

**BEFORE THE ADMINISTRATOR
UNITED STATES ENVIRONMENTAL PROTECTION
AGENCY**

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RAVEN POWER FORT SMALLWOOD, LLC)	
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PROPOSED PERMIT NUMBER)	
24-003-0468)	PETITION TO OBJECT TO PERMIT
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ISSUED BY THE MARYLAND)	
DEPARTMENT OF THE ENVIRONMENT)	
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Pursuant to section 505(b)(2) of the Clean Air Act, 42 U.S.C. § 7661d(b)(2), and 40 C.F.R. § 70.8(d), Chesapeake Climate Action Network, Sierra Club, Environmental Integrity Project (“EIP”), and Physicians for Social Responsibility, Chesapeake, Inc. (collectively, “Petitioners”) petition the Administrator of the U.S. Environmental Protection Agency to object to the proposed Title V Operating Permit Number 24-003-0468 (“Proposed Permit” or “Permit”) issued by the Maryland Department of the Environment (“MDE”) to Raven Fort Smallwood, LLC (“Raven”) for the Fort Smallwood complex. As described in more detail below, the Fort Smallwood complex houses two separate electrical generating stations, the Brandon Shores plant and the Wagner plant, which collectively fire coal, natural gas, and oil. The Fort Smallwood complex is located in Anne Arundel County, Maryland. As required by these cited provisions, Petitioners are filing this Petition with the EPA Administrator via e-mail and certified U.S. mail, and providing copies via e-mail and certified U.S. mail to MDE, Raven, and EPA Region III.

EPA must object to the Proposed Permit because it is not in compliance with the Clean Air Act. Specifically, the Permit fails to include monitoring requirements sufficient to assure compliance with the visible emissions limit for units 1 and 2 at the Brandon Shores plant, and MDE failed to significantly respond to significant comments made by Petitioners relating to these monitoring requirements. In addition, the monitoring requirements of the Proposed Permit

fail to assure compliance with a limit for total particulate matter (“PM”) and particulate matter with a diameter of ten microns or less (PM₁₀) for Brandon Shores units 1 and 2.

Background

The Fort Smallwood coal plant complex is located in Anne Arundel County, Maryland.¹ The complex consists of two electrical generating stations “co-located on a 456-acre site.” One is the Brandon Shores plant and the other is the Wagner plant. The primary emission units at the Brandon Shores plant are two coal-burning boilers (units 1 and 2) “with a combined nominal generating capacity of approximately 1,370 megawatts (MW).”² The primary emission units at the Wagner plant are four steam generating units “with a combined nominal rating of approximately 1,040 MW.” Two of these boilers (units 2 and 3) are coal-fired boilers, one (unit 1) is natural gas-fired and one (unit 4) is oil-fired.³

The Maryland Department of the Environment (“MDE”) issued a draft renewal Title V permit for the Fort Smallwood complex on May 19, 2016. Timely comments were submitted on the draft permit on June 17, 2016 by Petitioners.⁴ All issues raised in this Petition were set forth in Petitioners’ June 17, 2016 comments to MDE. MDE made several revisions to the draft permit in response to Petitioners’ comments and provided Petitioners with its response to comments⁵ on November 10, 2016.⁶ MDE provided Petitioners with the revised permit, referred to herein as the “Proposed Permit” or “Permit,” on December 19, 2016.⁷ The issuance date of the Proposed Permit, as identified on the cover page, is January 1, 2017.

¹ Air & Radiation Mgmt. Admin., MDE, Raven Power Fort Smallwood, LLC, Part 70 Operating Permit Fact Sheet Permit No. 24-003-0468 (“Fact Sheet”) at 1.

² *Id.*

³ *Id.* at 2.

⁴ Public comment letter from Leah Kelly, Attorney, EIP, to Shannon Heafey, Air Quality Permits Program, MDE (June 17, 2016) (“Public Comments”) (Attachment A).

⁵ Air & Radiation Mgmt. Admin., MDE, Raven Power Fort Smallwood Complex Draft Part 70 Operating Permit Response to Comments (“MDE Response to Comments”) (Attachment B).

⁶ Email from Karen Irons, Manager, Air Quality Permits Program, MDE, to Leah Kelly, Attorney, EIP (Nov. 10, 2016) (Attachment C).

