

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

IN THE MATTER OF)	
)	
Clean Air Act Final Initial Class I)	
Title V Operating Permit)	
)	
Issued to Aluminum Dynamics, Inc., for its)	Title V Permit No. 106233
Aluminum Processing Plant)	
)	
Issued by the Arizona Department of)	
Environmental Quality)	
)	

**PETITION TO OBJECT TO FINAL CLASS I TITLE V OPERATING PERMIT
NO. 106233 FOR ALUMINUM DYNAMICS, INC.'S
ALUMINUM PROCESSING PLANT**

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), the Center for Biological Diversity petitions the Administrator of the United States Environmental Protection Agency (“Administrator” or “EPA”) to object to the final initial Class I Title V Operating Permit (“Title V Permit”) issued by the Arizona Department of Environmental Quality (“ADEQ”) authorizing Aluminum Dynamics, Inc. (“ADI”) to construct and operate a new waste aluminum processing facility in the town of Benson in Cochise County, Arizona (hereafter “the ADI facility” or “ADI’s facility”).

Petitioner requests the EPA object on the basis that the Title V Permit fails to assure compliance with Title V and other applicable requirements under the Clean Air Act.

THE ADI FACILITY

The ADI facility would be a 200-acre secondary aluminum processing facility processing waste aluminum for the purpose of producing cast ingots to supply an aluminum rolled mill elsewhere. The facility would be constructed in the Arizona town of Benson, a small town in Cochise County that currently has little industrial development. The facility would consist of scrap handling and processing operations, kilns and furnaces for processing and melting, and other equipment for refining waste aluminum into ingots. To support the operation, the facility would also include a large scrap yard, roads, gasoline and diesel storage tanks, cooling towers, lime silos, dryers, and a dross press and dross house.

The facility would be considered a secondary aluminum processing facility under the Clean Air Act and would be a major source of hazardous air pollutants. Hazardous air pollutants are listed under Section 112 of the Clean Air Act and are a group of especially toxic substances that pose inordinate risks to public health and the environment. The ADI facility would be a major source of hydrogen chloride, or HCl (also known as hydrochloric acid), but will release a number of other hazardous air pollutants including dioxins and furans, organic compounds including hexane and toluene, and metals including manganese, nickel, and chromium. Because of its hazardous air pollutant emissions, the ADI facility would be subject to National Emissions Standards for Hazardous Air Pollutants (“NESHAP”) for secondary aluminum processing facilities. Although these NESHAP impose stringent air pollution requirements on paper, compliance in real life depends on diligent operations and maintenance, including continuous monitoring of emissions to assure compliance and protection of public health.

In addition to hazardous air pollutants, the ADI facility has the potential to emit hundreds of tons of other pollutants known to be harmful to public health and the environment, including particulate matter, nitrogen oxides, carbon monoxide, and volatile organic compounds. Because the facility is a major source of hazardous air pollutants, it is subject to Title V Permitting requirements under the Clean Air Act. Below is the ADI facility’s potential to emit harmful pollutants, as disclosed by ADEQ:

Pollutant	Potential to Emit (tons per year)
Fine Particulate Matter (“PM _{2.5} ”)	52.2
Coarse Particulate Matter (“PM ₁₀ ”)	61.7
Nitrogen Oxides (“NO _x ”)	93.7
Carbon Monoxide (“CO”)	80.3
Volatile Organic Compounds (“VOCs”)	93.3
Hydrogen chloride (“HCl”)	92.3
Total Hazardous Air Pollutants	110.7

PETITIONER

The Center for Biological Diversity is a nonprofit, 501(c)(3) conservation organization. The Center’s mission is to ensure the preservation, protection, and restoration of biodiversity, native species, ecosystems, public lands and waters, and public health through science, policy, and environmental law. Based on the understanding that the health and vigor of human societies and the integrity and wildness of the natural environment are closely linked, the Center is working to secure a future for animals and plants hovering on the brink of extinction, for the ecosystems they need to survive, and for a healthy, livable future for all of us.

PROCEDURAL BACKGROUND

ADEQ released the draft Title V Permit for the ADI facility on July 16, 2025 and held a public comment hearing on August 21, 2025. The Center for Biological Diversity submitted

timely written comments on the draft Title V Permit on August 21, 2025. *See* Exhibit 1, Comments of the Center for Biological Diversity on the draft Title V Permit for the ADI Facility (Aug. 21, 2025). Petitioner’s comments included detailed technical comments and provided sufficient specificity to alert ADEQ to the issues raised in this petition.

ADEQ responded to comments on December 17, 2025. *See* Exhibit 2, ADEQ Responsiveness Summary to Public Comments (Dec. 17, 2025). The agency concurrently transmitted the proposed permit to EPA for the agency’s 45-day review. The EPA did not object to the issuance of the Title V Permit. A final Title V Permit and Technical Support Document were issued by ADEQ on February 18, 2026. *See* Exhibit 3, Final Title V Permit and Exhibit 4, Final Technical Support Document. According to EPA Region 9’s online Permit Hub, the deadline to file a petition to the EPA to object to the Title V Permit is April 3, 2026. Pursuant to 42 U.S.C. § 7661d(b)(2), this petition is now timely submitted within 60 days following a lack of objection from the EPA during the agency’s 45-day review period.

