit

Below is our response to the specific citations in the VN.

Cited Violation:

Alleged Rule Condition Violated – Part 55, R 336.1901 Air Contaminant or water vapor; prohibition. Rule 901(b).

Notwithstanding the provisions of any other rule, a person shall not cause or permit the emission of an air contaminant or water vapor in quantities that cause, alone or in reaction with other contaminants, unreasonable interference with the comfortable enjoyment of life and property.

CE Response:

Through the changing and evolving nature of our Landfill operations over numerous years, CE processes have been successful in preventing fugitive dust from becoming airborne and impacting our neighbors. Although CE believes that its Landfill operations are not the sole or primary source of dust over the three-day period preceding the complaint, CE took immediate action to mitigate any potential for impacts that neighbors experienced from this event and adjusted processes accordingly. From meeting with nearby residents, as well as follow up conversations with EGLE, CE understands that residents are upset with this experience. It is CE's intent to resolve the immediate issue and prevent the Landfill from being a source, either real or perceived, for fugitive dust in the future. CE maintains its CCR FDCP in accordance with the Solid Waste Disposal Area Operating License and CCR regulations and seeks EGLE's agreement that CE's inclusion of a mobile irrigation system, straw crimping of active areas once they have reached final grade prior to construction of final cover, reduction in active area open acreage, and expeditious reduction in active portion as documented in the update to the closure plan submitted on May 19, 2021 is appropriate to include in CE's CCR FDCP to address these complaints and VN.

Cited Violation:

Alleged Rule Condition Violated – Part 55, R 336.1370 Collected air contaminants. Rule 370 (1).

Collected air contaminants shall be removed as necessary to maintain the equipment at the required operating efficiency. The collection and disposal of air contaminants shall be performed in a manner so as to minimize the introduction of contaminants to the outer air.

CE Response:

CE has invested significantly in infrastructure as well as work practices to prevent our collected air contaminants from being reintroduced into the outer air. CE maintains that our processes and work practices for collecting air containments did not contribute to this fugitive dust incident. The fugitive dust requirements of our site Landfill operations are covered by the CCR FDCP and we believe this citation was made in error. Regardless of our agreement on this VN, we believe that our actions to mitigate the fugitive dust issue would also demonstrate compliance with this requirement. CE believes this citation is out of context of the underlying Rule 370, with Rule 370 focused on air contaminant collection and disposal from equipment at the site and immediate locale of generation.

Cited Violation:

Alleged Rule Condition Violated – Part 115, R 299.4315 Type III landfill operating requirements; control of dust and blowing papers. Rule 315 (5):

Measures shall be provided to control fugitive dust, odors and other emissions at a type III landfill. These measures shall be sufficient to ensure that the operation of the landfill will not produce any emission that results in a violation of Part 55 of the Act.

CE Response:

Through the changing and evolving nature of CE Landfill operations, our processes have been successful in preventing fugitive dust from becoming airborne and impacting our neighbors. Engineering controls and best practices are documented in a CCR FDCP that has been certified by a professional engineer, signed off by the plant manager, and implemented through site operations. This document is placed on our public-facing CCR Rule Compliance Data and Information website (https://www.consumersenergy.com/community/sustainability/environment/waste-

management/coal-combustion-residuals) – the most recent version dated and signed on December 4, 2020 and referenced as approved by EGLE in the Operating License. In response to the complaint, we have improved some of our existing requirements identified in the existing CCR FDCP, these improvements are noted above in our response to the first citation. If EGLE is in agreement with these improvements, we will expeditiously update our CCR FDCP for review and approval prior to updating the document to the public-facing compliance website

CE takes great pride in being a good neighbor as well as an ethical corporate citizen and environmental steward in the communities it serves. As detailed within this response, CE believes it mobilized all the resources it could to quickly and effectively resolve this fugitive dust incident, be it from surrounding property or our Landfill operations. Also, CE has additional measures underway to further reduce the possibility of CCR fugitive dust concerns. We believe that we have taken all the reasonable and necessary actions available to prevent a future fugitive dust event from our Landfill operations. Our continued Landfill operation will eventually lead to closure and vegetative cover that will further reduce the potential for a fugitive dust event. EGLE can expedite this process by approving the J.C. Weadock Disposal Area closure plan submitted to EGLE on May 19, 2021. We are open to further discussion on this issue as EGLE deems beneficial.

If you have any questions or would like additional information, please contact me at 989-891-3446.

Sincerely,

Colby Cottick, Fuel Handling and Technical Services Manager

Karn Complex

Consumers Energy Company

cc: Mr. Ben Witkopp, Environmental Quality Analyst, EGLE-AQD

Mr. Sean Kelly, Karn Site Complex Manager, CE

Mr. George Eurich, Karn Air Ouality Lead, CE

Mr. Caleb Batts, Karn Landfill Operations, CE

Mr. Brad Runkel, Landfill Compliance Supervisor, CE

Mr. Harold D. Register, Landfill Compliance Engineer, CE

Mr. Michael Gruber, Air Quality Engineer, CE

Mr. James Walker, Air Quality Supervisor, CE

Mr. Scott Sinkwitts, Corporate Counsel, CE

Attachments

Figure 1 – Overview of Landfill and Residence Area

Exhibit 1 - Wind Speed and Direction Graphics - April 30 - May 2, 2021

Exhibit 2 - Tabulated Wind Speed and Direction from MBS International Weather Station