⁷ Email from Shannon Heafey, Air Quality Permits Program, MDE, to Leah Kelly, Attorney, EIP (Dec. 19, 2016) (Attachment D).

Petitioners

Petitioner Chesapeake Climate Action Network (“CCAN”) is a regional grassroots, non-profit organization with 18,000 members in Maryland. CCAN was founded to transition the region towards clean-energy solutions to climate change, specifically in Maryland, Virginia, and Washington, D.C. CCAN's mission is to educate and mobilize citizens in a way that fosters a rapid societal switch to clean energy sources. This mission includes ensuring that facilities that contribute to global warming, such as coal-fired power plants, do not impact the health of CCAN's members or the environment through emitting dangerous pollutants. CCAN's mission and its members are adversely impacted if Title V permits do not comply with the Clean Air Act and thus permit power plants and other facilities to emit more pollutants than they should be allowed to emit under the Act — or if permits do not assure compliance with the limits established under the Act.

Petitioner Chesapeake Physicians for Social Responsibility (“Chesapeake PSR”) is dedicated to creating a healthy, just and peaceful world for both the present and future generations. Among other efforts, Chesapeake PSR uses its medical and public-health expertise to promote clean, renewable energy and to minimize the amount of air pollution emitted from coal-fired power plants. Chesapeake PSR, which has approximately 300 members, actively participates in the regulatory and permitting processes for coal-fired power plants in an effort to ensure that Maryland adequately addresses public-health issues associated with the operation of these plants. Chesapeake PSR and its members would be harmed if either plant at the Fort Smallwood complex were to emit more particulate or visible emissions than legally permissible and thus adversely affect public health.

Petitioner Sierra Club is the nation's largest and oldest grassroots environmental organization, with a mission to explore, enjoy, and protect the wild places of the earth; to practice and promote the responsible use of the earth's ecosystems and resources; and to educate and enlist humanity to protect and restore the quality of the natural and human environments. Sierra Club's Maryland Chapter has over 14,000 members. For decades, the Sierra Club in Maryland has worked to clean up and protect the State's air, water and lands, and to promote public health through regulatory, legislative and legal processes, and through grassroots engagement. Sierra Club has members who live in proximity to the Fort Smallwood complex

and would be adversely affected if the Permit's inadequate monitoring requirements allowed the plant to emit particulate matter and visible emissions in excess of Permit limits.

Petitioner EIP is a Washington, D. C. based non-profit founded to advocate for the effective enforcement of environmental laws, with a specific focus on the Clean Air Act and large stationary sources of air pollution like the Fort Smallwood complex and each of the plants housed therein. As one method of achieving its mission, EIP participates in permitting proceedings for major sources of air pollution in the State of Maryland. EIP's ability to carry out its mission of improving the enforcement of environmental laws is adversely impacted if EPA fails to object to the issuance of Title V permits that do not comply with the Clean Air Act.

Thus, Petitioners would each be harmed if EPA failed to object to the Permit.

Specific Objections

"If any [Title V] permit contains provisions that are determined by the Administrator as not in compliance with the applicable requirements of this chapter . . . the Administrator *shall* . . . object to its issuance."⁸ EPA "does not have discretion whether to object to draft permits once noncompliance has been demonstrated."⁹ Here, EPA must object to the Proposed Permit for the reasons discussed below.

I. The Proposed Permit Fails to Assure Compliance with the Visible Emissions Limit for Brandon Shores Units 1 and 2¹⁰

EPA must object to the Proposed Permit because it does not include monitoring conditions that assure compliance with the visible emissions limit for units 1 and 2 at the Brandon Shores plant. The weekly or monthly visual observations required for demonstrating compliance with this limit cannot ensure that the limit, which applies at all times, will be met. In addition, MDE failed to substantively respond to significant comments submitted by Petitioners on this issue.

⁸ 42 U.S.C. § 7661d(b)(1) (1990) (emphasis added).

⁹ See *N.Y. Pub. Interest Group v. Whitman*, 321 F.3d 316, 334 (2d Cir. 2003) (holding that EPA is required to object to Title V permits once a petitioner has demonstrated that a permit does not comply with the Clean Air Act).

¹⁰ Petitioners raise this issue on pages 8-9 of their public comments. (Attachment A.)