GENERAL TITLE V PERMITTING REQUIREMENTS

The Clean Air Act prohibits qualifying stationary sources of air pollution from operating without or in violation of a valid Title V Permit, which must include conditions sufficient to “assure compliance” with all applicable Clean Air Act requirements. 42 U.S.C. §§ 7661c(a), (c); 40 C.F.R. §§ 70.6(a)(1), (c)(1). “Applicable requirements” include all standards, emissions limits, and requirements of the Clean Air Act, including all requirements in an applicable implementation plan. 40 C.F.R. § 70.2. Congress intended for Title V to “substantially strengthen enforcement of the Clean Air Act” by “clarify[ing] and mak[ing] more readily enforceable a source’s pollution control requirements.” S. Rep. No. 101-228, at 347, 348 (1990), *as reprinted in* A Legislative History of the Clean Air Act Amendments of 1990, at 8687, 8688 (1993). As EPA explained when promulgating its Title V regulations, a Title V Permit should “enable the source, States, EPA, and the public to understand better the requirements to which the source is subject, and whether the source is meeting those requirements.” Operating Permit Program, Final Rule, 57 Fed. Reg. 32,250, 32,251 (July 21, 1992). Among other things, a Title V Permit must include compliance certification, testing, monitoring, reporting, and recordkeeping requirements sufficient to assure compliance with the terms and conditions of the permit. 42 U.S.C. § 7661c(c); 40 C.F.R. §§ 70.6(a)(1), (c)(1).

Under the Clean Air Act, “any person” may petition EPA to object to a proposed permit “within 60 days after the expiration of [EPA’s] 45-day review period.” 42 U.S.C. § 7661d(b)(2); *see also* 40 C.F.R. § 70.8. Each objection in the petition must have been “raised with reasonable specificity during the public comment period provided for in § 70.7(h) of this part, unless the petitioner demonstrates that it was impracticable to raise such objections within such period, or unless the grounds for such objection arose after such period.” 40 C.F.R. § 70.8(d). Any objection included in the petition “must be based on a claim that the permit, permit record, or permit process is not in compliance with applicable requirements or requirements [of 40 C.F.R. Part 70].” 40 C.F.R. § 70.12(a)(2).

Upon receipt of a petition, EPA “shall issue an objection within [60 days] if the petitioner demonstrates to the Administrator that the permit is not in compliance with the requirements of this chapter, including the requirements of the applicable implementation plan.” 42 U.S.C. § 7661d(b)(2) (emphasis added); *see also* 40 C.F.R. § 70.8(c) (“The Administrator will object to the issuance of any proposed permit determined by the Administrator not to be in compliance with applicable requirements or requirements under this part.”). When deciding whether a petitioner has met this demonstration requirement, EPA will evaluate the entirety of the permit record, including the statement of basis and response to comments. *See In re Valero Refining-Texas, L.P.*, Order on Petition No. VI-2021-8 (June 30, 2022).

GROUND FOR OBJECTION

For the reasons set forth below, the Title V Permit fails to comply with applicable requirements under the Clean Air Act and requirements under Title V. The Administrator must accordingly object to the issuance of the Title V Permit for the ADI facility.

I. The Title V Permit Fails to Assure Compliance with Applicable National Emissions Standards for Hazardous Air Pollutants

As a new secondary aluminum production facility, the ADI facility is subject to NESHAP at 40 C.F.R. § 63, Subpart RRR, which, as standards promulgated under section 112 of the Clean Air Act, are applicable requirements under Title V. Specifically, the facility is subject to emission standards at 40 C.F.R. § 63.1505 and monitoring requirements under 40 C.F.R. § 63.1510. Unfortunately, the Title V Permit does not assure that the ADI facility operates in compliance with these emission standards and requirements. Specifically, the permit does not set forth the specific applicable monitoring requirements under 40 C.F.R. § 63.1510 and correspondingly fails to assure compliance with visible emission limits that may be applicable under 40 C.F.R. § 63.1505.

Although Petitioner did not comment explicitly as to whether the draft Title V Permit assures compliance with the NESHAP at 40 C.F.R. § 63, Subpart RRR, as will be explained, the grounds for this argument arose after the close of the comment period and after ADEQ modified the draft Title V Permit in such a way that is contrary to the applicable NESHAP.

In comments, the Center raised specific concerns over the failure of the Title V Permit to assure sufficient monitoring of opacity. Pointing to Condition II.C.4.f of Attachment “B” in the draft Title V Permit, which set forth a 10% opacity limit for the Cold Baghouse #1, Hot Baghouse #1, Hot Baghouse #2, and Hot Baghouse #3, all of which control emissions from units subject to 40 C.F.R. § 63, Subpart RRR, the Center raised concerns that the draft permit failed to require sufficient monitoring to assure compliance with this limit. This was in part due to the fact that the draft permit did not “set forth an explicit opacity monitoring requirement.” Exhibit 1, Center Comments at 4.

