

BEFORE THE UNITED STATES ENVIRONMENTAL
PROTECTION AGENCY

PETITION TO OBJECT TO THE ISSUANCE OF A TITLE V
OPERATING PERMIT

Facility: HyCast Foundry, LLC

Facility ID: 51-01-005

Facility Address: 905 West Depot Avenue, Fairfield, Iowa
52556

Permit Action: Title V Operating Permit Renewal

Permit Number: 99-TV-058R4

Permitting Authority: Iowa Department of Natural Resources,
Air Quality Bureau

EPA Region: Region 7

PETITIONER

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This Petition is submitted pursuant to Clean Air Act § 505(b)(2), 42 U.S.C. § 7661d(b)(2), and 40 C.F.R. §§ 70.8(d) and 70.12, requesting that the Administrator object to issuance of the Title V Operating Permit renewal for HyCast Foundry, LLC, Facility No. 51-01-005, Permit No. 99-TV-058R4.

Date Filed: September 2, 2026

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TABLE OF CONTENTS

PART 0 – Jurisdiction, Timeliness, and Preservation of Issues 7

- I. Jurisdiction 8
- II. Timeliness 8
- III. Standing and Participation 9
- IV. Preservation of Issues 10
- V. Standard of Review 12

PART 1 – Executive Summary and Legal Authority 15

A. What’s Wrong with This Permit in Plain Terms 16

B. What the Law Requires 21

C. Monitoring Requirements Apply Even When a Facility Is Not a Major Source 22

D. Why Additional Monitoring Is Required to Assure Compliance 24

PART 2 – Failure to Demonstrate That Required Title V Findings Remain Defensible 30

PART 2A – EPA 45-Day Non-Objection 37

PART 2B – April 2026 EP240 Stack Test 49

PART 2C – DNR July 31 Investigation 68

PART 2D – August 10 Compliance Plan / NOV-HPV Status 72

PART 2E – Absence of Final Title V Permit 77

PART 2F – Claim Preservation and Responsiveness-Summary Citations 78

PART 2G – Untimely Final Action / Unresolved Compliance Record 85

PART 2H – Draft/Proposed Permit Reconciliation 116

PART 2I – EP240 Compliance Assurance Monitoring (CAM) 123

PART 3 – Ground I: Compliance During Normal Operations 136

PART 4 – Ground II: Operational and Feedstock Variability 158

PART 5 – Ground III: Pollution-Control Performance 169

PART 6 – Ground IV: Pollutants Not Addressed by Particulate Controls 186

PART 7 – Ground V: Monitoring of Pollutants Leaving the Facility 197

PART 8 – Ground VI: HAP / Source Classification / Applicability 210

PART 9 – Conclusion and Request for Relief 237

PART 10 – Response to the Responsiveness Summary 239
Incorporation of Appendix J 239

PART 11 – Appendices 240

APPENDIX A – Public Comment Letters 241

APPENDIX B – Stack Testing and Historical Test Data 242

APPENDIX C – Monitoring and Compliance Framework 244

C-1 – Monitoring Requirements in Permit, Fact Sheet, and Application 244

C-2 – Proposed Air Monitoring Plan (Fenceline and Community Monitoring) 244

APPENDIX D – Historical Emissions Inventory 245

**APPENDIX E – Supporting Technical and Public Materials
245**

APPENDIX F – DNR Correspondence 246

**APPENDIX G – Administrative Record and Application
Materials 251**

**APPENDIX H – Responsiveness Summary and Proposed
Title V Permit 252**

APPENDIX I – Public Health and Exposure Data 252

**APPENDIX J – Administrative Record Response Analysis
and Matrix Synthesis 253**

Part I – Individual Comment Analysis (#1–108) 253

Part II – Administrative Record Synthesis 1348

Part II.A – Ground Support Matrix 1359

Part II.B – Verification Matrix 1398

Part II.C – Non-Discretionary Duty Matrix 1404

Part II.D – Recurring DNR Boilerplate Response Matrix 1411

Part II.E – Narrative Synthesis of Unresolved Issues 1416

**APPENDIX K – Feasible Methods to Verify Off-Site Lead
Deposition 1423**

**APPENDIX L – Anticipated EPA Responses and Preemptive
Rebuttal 1423**

**BEFORE THE U.S. ENVIRONMENTAL PROTECTION
AGENCY**

PETITION TO OBJECT TO THE ISSUANCE OF THE HYCAST TITLE V OPERATING PERMIT

(Clean Air Act §505(b)(2), 42 U.S.C. §7661d(b)(2))