A. The Permit Must Include Monitoring Requirements that Assure Compliance With Emission Limits and the Rationale for Monitoring Requirements Must be Documented in the Permit Record

The Clean Air Act states that Title V permits must include monitoring and reporting requirements sufficient to assure compliance with all applicable emission limits and standards.¹¹ Monitoring requirements must “assure use of terms, test methods, units, averaging periods, and other statistical conventions consistent with the applicable requirement.”¹²

Monitoring must be sufficiently frequent to assure compliance with a given limit. The D.C. Circuit Court of Appeals has specifically stated that Title V requires that a “monitoring requirement insufficient ‘to assure compliance’ with emission limits has no place in a permit unless and until it is supplemented by more rigorous standards.”¹³ The court has also acknowledged that the mere existence of periodic monitoring requirements may not be sufficient.¹⁴ For example, the court noted that annual testing is unlikely to assure compliance with a daily emission limit.¹⁵ In other words, the frequency of monitoring methods must bear a relationship to the averaging time used to determine compliance.

Permit-issuing authorities are obligated to revise permits to supplement inadequate monitoring requirements. EPA has stated that, pursuant to 40 C.F.R. § 70.6(c)(1), “if there is some periodic monitoring in the applicable requirement but that monitoring is not sufficient to assure compliance, permitting authorities must supplement monitoring to assure such compliance.”¹⁶

In addition, agencies that issue Title V permits “must include a rationale for the monitoring requirements selected that is clear and documented in the permit record.”¹⁷

¹¹ 42 U.S.C. § 7661c(c).

¹² 40 C.F.R. § 70.6(a)(3)(i)(B); 40 C.F.R. § 70.6(c)(1) (requiring “compliance certification, testing, monitoring, reporting, and recordkeeping requirements *sufficient to assure compliance with the terms and conditions of the permit*”) (emphasis added).

¹³ See *Sierra Club v. EPA*, 536 F.3d 673, 677 (D.C. Cir. 2008).

¹⁴ *Id.* at 676–77.

¹⁵ *Id.* at 675.

¹⁶ *In the Matter of Tennessee Valley Authority, Bull Run, Clinton, Tennessee*, Order on Petition IV-2015-14 (Nov. 10, 2016) (“*TVA Bull Run Order*”) at 8 (citing e.g. *In the Matter of CITGO Refining and Chemicals Col, L.P., West Plant, Corpus Christi, Texas*, Order on Petition No. VI-2007-01 (May 28, 2009)).

¹⁷ *TVA Bull Run Order* at 8 (internal citations omitted); *In the Matter of Mettiki Coal, LLC, Garrett County, Maryland* Order on Petition III-2013-1 (Sept. 26, 2014) (“*Mettiki Coal Order*”) at 7-8.

B. Monitoring Requirements in the Proposed Permit Fail to Assure Compliance with Visible Emissions Limit for Brandon Shores Units 1 and 2

Units 1 and 2 at the Brandon Shores plant are subject to a visible emissions limit deriving from Maryland's State Implementation Plan ("SIP"). Specifically, Raven

may not cause or permit the discharge of emissions from any fuel burning equipment, other than water in an uncombined form, which is visible to human observers except that, for the purpose of demonstrating compliance using [continuous opacity monitoring ("COM")] data, emissions that are visible to a human observer are those that are equal to or greater than 10 percent opacity . . . [This limit does not apply] during load changing, soot blowing, startup, or adjustments of occasional cleaning of control equipment if:

- (a) The visible emissions are not greater than 40 percent opacity; and
- (b) The visible emissions do not occur for more than 6 consecutive minutes in any sixty minute period.¹⁸

This is an emission limit that applies at all times, with narrow exceptions for the circumstances identified in the limit itself.

The Proposed Permit allows Raven to show compliance with this limit using COM (continuous opacity) data or visual observations performed for one hour per week or one hour per month, using EPA Reference Method 9.¹⁹ Weekly observations are required initially.