At the time, Condition II.C.4.f of Attachment “B” in the draft Title V Permit stated that opacity must be measured “in accordance with Condition II.C.4 below.” Condition II.C.4 of

Attachment “B” in the draft permit stated that monitoring must be conducted “[i]n accordance with Condition II.I.5.c. below.” However, as Petitioner commented, Condition II.I.5.c of Attachment “B” in the draft permit, which incorporated provisions of 40 C.F.R. § 63.1510(f), did not actually set forth a specific applicable monitoring method, but rather provided that ADI could utilize one of three monitoring methods: the use of a baghouse leak detection system, the use of a continuous opacity monitoring system (“COMS”), or visible emissions monitoring for the aluminum scrap shredder at the ADI facility. In providing various “options” for monitoring, Petitioner commented, “the permit does not set forth what monitoring is actually required of Aluminum Dynamics.” Exhibit 1, Center Comments at 4.

Condition II.C.4.f of Attachment “B” in the draft Title V Permit made clear that a number of emission units subject to 40 C.F.R. § 63, Subpart RRR at the ADI facility were subject to the 10% opacity limit. Indeed, numerous provisions of 40 C.F.R. § 63.1505 set forth a 10% opacity visible emissions limit for various emission units utilizing add-on particulate matter controls if COMs are utilized. *See* 40 C.F.R. §§ 63.1505(b)(2), (d)(2), (e)(2), (g)(2), (h)(2), (i)(5), and (j)(4). At the ADI facility, the scrap processing system (which involves scrap shredding) is subject to 40 C.F.R. § 63.1505(b), the decoater furnace is subject to 40 C.F.R. § 63.1505(e), and the sidewall melting furnaces and holding furnaces are subject to 40 C.F.R. § 1505(i). These units are all variously controlled by the baghouses referenced in Condition II.C.4.f of Attachment “B” in the draft permit. Accordingly, the Center commented that the permit must require the use of COMS to assure compliance with the applicable 10% opacity limit. *See* Exhibit 1, Center Comments at 4.

In response to comments, ADEQ revised Condition II.C.4.f of Attachment “B” in the final permit to eliminate the reference to a 10% opacity limit and removed the reference to Condition II.C.4. In doing so, the Title V Permit now fails to assure compliance with applicable monitoring requirements at 40 C.F.R. § 63, Subpart RRR.

Under 40 C.F.R. § 63.1505, the 10% opacity limits apply where a source utilizes COMS or, in the case of scrap shredding, COMS or visible emissions monitoring methods. In initially proposing to require a 10% opacity limit for Cold Baghouse #1, Hot Baghouse #1, Hot Baghouse #2, and Hot Baghouse #3, it was clear the permit needed to specifically require the use of COMS (or visible emissions monitoring for scrap processing) to assure sufficient monitoring and compliance with the 10% opacity limit. Now that ADEQ removed the explicit 10% opacity limit for the baghouses, the question is what monitoring methods will actually be utilized by ADI to assure compliance with 40 C.F.R. § 63, Subpart RRR and specifically the fabric filter monitoring requirements at 40 C.F.R. § 63.1510(f)? The Title V Permit does not answer this question and therefore fails to assure compliance with the applicable NESHAP.

40 C.F.R. § 63.1510(f) provides that sources may utilize either a baghouse leak detection system or a COMS to comply with Subpart RRR or, in the case of scrap shredders, a baghouse leak detection system, COMS, or visible emissions monitoring. Rather than identifying what specific method will be applicable to the ADI facility, Condition II.I.5.c of Attachment “B” in the Title V Permit simply restates the potential monitoring options set forth under 40 C.F.R. § 63.1510(f). Restating the monitoring options set forth under 40 C.F.R. § 63.1510(f) does not

assure compliance with any specific monitoring method and therefore does not assure the ADI facility operates in compliance with these applicable requirements.

Although 40 C.F.R. § 63, Subpart RRR may provide a number of potential compliance options, a Title V Permit must identify what specific options are actually applicable to a specific source to ensure the enforceability of the permit. Just listing potentially applicable requirements in federal regulations, such as potentially applicable monitoring options, does not satisfy Title V requirements that permits set forth enforceable limits that assure compliance with applicable requirements. *See* 42 U.S.C. § 7661c(a) and 40 C.F.R. § 70.6(a); *see also In the Matter of South 32, Inc.* Order on Petition No. IX-2024-20 (May 30, 2025) at 35 (“[I]t is ultimately the permitting authority’s responsibility to issue title V permits that include (that is, identify with sufficient detail and clarity) all applicable requirements.”).