PART 0 – JURISDICTION, TIMELINESS, AND PRESERVATION OF ISSUES

I. Jurisdiction

This Petition is submitted pursuant to Section 505(b)(2) of the Clean Air Act, 42 U.S.C. § 7661d(b)(2), requesting that the Administrator object to the issuance of the Title V Operating Permit renewal for HyCast Foundry, LLC, Facility No. 51-01-005, **Permit No. 99-TV-058R4**. At the time this Petition was prepared, Iowa DNR had not yet issued the final Title V Operating Permit. Iowa DNR has confirmed that the permit number for this permitting action is **99-TV-058R4** and that this permit number will not change. Accordingly, the permitting action is identified throughout this Petition by the facility name, Facility No. 51-01-005, Permit No. 99-TV-058R4, the proposed permit, the Responsiveness Summary, and the associated administrative record.

The Administrator has authority to object to a Title V permit where the petitioner demonstrates that the permit is not in compliance with applicable requirements of the Clean Air Act and Title V permitting regulations.

II. Timeliness

This petition is submitted pursuant to Clean Air Act § 505(b)(2), 42 U.S.C. § 7661d(b)(2), within the time period prescribed for

petitions requesting that the Administrator object to the issuance of a Title V operating permit. Accordingly, this petition is timely.

III. Standing and Participation

Petitioner, Robert Smistik, has standing because he actively participated in the state permitting process by submitting written comments and raising the issues presented in this petition.

The issues raised herein were presented with reasonable specificity during the public comment process and therefore satisfy the preservation requirements of Section 505(b)(2).

Petitioner submitted or supported a total of 108 numbered comments and related supporting materials addressing monitoring adequacy, compliance assurance, operational variability, pollution-control performance, hazardous air pollutant inventories, source-classification determinations, applicability findings, permit enforceability, and related Clean Air Act requirements.

This permitting action generated substantial public participation, including the Fairfield Clean Air public meeting documented in Appendix E-2. A community petition expressing concern regarding renewal of the HyCast Foundry Title V Operating Permit under the new ownership was signed by **426 individuals (Appendix A)**. In addition, 247 individual public comments (Appendices A, A-1, and A-2) were submitted to Iowa DNR addressing the proposed permit, including concerns regarding hazardous air pollutant emissions, particulate matter emissions, monitoring, compliance assurance, permit enforceability, and

related Clean Air Act issues. Additional public-participation materials, including the January 16, 2026 public-involvement letter, the HyCast public-hearing presentation, and the complete public-hearing transcript, are included in Appendices E-3, E-4, and E-5.

IV. Preservation of Issues

The grounds presented in this petition were raised repeatedly throughout the administrative record, including public comments, supporting submissions, hearing testimony, technical analyses, correspondence, and supplemental filings.

The issues presented in Grounds I through VI were not raised in isolated comments. Rather, they were developed throughout the public-comment process and repeatedly presented from multiple perspectives, including monitoring adequacy, compliance assurance, operational variability, pollution-control performance, hazardous air pollutant inventories, source-classification determinations, applicability findings, emissions calculations, permit enforceability, and off-site impact verification.

Appendix J contains the complete preservation analysis for this petition. Appendix J provides a comment-by-comment evaluation of all 108 comments submitted during the public-comment process, identifies the issues preserved by each comment, summarizes DNR's responses, evaluates the adequacy of those responses, and identifies the corresponding grounds presented in this petition.

The preservation analysis contained in Appendix J demonstrates that the issues presented in Grounds I through VI were repeatedly raised throughout the administrative record and were presented with sufficient specificity to satisfy the preservation requirements of Clean Air Act § 505(b)(2), 42 U.S.C. § 7661d(b)(2).

Appendix J also preserves issues relating to source-classification determinations, hazardous air pollutant inventory development, applicability findings, emissions-calculation support, non-discretionary duties associated with permit issuance, and the need for sufficient information in the administrative record to independently verify the basis of emissions inventories, applicability conclusions, and related permit determinations. These issues are developed further in Ground VI and throughout the Verification Analysis, Non-Discretionary Duty Analysis, and Administrative Record Synthesis contained in Appendix J.