If after a six month period time [sic], no violations of the opacity limit are observed, the frequency of observation may be reduced to once per month. At any point in time that a violation of the opacity limit is observed, the observations shall return to the weekly schedule until another six month period elapses without a violation.²⁰

Petitioners consider COM to be a sufficient method for assuring compliance with the visible emissions limit. However, the alternative monitoring approach allowed under the Proposed Permit - Method 9 observations for one hour per week or one hour per month - is insufficient to assure compliance with a visible emissions limit that must be met at all times.²¹ In addition, as stated in Petitioners' comments, "Method 9 observations require ideal weather conditions and cannot be made in conditions such as at night, during rainfall, or on cloudy

¹⁸ Proposed Permit at 35; COMAR 26.11.09.05.

¹⁹ Proposed Permit at 42.

²⁰ *Id.*

²¹ See *Sierra Club*, 536 F.3d at 676-677.

days.”²² EPA has previously found that a Title V permit record failed to sufficiently support the use of weekly Method 9 observations to assure compliance with a continuous opacity limit.²³ As discussed in more detail below, the use of weekly Method 9 measurements is similarly unsupported in the present instance.

C. MDE’s Response Fails to Show That Weekly or Monthly Method 9 Observations are Sufficient to Assure Compliance With the Visible Emissions Limit for Brandon Shores Units 1 and 2

MDE’s response to Petitioners’ comments on this issue is set forth on pages 7 to 8 of the MDE Response to Comments. However, this response does not demonstrate that weekly or monthly Method 9 observations are sufficient to assure compliance with a limit that applies at all times. Accordingly, the Administrator must object to the Proposed Permit because Petitioners have demonstrated that it fails to assure ongoing compliance with applicable limits.

MDE states in its response to comments that “[i]t is an accepted fact that COM[] cannot be used on stacks with moisture in stack gases. This is the case for the stacks at Brandon Shores Units 1 and 2.”²⁴ MDE further states that

The opacity standard in COMAR is a surrogate for the PM standard. Prior to the development of continuous particulate emission monitors, the only means of determining compliance with the PM standard was a stack test. In order to assess compliance with a PM standard on a continuous basis, a limit for opacity was established which correlates to the PM standard.²⁵ Now that PM CEMS have been demonstrated to measure accurately PM emissions, an opacity limit is no longer necessary.²⁶

²² Public Comments at 9. (Attachment A.)

²³ *In the Matter of EME Homer City Generation L.P. Indiana County, Pennsylvania*, Order on Petitions III-2012-06, III-2012-07, and III-2013-02 (June 30, 2014) (“*Homer City Order*”) at 44; *see also In the Matter of Pacficorp’s Jim Bridger and Naughton Electric Utility Steam Generating Plants*, Order on Petition No. VIII-00-1 (Nov. 16, 2000) at 19 (quarterly Method 9 observations were inadequate to assure compliance with SIP opacity limits.)

²⁴ MDE Response to Comments at 7. (Attachment B)

²⁵ MDE does not explicitly state that the visible emissions limit for Brandon Shores units 1 and 2 in the Proposed Permit (Proposed Permit at 35-36) is directly correlated with the PM limit in the Proposed Permit (Proposed Permit at 36) for those units. However, it does not appear that the underlying SIP limits for visible emissions can be correlated directly to the Maryland’s SIP limits for PM. The visible emissions limits in Maryland’s SIP differ by region, and the limit to which Brandon Shores units 1 and 2 are subject is the most protective of these. COMAR 26.11.09.05A(1)-(2). Conversely, only a single set of PM SIP limits apply statewide for solid-fuel burning boilers. COMAR 26.11.09.06B(3); COMAR 26.11.09.09 (Table 1).

²⁶ MDE Response to Comments at 7. (Attachment B.)

Rather than addressing Commenters' demonstration that weekly or monthly Method 9 observations do not assure compliance with Maryland's federally enforceable visible emissions limit, MDE contends – incorrectly – that the limit itself is unnecessary. The Clean Air Act and EPA's regulations are clear that SIP requirements remain enforceable until changed through the SIP revision process and that neither EPA nor state permitting authorities may issue orders that modify SIP requirements with respect to a stationary source.²⁷

MDE also provides an example of an EPA rule, within the New Source Performance Standards ("NSPS"),²⁸ allowing "affected sources which operate a PM CEMS" to ask EPA for permission to comply with the rule's PM standard instead of its opacity standard.²⁹ However, this is not instructive because no similar language exists in Maryland's SIP for the visible emissions limit at issue.