Here, it is especially critical for the Title V Permit to have set forth the specific fabric filter monitoring requirements applicable to the ADI facility. Although ADEQ removed the 10% opacity limit in Condition II.C.4.f, the limit may continue to be applicable according to 40 C.F.R. § 63.1505 and the Title V Permit depending on the monitoring method utilized by ADI. For example, Condition II.I.4.a(2), incorporating 40 C.F.R. § 63.1505(b)(2) states that the 10% limit applies “if a continuous opacity monitor (COM) or visible emissions monitoring is chosen as the monitoring option.” *See also* Conditions II.I.4.b(3) and II.I.4.c(4) (incorporating 40 C.F.R. §§ 63.1505(e)(2) and (i)(5), respectively, and providing the 10% limit applies if COMs are chosen as the monitoring option). However, simply stating that the 10% opacity limit applies only “if” a particular monitoring option is utilized does not sufficiently set forth whether it is, in fact, applicable and assure compliance with the applicable requirement. While in the draft Title V Permit it was clear the 10% opacity limit applied, by identifying only monitoring “options,” the Title V Permit now provides no clarity and does not assure compliance with applicable limits.

In this case, if ADI is utilizing COMS, then the 10% opacity limit would, in fact, apply. Or, in the case of the scrap shredder, if visible emissions monitoring is utilized, the 10% limit would also apply. The Title V Permit must identify the specific monitoring method in order to clearly establish whether or not the 10% opacity limit applies so that it can assure compliance.

The need for clarity is underscored by the fact that the Title V Permit actually requires visible emissions monitoring for the Cold Baghouse controlling particulate emissions from the scrap processing system at the ADI facility, meaning the 10% opacity limit is applicable. As Condition II.C.4.f of Attachment “B” now states, ADI must measure opacity from the Cold Baghouse using EPA Reference Method 9. 40 C.F.R. § 63.1510(f)(3)(i), which sets forth requirements for visible emissions monitoring for fabric filters, also requires opacity measurements using EPA Reference Method 9. Under 40 C.F.R. § 63.1505(b)(2), scrap shredding is subject to the 10% opacity limit when visible emission monitoring is utilized, meaning the 10% opacity limit applies to the Cold Baghouse.¹ The Title V Permit, however, does not clearly and specifically state that the 10% opacity limit is applicable and therefore fails to assure compliance with 40 C.F.R. § 63.1505(b)(2).

¹ While described as “scrap processing” in the Title V Permit, scrap processing at ADI involves scrap shredding. *See* Exhibit 4, TSD at 1.

The Administrator must object to the issuance of the Title V Permit for the ADI facility as the permit fails to assure compliance with applicable NESHAP at 40 C.F.R. § 63, Subpart RRR. The permit does not set forth the specific monitoring methods required to assure the baghouses at the ADI facility are monitored in compliance with the NESHAP. Further, the Title V Permit also fails to assure compliance with the NESHAP's 10% opacity limit for the baghouses as it may be applicable. Finally, although the 10% opacity limit applies to the baghouse controlling emissions from scrap processing, the Title V Permit does not explicitly set forth this applicable requirement.

II. The Title V Permit Fails to Set Forth Sufficient Monitoring to Assure Compliance With Applicable Limits

A Title V Permit must set forth monitoring that assures compliance with permits terms and conditions, including “periodic monitoring sufficient to yield reliable data from the relevant time period that are representative of the source’s compliance with the permit[.]” 40 C.F.R. § 70.6(a)(3)(i)(B); *see also* 42 U.S.C. § 7611c(c) and 40 C.F.R. § 70.6(c)(1); *see also In the Matter of XTO Energy Inc., Wildcat Compressor Station*, Order on Petition No. VI-2023-4 (Aug. 7, 2023) at 19-21 (objecting to permit that failed to set forth methodologies for demonstrating compliance with applicable limits). As the EPA has held, determining whether monitoring is adequate in a particular circumstance is generally a context-specific determination made on a case-by-case basis. *In the Matter of CITGO Refining and Chemicals Company, L.P.*, Order on Petition No. VI-2007-01 at 7 (May 28, 2009). Regardless, the rationale for the selected monitoring requirements must be clear and documented in the permit record. 40 C.F.R. § 70.7(a)(5).

Here, the Title V Permit does not set forth sufficient monitoring to assure compliance with hourly emission limits for particulate matter and NO_x from the baghouses at the ADI facility.

A. The Title V Permit Fails to Set Forth Sufficient Monitoring to Assure Compliance with Hourly Particulate Matter Limits Applicable to the Bagoes

In comments on the draft Title V Permit, Petitioner raised specific concerns that the permit did not set forth monitoring sufficient to assure compliance with hourly particulate matter limits for the Cold Baghouse #1, Hot Baghouse #1, Hot Baghouse #2, and Hot Baghouse #3. *See* Exhibit 1, Center Comments at 1-2. Petitioner specifically raised concerns that the permit relied on insufficiently frequent annual particulate matter testing and that the permit did not set forth how annual testing would yield data representative of the source’s compliance with the quantitative limits in the time between testing. The final Title V Permit continues to fail to set forth sufficient periodic monitoring to assure compliance with the hourly particulate matter limits applicable to the ADI facility, contrary to Title V monitoring requirements.