Exhibit 3 - Photo of Straw Crimping

Figure 1
Overview of Landfill and Residence Area



Exhibit 1

Wind Speed and Direction Graphics – April 30 – May 2, 2021

(Note that the blue wind speed arrows indicate wind direction)







Exhibit 2

Tabulated Wind Speed and Direction from MBS International Weather Station

https://www.wunderground.com/history/daily/us/mi/freeland/KMBS/date/2021-5-2

Date/Time Wind From Wind Speed Wind Gust

4/30/21 12:13 AM NW 13 mph 0 mph

4/30/21 12:30 AM NW 23 mph 30 mph

4/30/21 12:53 AM NW 20 mph 0 mph

4/30/21 1:53 AM WNW 18 mph 0 mph

4/30/21 2:53 AM WNW 14 mph 0 mph

4/30/21 3:53 AM WNW 14 mph 0 mph

4/30/21 4:53 AM WNW 12 mph 0 mph

4/30/21 5:53 AM W 10 mph 0 mph

4/30/21 6:53 AM WNW 13 mph 0 mph

4/30/21 7:53 AM WNW 13 mph 0 mph

4/30/21 8:53 AM NW 17 mph 29 mph

4/30/21 9:53 AM NW 23 mph 32 mph

4/30/21 10:53 AM NW 28 mph 38 mph

4/30/21 11:53 AM NW 28 mph 40 mph

4/30/21 12:53 PM NNW 31 mph 44 mph

4/30/21 1:53 PM NW 23 mph 33 mph

4/30/21 2:53 PM NW 20 mph 33 mph

4/30/21 3:53 PM NW 18 mph 36 mph

4/30/21 4:53 PM NW 23 mph 39 mph

4/30/21 5:53 PM NW 18 mph 31 mph

4/30/21 6:53 PM NW 20 mph 36 mph

4/30/21 7:53 PM NNW 21 mph 0 mph

4/30/21 8:53 PM NW 13 mph 0 mph

4/30/21 9:53 PM NW 6 mph 0 mph

4/30/21 10:53 PM NW 7 mph 0 mph

4/30/21 11:53 PM NW 7 mph 0 mph

5/1/21 12:53 AM WNW 8 mph 0 mph

- 5/1/21 1:53 AM WNW 7 mph 0 mph
- 5/1/21 2:53 AM SW 6 mph 0 mph
- 5/1/21 3:53 AM SW 6 mph 0 mph
- 5/1/21 4:53 AM SW 6 mph 0 mph
- 5/1/21 5:53 AM SSW 6 mph 0 mph
- 5/1/21 6:53 AM S 7 mph 0 mph
- 5/1/21 7:53 AM SSW 7 mph 0 mph
- 5/1/21 8:53 AM S 9 mph 0 mph
- 5/1/21 9:53 AM S 12 mph 0 mph
- 5/1/21 10:53 AM S 10 mph 0 mph
- 5/1/21 11:53 AM SSW 14 mph 0 mph
- 5/1/21 12:53 PM S 17 mph 29 mph
- 5/1/21 1:53 PM S 22 mph 32 mph
- 5/1/21 2:53 PM SSW 25 mph 35 mph
- 5/1/21 3:53 PM SSW 22 mph 33 mph
- 5/1/21 4:53 PM SW 24 mph 37 mph
- 5/1/21 5:53 PM SW 25 mph 38 mph
- 5/1/21 6:53 PM SW 24 mph 37 mph
- 5/1/21 7:53 PM SW 16 mph 0 mph
- 5/1/21 8:53 PM SW 9 mph 0 mph
- 5/1/21 9:53 PM SSE 3 mph 0 mph
- 5/1/21 10:53 PM E 3 mph 0 mph
- 5/1/21 11:53 PM SE 8 mph 0 mph
- 5/2/21 12:53 AM S 10 mph 0 mph
- 5/2/21 1:53 AM S 8 mph 0 mph
- 5/2/21 2:53 AM SSW 8 mph 0 mph
- 5/2/21 3:53 AM SW 10 mph 0 mph
- 5/2/21 4:53 AM WSW 10 mph 0 mph
- 5/2/21 5:53 AM NNE 5 mph 0 mph
- 5/2/21 6:53 AM NE 3 mph 0 mph
- 5/2/21 7:53 AM NNE 7 mph 0 mph
- 5/2/21 8:53 AM NNE 9 mph 0 mph
- 5/2/21 9:53 AM NNE 7 mph 0 mph
- 5/2/21 10:53 AM NE 12 mph 0 mph

5/2/21 11:53 AM NE 8 mph 0 mph 5/2/21 12:53 PM NNE 7 mph 0 mph 5/2/21 1:53 PM E 6 mph 0 mph 5/2/21 2:53 PM ESE 5 mph 0 mph 5/2/21 3:53 PM SW 20 mph 26 mph 5/2/21 4:53 PM WSW 16 mph 25 mph 5/2/21 5:53 PM WSW 15 mph 0 mph 5/2/21 6:39 PM NNE 15 mph 0 mph 5/2/21 6:53 PM NNE 17 mph 22 mph 5/2/21 7:53 PM NNE 18 mph 23 mph 5/2/21 8:53 PM NNE 16 mph 0 mph 5/2/21 9:53 PM NNE 12 mph 0 mph 5/2/21 10:53 PM ENE 9 mph 0 mph 5/2/21 11:53 PM NNE 15 mph 0 mph

Exhibit 3

Photo of Straw Crimping