MDE's response does not set forth an adequate rationale for the selected monitoring requirements. In particular, MDE's response does not demonstrate that the monitoring requirements assure compliance with the visible emissions limit, which must be met at all times with narrow circumstantial exceptions. This demonstration is also not provided elsewhere in the Permit record. The visible emissions limit remains fully effective and has not been removed from the SIP. Therefore, monitoring requirements must be sufficient to assure compliance with this limit.³⁰

D. MDE Failed to Respond to Significant Comments Relating to Monitoring for the Visible Emissions Limit

In addition, MDE failed to respond to significant comments submitted by Petitioners on this issue. Permit-issuing agencies "have a responsibility to respond to significant comments," and EPA has objected in the past when state permitting authorities have failed to so respond.³¹

Petitioners, in their public comments on the Proposed Permit, stated that:

²⁷ 42 U.S.C. § 7410 (i) and (l); 40 C.F.R. § 51.105; *see also General Motors v United States*, 496 U.S. 530, 540 (1990).

²⁸ The NSPS referenced by MDE is at 40 Part 60 Subpart D. MDE Response to Comments at 7. (Attachment B.)

²⁹ MDE Response to Comments at 7-8. (Attachment B.)

³⁰ 40 C.F.R. § 70.6(c)(1).

³¹ *In the Matter of Wheelabrator Baltimore, L.P., Baltimore Maryland*, Permit No. 24-510-01886 (April 14, 2010) ("Wheelabrator Order") at 7-8 (granting objection because of permitting authority's failure to substantively respond to significant comments).

If the plant truly cannot use COM[] because of a [flue gas desulfurization] device, MDE should establish a PM limit that correlates to the SIP opacity limit and require the use of continuous monitoring using PM CEMS to assure compliance with the opacity limit. In doing so, MDE must account for the fact that opacity can indicate the presence of sulfuric acid or condensable particles, which are not measured by PM CEMS.³²

MDE did not address this option in its response to comments and has not explained why compliance with the visible emissions limit could not be assured using this monitoring approach. Petitioners' concern about opacity indicating the presence of condensable particles is of particular importance given the inadequacy of the monitoring requirements for condensable PM at Brandon Shores units 1 and 2, as discussed in more detail in Section II below.³³

II. The Proposed Permit Fails to Assure Compliance with the Synthetic Minor Limit for Total PM/PM₁₀ for Brandon Shores Units 1 and 2³⁴

Brandon Shores units 1 and 2 are also subject to Prevention of Significant Deterioration ("PSD") limits for PM/PM₁₀ deriving from a permit issued in 2007. At that time, Raven's predecessor, Constellation Power Source Generation, Inc. ("Constellation"), sought to make several changes at the plant, including increasing heat input from 6,173 MMBtu/hr to 7,128 MMBtu/hr.³⁵ Constellation accepted "synthetic minor" emission limits in order to keep emissions of PM and PM₁₀ below major source thresholds, thereby avoiding PSD requirements.³⁶ The 2007 permit established two synthetic minor limits for PM/PM₁₀. One limit applies only to the filterable fraction of PM/PM₁₀ and the other limit applies to total PM/PM₁₀, including both the filterable and condensable fractions. The Total PM/PM₁₀ limit is "0.034 lb/MMBtu (filterable and condensable), as determined by the average of three stack tests."³⁷

The Proposed Permit fails to require monitoring that assures compliance with the synthetic minor limit for total PM/PM₁₀. This is the case for two reasons. First, the monitoring methods set forth in the Proposed Permit do not clearly require measurement of the condensable

³² Public Comments at 9. (Attachment A.)

³³ In addition, EPA has recognized that opacity is an important real-time check to ensure that PM control devices are functioning properly, especially for plants with higher PM emissions. *See* 74 Fed. Reg. 5072, 5074 (Jan. 28, 2009) (stating, in New Source Performance Standards rule, that since PM "CEMS readings cannot be verified as readily as other CEMS, and since recalibration requires [particulate matter] performance tests, baseline opacity readings can be a valuable secondary check on control device performance and [particulate matter] emissions").

³⁴ This issue is addressed on pages 2 through 6 of the public comments. (Attachment A.)

³⁵ Fact Sheet at 6.

³⁶ *Id.*

³⁷ Proposed Permit at 36.

portion of PM. Second, the requirements in the Proposed Permit do not ensure that total PM (filterable and condensable) will be monitored frequently enough to assure compliance with the emission limit, which applies at all times.