Condition II.C.1.a-d of Attachment “B” in the Title V Permit sets forth hourly PM₁₀ and PM_{2.5} limits applicable to the Cold Baghouse #1, Hot Baghouse #1, Hot Baghouse #2, and Hot Baghouse #3. According to the permit, these limits were established pursuant to Arizona Administrative Code (“A.A.C.”) R18-2-334.C.2. This provision provides that limits for new sources must be established to ensure emissions do not interfere with attainment or maintenance of national ambient air quality standards (“NAAQS”). In this case, the hourly PM₁₀ and PM_{2.5} limits were established to ensure protection of the short-term 24-hour PM₁₀ and PM_{2.5} NAAQS, as well as the longer-term annual PM_{2.5} NAAQS. *See* Exhibit 4, TSD at 23.

To purportedly assure compliance with these limits, Condition II.C.3 of Attachment “B” in the Title V Permit requires that ADI conduct a performance test no later than 180 days after initial start-up and annually thereafter. The Title V Permit does not otherwise explicitly point to or set forth any other specific monitoring to assure compliance with the hourly particulate matter limits. Condition II.C does not otherwise set forth additional monitoring to assure compliance with the hourly particulate matter limits. This limited monitoring is problematic and contrary to Title V requirements. Where underlying applicable requirements do not set forth monitoring, permits must set forth sufficient periodic monitoring that yields data from the relevant time period that is representative of a source’s compliance status. *See* 40 C.F.R. § 70.6(a)(3)(i)(B).

To begin with, as Petitioner commented, annual monitoring alone is insufficiently frequent to assure compliance with the hourly particulate matter limits. While annual testing may provide data regarding compliance with hourly limits at the time of the test, it does not otherwise yield data representative of the source’s compliance the remainder of the year. While an annual test may be a valid method for determining compliance with long-term limits (e.g., ton per year limits), an annual test cannot possibly provide data representative of a source’s compliance with short-term hourly limits that apply on a continuous basis. As the EPA has consistently held:

[P]eriodic stack testing alone is insufficient to assure compliance with short-term emission limits. *See e.g., In the Matter of Oak Grove Management Company, Oak Grove Steam Electric Station*, Order on Petition No. VI-2017-12 at 25–26 (October 15, 2021); *In the Matter of Owens-Brockway Glass Container Inc.*, Order on Petition No. X-2020-2 at 14–15 (May 10, 2021).

See In the Matter of CF Industries East Point, LLC, Order on Petition No. VI-2024-11 (June 25, 2024) at 8. Here, the Title V Permit identifies annual performance testing as the sole means for demonstrating compliance with hourly particulate matter limits. Such reliance on long-term stack testing alone is insufficient to assure compliance with the applicable hourly limits.

Adding to the problem is that the Title V Permit does not explain whether or how annual test data will be extrapolated to demonstrate continuous compliance during the times between tests. If the annual test demonstrates that the ADI facility is out of compliance with one or more hourly limits, would this indicate the source has been out of compliance every hour since the previous test? Or would ADI’s hourly particulate matter emissions in the hours since the previous test simply be ignored? For testing required for other pollutants, such as NO_x and VOCs, the Title V Permit provides that testing data be utilized to develop emission factors that

are then utilized to calculate emissions on an ongoing basis. *See* Conditions II.D.4 and II.F.3 of Attachment “B” of the Title V Permit.² Even if annual testing alone could possibly be sufficient, the Title V Permit does not explain how the testing required by Condition II.C.3 of Attachment “B” yields reliable data representative of the source’s compliance during all hours between tests.

It is difficult to discern a response to the Center’s comments on this issue. In ADEQ’s response to comments, there does not appear to be a direct response. ADEQ does not otherwise explain its rationale for determining that annual testing was sufficient to assure compliance with the hourly particulate matter limits. Neither the response to comments nor the TSD provide any specific explanation.

Indirectly it appears that ADEQ likely believes that because the baghouses are also subject to other related applicable requirements, primarily including 40 C.F.R. § 63, Subpart RRR, that the Title V Permit overall assures sufficient monitoring. In response to general comments regarding “concerns over periodic performance testing not being sufficient to demonstrate compliance with emission limits,” ADEQ responded:

Other monitoring requirements include COMS [continuous opacity monitoring system], daily visible emission observations, or installing BLDS [bag leak detector system] implementation of an OM&M plan that includes requirements for operating each capture and collection system and process unit.

Exhibit 2, Response to Comments at 42-43. While other requirements may apply to the baghouses, taken together with annual testing, these overall requirements still do not set forth sufficient periodic monitoring that assures compliance with the hourly particulate matter limits.