A. The Proposed Permit Does Not Require Measurement of Condensable PM

The Proposed Permit requires monitoring for the total PM/PM₁₀ limit using PM CEMS³⁸ and annual stack testing.³⁹ However, measurement of condensable PM is not clearly required under either method. PM CEMS is incapable of measuring condensable PM. MDE acknowledges this in its response to comments, stating that [t]here is no continuous emissions monitor that specifically measures PM condensables.”⁴⁰

The annual stack testing requirements of the Proposed Permit also do not require measurement of condensable PM. The Proposed Permit requires “annual [stack] testing using EPA Reference Methods of 40 CFR Part 60, Appendix A” and that a protocol for stack testing must be submitted to MDE for approval thirty days prior to the proposed test date.⁴¹ Measurement of condensable PM is not clearly required under these conditions. The Proposed Permit allows Raven to select a monitoring method from an appendix within EPA’s regulations – Appendix A to 40 CFR Part 60 - that includes multiple monitoring methods, not all of which require measurement of condensable PM.⁴² There is no language in the Proposed Permit that requires Raven to select a method from Appendix A that includes measurement or calculation of condensable PM. Finally, while a protocol must be submitted to MDE for approval ahead of testing, there is nothing in the Proposed Permit that compels MDE to ensure that the protocol includes measurement of condensable PM.

³⁸ Proposed Permit at 43, 46.

³⁹ *Id.* at 40.

⁴⁰ MDE Response to Comments at 4. (Attachment B)

⁴¹ Proposed Permit at 40.

⁴² In fact, it appears that 40 C.F.R. Part 60 Appendix A does not provide any method for measuring total PM at higher temperatures. EPA’s regulations indicate that, at higher temperatures, Reference Method 5, which is set forth in 40 C.F.R. Part 60, Appendix A, must be supplemented with EPA Method 202, which is not set forth in that appendix, in order to capture total PM (filterable and condensable). 40 C.F.R. Part 60, Appendix A-3, Method 5, Section 2.0 (“[In Method 5], [p]articulate matter is withdrawn . . . and collected on a glass fiber filter maintained at a temperature of 120 ±14 °C (248 ±25 °F) or such other temperature as specified by an applicable subpart of the standards or approved by the Administrator for a particular application. The PM mass, which includes *any material that condenses at or above the filtration temperature*, is determined gravimetrically after the removal of uncombined water.”) (Emphasis added.) 40 C.F.R. Part 51, Appendix M, Method 202, Section 1.4(h) (“You may use Method 5 . . . to collect filterable PM from stationary sources with temperatures above 30 °C (85 °F) in conjunction with [Method 202, which measures condensables only]. However, if the gas filtration temperature never exceeds 30 °C (85 °F), then use of [Method 202] is not required to measure total primary PM.”)

B. The Proposed Permit Does Require Sufficiently Frequent Monitoring of Total PM/PM₁₀

In addition, the monitoring required under the Proposed Permit is not sufficiently frequent to assure compliance with the synthetic minor limit for total PM/PM₁₀, which must be met at all times.⁴³ Even if the stack testing requirements of the Proposed Permit did require measurement of condensable PM, which they do not, annual testing is not sufficiently frequent to comply with a limit that must be met at all times.⁴⁴ As discussed above, PM CEMS is required, but this technology is incapable of measuring the condensable fraction of total PM, and no method for supplementing the PM CEMS data to account for condensable PM is set forth in the Proposed Permit. Thus, the Proposed Permit does not assure compliance with the total PM/PM₁₀ limit because it does not assure continuous measurement of condensable PM.

C. MDE's Response Fails to Show that Monitoring Requirements Assure Compliance With the Synthetic Minor Limit for Total PM/PM₁₀

MDE's response to Petitioners' comments on this issue is set forth on pages 3 to 4 of the MDE Response to Comments. However, this response does not demonstrate that PM CEMS and annual stack testing using methods in 40 C.F.R. Part 60, Appendix A is sufficient to ensure compliance with this limit. Accordingly, the Administrator must object to the Proposed Permit.