To begin with, as ADEQ acknowledges, the Title V Permit does not specifically set forth that ADI must utilize a COMS, must conduct daily visible emission observations, or must install a bag leak detection system. These requirements stem from requirements in 40 C.F.R. § 63, Subpart RRR and are generally set forth in Condition II.I of Attachment “B”. While the Title V Permit presents these three means of monitoring as options, the permit does not identify what one specific option ADI must utilize. Condition II.I.5.c.1 of Attachment “B” provides that ADI shall utilize a bag leak detection system or a COMS, but does not require that any specific option be utilized. The Title V Permit also provides that for the Cold Baghouse #1 controlling emissions from scrap processing, ADI may utilize a bag leak detection system, COMS, or visible emissions monitoring, but again does not require that any one specific monitoring method be utilized. As discussed previously in this Petition, the Title V Permit cannot simply provide a menu of options to satisfy the requirement to set forth specific periodic monitoring. Not only does this render the monitoring requirements in the Title V Permit unenforceable as it is unclear what monitoring methods actually apply, but it simply does not set forth the specific monitoring method required. The permit must identify what specific method ADI is required to utilize and the Title V Permit must assure compliance with this method.

² Although, as will be explained further, the Title V Permit only appears to require calculation of monthly NO_x emissions to assure compliance with 12-month rolling limits and not calculation of hourly emissions to assure compliance with hourly limits.

Regardless, neither monitoring option appears to yield reliable data from the relevant time period that is representative of ADI's compliance with the applicable hourly particulate matter limits.

With regards to a bag leak detection system, this would yield data regarding whether the baghouses are functioning properly. This could be indicative of an exceedance of one or more hourly particulate matter limits, but it does not provide data representative of whether the source is actually in compliance with the numerical particulate matter limits. Condition II.I.5.c.1 of Attachment "B" does require that any leak detection system provide output of relative or absolute particulate matter loadings, but this does not appear to yield data specifically representative of the mass of PM₁₀ and PM_{2.5} released in any one hour such that it can be determined whether the hourly limits are being met. The Condition also requires an alarm system to sound when relative particulate matter emissions increase over a preset level, but it does not state that such an occurrence indicates an exceedance of any hourly limit.

If baghouse leak detection monitoring is intended to obtain data representative of compliance with the hourly particulate matter limits, the Title V Permit must clearly set forth how such data represents compliance with the limits. It currently does not. While baghouse leak detection monitoring could be a valuable tool for determining if further particulate matter monitoring is necessary to assure compliance, the Title V Permit does not set forth such a system for utilizing baghouse leak detection monitoring data as a trigger for further monitoring. As the Title V Permit is written, baghouse leak detection monitoring would only yield data representative of whether the baghouse is performing properly, not whether the source is in compliance with hourly particulate matter limits.

With regards to COMS, this would also yield data regarding whether the baghouses are functioning properly, but it would not yield data representative of compliance with the hourly particulate matter limits. As ADEQ notes in its response to comments, "Opacity is an indicator of performance for processes and control devices and if COMS or visible emission observations are over the applicable standard, it could indicate issues with the fabric filter or baghouse performance." Exhibit 2, Response to Comments at 70. Similar to baghouse leak detection monitoring, while COMS would yield data indicating whether the baghouses are performing properly, it would not provide data representative of whether the source is actually in compliance with the numerical particulate matter limits. Although COMS would yield data regarding compliance with applicable quantitative opacity limits, the Title V Permit does not set forth that quantitative opacity values correlate in any way to quantitative PM₁₀ and PM_{2.5} emissions.

If COMS are intended to obtain data representative of compliance with the hourly particulate matter limits, the Title V Permit must clearly set forth how such data represents compliance with the limits. It currently does not. COMS could be a valuable tool for determining if further particulate matter monitoring is necessary to assure compliance. Further, quantitative opacity values could be correlated with quantitative particulate matter emissions, thereby providing representative data regarding compliance. However, the Title V Permit neither sets forth a system for utilizing COMS data as a trigger for further monitoring nor correlates opacity values to particulate matter emissions. As the Title V Permit is written,

COMS would only yield data representative of whether the baghouse is performing properly and whether the source is in compliance with applicable opacity limits, not whether the source is in compliance with the hourly particulate matter limits.

With regards to visible emissions monitoring, this again would yield data regarding whether the baghouses are performing properly and whether the source is in compliance with applicable opacity limits, but it would not yield data representative of compliance with applicable hourly particulate matter limits. In the Title V Permit, daily visible emissions monitoring may be used to monitor emissions from the Cold Baghouse #1, which controls emissions from scrap processing, and assure compliance with the applicable 10% opacity limit, but weekly visible emissions monitoring is required for all baghouses to assure compliance with a 20% opacity limit. *See* Condition II.C.1.f and II.C.4 of Attachment “B”. Again, while visible emissions monitoring would yield data indicating whether the baghouses are performing properly, it would not provide data representative of whether the source is actually in compliance with the numerical particulate matter limits. Although visible emissions monitoring would yield data regarding compliance with applicable quantitative opacity limits, the Title V Permit does not set forth that quantitative opacity values correlate in any way to quantitative PM₁₀ and PM_{2.5} emissions.³

If visible emissions monitoring is intended to obtain data representative of compliance with the hourly particulate matter limits for scrap processing, the Title V Permit must clearly set forth how such data represents compliance with the limits. It currently does not. Visible emissions monitoring could be a valuable tool for determining if further particulate matter monitoring is necessary to assure compliance. Further, quantitative opacity values could be correlated with quantitative particulate matter emissions, thereby providing representative data regarding compliance. However, the Title V Permit neither sets forth a system for utilizing visible emissions data as a trigger for further monitoring nor correlates opacity values to hourly particulate matter emissions. As the Title V Permit is written, visible emissions monitoring would only yield data representative of whether the baghouse is performing properly and whether the source is in compliance with applicable opacity limits, not whether the source is in compliance with hourly particulate matter limits.

It is telling that, with regards to the particulate matter limits set forth under the NESHAP at 40 C.F.R. § 63, Subpart RRR that are applicable to the baghouses at the ADI facility, the applicable requirements actually require the source to establish minimum or maximum operating parameter values or ranges to be monitored to ensure compliance with the particulate matter limits. 40 C.F.R. § 1511(g), which is also set forth at Condition II.I.6.f of Attachment “B” in the Title V Permit, states that ADI “[S]hall establish a minimum or maximum operating parameter value, or an operating parameter range for each parameter to be monitored as required by

³ The fact that the Title V Permit establishes two different—and seemingly conflicting—opacity limits for the baghouses underscores that opacity is not reliably correlated with the mass of particulate matter emissions. The Title V Permit provides that the 10% opacity limit, which is set forth under 40 C.F.R. § 63, Subpart RRR, may apply to the baghouses, depending on the selected monitoring option. If the 10% limit does not apply, then the 20% limit applies. If opacity is meant to be a surrogate for particulate matter emissions, it is unclear whether this relationship would apply under either the 10% limit or the 20% limit, or both. Regardless, the Title V Permit does not set forth a relationship between quantitative opacity values and quantitative particulate matter emissions.

Condition II.I.5 above, that ensures compliance with the applicable emission limit or standard.” These parametric monitoring values must also be incorporated into the operation, maintenance, and monitoring (“OM&M”) plan as required by 40 C.F.R. § 63.1510(b). This indicates that if parameters are to be relied upon to ensure compliance with particulate matter limits, that actual parametric values or ranges must be established and monitored so as to clearly indicate compliance with such limits.

Unfortunately, the applicable particulate matter limits set forth under 40 C.F.R. § 63, Subpart RRR do not include the hourly PM₁₀ and PM_{2.5} emission limits set forth in the Title V Permit. This means that to the extent that 40 C.F.R. § 63.1511(g) may yield parametric values that ensure compliance with the NESHAP, they do not ensure compliance with the hourly limits. This further means that to the extent parametric monitoring values are incorporated into the OM&M plan, which ADEQ also points to in asserting the Title V Permit sets forth sufficient monitoring that assures compliance with hourly particulate matter limits, these values do not actually assure compliance with these limits.

In this case, if the Title V Permit is to rely on parametric monitoring, particularly baghouse leak detection systems, COMs, or visible emissions monitoring, to assure compliance with the hourly PM₁₀ and PM_{2.5} applicable to the baghouses, it must require that actual parametric values or ranges be established that are representative of compliance with the hourly limits. As discussed above, the Title V Permit does not require that such parametric values or ranges be established and monitored such that it assures compliance with the hourly limits in the time between annual performance tests.

The Administrator must object to the issuance of the Title V permit over its failure to set forth monitoring sufficient to assure compliance with the applicable hourly particulate matter limits for Cold Baghouse #1, Hot Baghouse #1, Hot Baghouse #2, and Hot Baghouse #3.

B. The Title V Permit Fails to Set Forth Sufficient Monitoring to Assure Compliance with Hourly Nitrogen Oxide Limits Applicable to the Hot Baghouses

In comments on the draft Title V Permit, Petitioner raised specific concerns that the permit did not set forth monitoring sufficient to assure compliance with hourly NO_x limits for the Hot Baghouse #1, Hot Baghouse #2, and Hot Baghouse #3. *See* Exhibit 1, Center Comments at 4-6. Petitioner specifically raised concerns that the permit relied on insufficiently frequent annual NO_x testing and that the permit did not set forth how annual testing would yield data representative of the source’s compliance with the quantitative limits in the time between testing.

In response to comments, ADEQ decided to increase the frequency of NO_x testing from annual to semi-annual testing. However, the final Title V Permit continues to fail to set forth sufficient periodic monitoring to assure compliance with the hourly NO_x limits applicable to the ADI facility, contrary to Title V monitoring requirements.

Condition II.D.1.a-c of Attachment “B” in the Title V Permit sets forth hourly PM₁₀ and PM_{2.5} limits applicable to the Hot Baghouse #1, Hot Baghouse #2, and Hot Baghouse #3.

According to the permit, these limits were established pursuant to Arizona Administrative Code (“A.A.C.”) R18-2-334.C.2. This provision provides that limits for new sources must be established to ensure emissions do not interfere with attainment or maintenance of national ambient air quality standards (“NAAQS”). In this case, the hourly NO_x limits were established to ensure protection of the short-term one-hour NO_x NAAQS (measured by nitrogen dioxide, or NO₂). *See* Exhibit 4, TSD at 23.