In its Response to Comments, MDE states:

The permit requires Raven Power to conduct the annual stack tests using EPA Reference Methods of 40 CFR Part 60, Appendix A and requires Raven Power to submit a test protocol to [MDE] for approval. There is more than one possible test method in Appendix A that may be used to determine PM and PM condensables. The permit allows the flexibility for Raven Power to select the test method and have it approved by the Department prior to testing.⁴⁵

⁴³ While the total synthetic minor limit for PM/PM₁₀ states that the limit is "as determined by the average of three stack tests" (Proposed Permit at 36), continuous compliance is required because the limit was established to cap annual emissions from Brandon Shores below major source thresholds in order to avoid PSD requirements.

⁴⁴ See *Sierra Club v. EPA*, 536 F.3d at 675.

⁴⁵ MDE Response to Comments at 3. (Attachment B.)

MDE also states that “PM CEMS data will be used to assess compliance with the . . . synthetic minor PM limit.”⁴⁶ MDE explains further that, while there is no method for continuously measuring condensable PM, it is taking the following steps:

MDE uses data collected from the PM CEMS for the filterable portion and data collected from continuous emissions monitors for SO₂ and NO_x to assess compliance for the condensable portion. SO₂ and NO_x emissions are the principal components of the condensables [sic] PM.

The Brandon Shores Units’ emission control systems for PM, SO₂, and NO_x are sized [sic] provide for overcontrol of the pollutants. The results of the stack tests and CEM data collected have shown continuous compliance with all the emissions limits. The margin of compliance has been sufficient to provide a reasonable level of confidence that the condensable PM limits are in continuous compliance. The [synthetic minor] limits were established to set an annual cap on PM emissions . . . [and] are an average number. The emissions control systems have sufficient over control capacity that a short term excursion will not cause the annual cap on PM emissions to be exceeded.⁴⁷

The federally enforceable portion for the permit requires annual tack tests and the use of CEMS for PM, and SO₂ and NO_x. This data provides sufficient data to assess continuous compliance with the . . . synthetic minor emission limits for filterable and condensable PM.⁴⁸

While Petitioners appreciate the time that MDE has taken to explain the approach using SO₂ and NO_x data, there are no conditions within the Proposed Permit that require, or even refer to, this method. The Proposed Permit requires monitoring for NO_x and SO₂ via CEMS,⁴⁹ but it does not require Raven to use this information in any way to determine compliance with the total PM/PM₁₀ emissions limit for Brandon Shores units 1 and 2. If Raven must evaluate its NO_x and SO₂ emissions to determine ongoing compliance with the total PM/PM₁₀ limit for Brandon Shores, the Proposed Permit must be revised to require Raven to include NO_x and SO₂ in its compliance determination for that limit. Moreover, the Proposed Permit must be revised to

⁴⁶ *Id.*

⁴⁷ The Permit record does not include any support for these statements. The permitting agency’s conclusory statements that the permit limits are unlikely to be violated is not a substitute for monitoring requirements that actually assure ongoing compliance with the applicable limit.

⁴⁸ MDE Response to Comments at 4. (Attachment B.)

⁴⁹ Proposed Permit at 43, 44.

explain *how* Raven is using NO_x and SO₂ CEMS data, in conjunction with PM CEMs (and, if applicable stack test data) to determine compliance with the total PM/PM₁₀ limit.⁵⁰

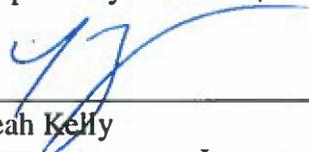
Thus, MDE has failed to set forth an adequate rationale in the Permit record for its selection of monitoring requirements for the synthetic minor limit for total PM/PM₁₀ for Brandon Shores units 1 and 2.

Conclusion

For the reasons discussed above, EPA must object to the Proposed Permit. The monitoring requirements set forth in the Proposed Permit fail to assure compliance with the visible emissions limit for Brandon Shores units 1 and 2, and MDE did not respond to significant comments on this issue. In addition, the Proposed Permit does not assure compliance with the synthetic minor limit for total PM/PM₁₀ limit for Brandon Shores units 1 and 2.

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Respectfully submitted,



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⁵⁰ *In the Matter of Yuhuang Chemical Inc. Methanol Plant, St. James Parish, Louisiana, Order on Petition No. VI-2015-03 (Aug. 31, 2016) at 18.*