To purportedly assure compliance with these limits, Condition II.D.3 of Attachment “B” in the Title V Permit requires that ADI conduct a performance test no later than 180 days after initial start-up and semi-annually thereafter. The Title V Permit does not otherwise explicitly point to or set forth any other specific monitoring to assure compliance with the hourly NO_x limits. Condition II.D does not otherwise set forth additional monitoring to assure compliance with the hourly particulate matter limits. This limited monitoring is problematic and contrary to Title V requirements. Where underlying applicable requirements do not set forth monitoring, permits must set forth sufficient periodic monitoring that yields data from the relevant time period that is representative of a source’s compliance status. *See* 40 C.F.R. § 70.6(a)(3)(i)(B).

Here, semi-annual monitoring alone is insufficiently frequent to assure compliance with the hourly NO_x limits. While semi-annual testing may provide data regarding compliance with hourly limits at the time of the test, it does not otherwise yield data representative of the source’s compliance between testing. While a semi-annual test may be a valid method for determining compliance with long-term limits, such as rolling 12-month totals, a semi-annual test cannot possibly provide data representative of a source’s compliance with short-term hourly limits that apply on a continuous basis. As the EPA has consistently held:

[P]eriodic stack testing alone is insufficient to assure compliance with short-term emission limits. *See e.g., In the Matter of Oak Grove Management Company, Oak Grove Steam Electric Station*, Order on Petition No. VI-2017-12 at 25–26 (October 15, 2021); *In the Matter of Owens-Brockway Glass Container Inc.*, Order on Petition No. X-2020-2 at 14–15 (May 10, 2021).

See In the Matter of CF Industries East Point, LLC, Order on Petition No. VI-2024-11 (June 25, 2024) at 8. Here, the Title V Permit identifies semi-annual performance testing as the sole means for demonstrating compliance with hourly NO_x limits. Such reliance on long-term stack testing alone is insufficient to assure compliance with the applicable hourly limits.

Adding to the problem is that the Title V Permit does not explain whether or how long-term test data will be extrapolated to demonstrate continuous compliance during the time between tests. If the semi-annual test demonstrates that the ADI facility is out of compliance with one or more hourly limits, would this indicate the source has been out of compliance every hour since the previous test? Or would ADI’s hourly NO_x emissions in the hours since the previous test simply be ignored?

It is telling that, with regards to the rolling 12-month NO_x limits set forth at Condition II.D.1.d-f of Attachment “B”, the Title V Permit provides that testing data be utilized to develop emission factors that are then utilized to calculate monthly emissions on a rolling basis. *See*

Conditions II.D.4 of Attachment “B” of the Title V Permit. The permit provides no similar explanation for how test data must be utilized to calculate hourly emissions and assure compliance with the applicable limits. If the permit requires that hourly emissions somehow be extrapolated from monthly calculations, there is no explanation for how this is to be done. This raises concerns that any hourly emissions data extrapolated from longer-term monthly calculations would not be representative of the source’s compliance with the actual limits. Indeed, if it is intended that hourly emissions be calculated based on monthly emissions divided by hours of operation, this would yield data that would very likely underestimate instances where actual hourly emissions exceeded the applicable limits. Regardless, the Title V Permit does not explain how hourly NO_x emissions are to be calculated.

In comments on the draft Title V Permit, the Center raised specific concerns over the failure of the Title V Permit to explain how testing data would be used to calculate hourly NO_x emissions and assure compliance between testing. *See* Exhibit 1, Center Comments at 5-6. It is difficult to discern a response to this comment on this issue. In ADEQ’s response to comments, there does not appear to be a direct response. ADEQ provides a rationale for requiring semi-annual testing to assure compliance with the rolling 12-month limits and explains how rolling 12-month emissions will be calculated. *See* Exhibit 2, Response to Comments at 52. ADEQ does not otherwise explain its rationale for determining that semi-annual testing was sufficient to assure compliance with the hourly particulate matter limits or otherwise explain how semi-annual testing data will be used to calculate hourly NO_x emissions in the time between tests.

The Administrator must object to the issuance of the Title V permit over its failure to set forth monitoring sufficient to assure compliance with the applicable hourly NO_x limits for Hot Baghouse #1, Hot Baghouse #2, and Hot Baghouse #3.

CONCLUSION

Pursuant to 42 U.S.C. § 7611d(b)(2) and 40 C.F.R. § 70.8(d), the EPA must object to the issuance of the Title V Permit for the ADI facility in the town of Benson in Cochise, County Arizona. As this Petition demonstrates, the Title V Permit fails to assure compliance with applicable requirements under the Clean Air Act and applicable requirements under Title V. Accordingly, Petitioner requests that the Administrator object to the Title V Permit and require ADEQ to revise and reissue the Permit in a manner that complies with the requirements of the Clean Air Act.

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Respectfully submitted,



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cc (per 40 C.F.R. § 70.8(d) and A.A.C. R18-2-307(E)):

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