Subsequent Evidence

Unless expressly stated otherwise, evidence and agency actions arising after the close of the public-comment period are not presented as new or independent Grounds for objection. They are cited as subsequent evidence relevant to, and corroborating, issues raised with reasonable specificity during the public-comment period and developed in Grounds I through VI. These subsequent materials do not alter the underlying objections; they provide additional factual evidence bearing upon the monitoring, representative-operation, operational-variability, control-performance, emissions-verification, source-classification, applicability, and compliance-assurance issues already preserved in the administrative record. To the extent EPA determines that

a particular objection is based upon grounds that arose only after the public-comment period, Petitioner alternatively relies upon the post-comment provisions of 40 C.F.R. §§ 70.8(d) and 70.12(a)(2)(v).

V. Standard of Review

Petitioner's Burden Under Clean Air Act § 505(b)(2)

Clean Air Act § 505(b)(2), 42 U.S.C. § 7661d(b)(2), places upon Petitioner the burden of demonstrating that the permit does not comply with applicable requirements or the requirements of Title V. *See Voigt v. EPA*, 46 F.4th 895 (8th Cir. 2022).

Petitioner does not ask EPA merely to investigate unresolved questions, require Iowa DNR to disprove Petitioner's concerns, or object simply because the administrative record contains uncertainty. Rather, each Ground identifies the applicable Title V requirement, the specific deficiency in the permit or permitting determination, the evidence demonstrating that deficiency, the manner in which the issue was preserved during public participation, DNR's response where applicable, and why that response does not resolve the demonstrated permit deficiency.

The evidence presented in this Petition affirmatively demonstrates the deficiencies alleged. In particular, the April 7, 2026 EP240 performance test provides direct operating evidence confirming several concerns previously raised during public participation. The test demonstrated substantial noncompliance with applicable particulate-matter requirements. Newly produced DNR records further establish that one of HyCast's induction furnaces became unavailable immediately before the

scheduled test and that HyCast informed DNR on April 6, 2026 that it intended to proceed using a single furnace. The three compliance runs consequently did not achieve the 90%+ capacity operating condition specified in the approved test protocol. In light of the newly disclosed equipment failure, Petitioner does not rely upon the reduced production rate, standing alone, as evidence that HyCast intentionally or inexplicably failed to test at the protocol's targeted operating condition. The April 7 test nevertheless remains material because EP240 substantially exceeded applicable particulate-matter limits during the compliance demonstration, and HyCast subsequently identified pollution-control deficiencies—not the unavailable furnace—as the primary and potential contributing causes of the excessive particulate emissions. Those subsequent findings directly bear on Petitioner's previously preserved objections concerning control-device performance, monitoring adequacy, operational variability, and the ability of the permit to assure continuing compliance. See Appendices F-15 and F-17.

Accordingly, references throughout this Petition to matters that DNR “failed to demonstrate,” that the administrative record “does not demonstrate,” or that remain “unverified” are not intended to shift the statutory burden of demonstration from Petitioner to DNR. Those references identify deficiencies in the factual and technical basis upon which the permitting authority relied. Petitioner's ultimate contention is that the evidence and analysis presented herein satisfy Petitioner's burden under § 505(b)(2) by demonstrating that the permit does not contain conditions, monitoring, testing, recordkeeping, reporting, and compliance-assurance provisions sufficient to satisfy the

applicable Title V requirements identified in Grounds I through VI.

In particular, the petition demonstrates deficiencies relating to compliance assurance under Clean Air Act Section 504(c), 42 U.S.C. § 7661c(c), and 40 C.F.R. § 70.6(a)(3), which require monitoring sufficient to assure compliance with permit terms and conditions.

The issue presented is not whether HyCast is presently in compliance with permit limits at a particular moment in time. **Rather, the issue is whether the permit contains monitoring and compliance assurance mechanisms sufficient to assure ongoing compliance throughout the permit term under varying operating conditions.**

Throughout this Petition, the recurring issue is not whether DNR was required to adopt every monitoring, testing, or verification measure requested by commenter. Rather, the issue is whether DNR demonstrated that the monitoring, testing, recordkeeping, reporting, calculations, assumptions, compliance demonstrations, and permit determinations it approved are sufficient to assure compliance under the specific uncertainties identified throughout the administrative record. The administrative record does not identify where DNR performed that analysis for many of the recurring concerns raised by commenter.

For the reasons set forth in Grounds I through VI and the supporting appendices, Petitioner affirmatively demonstrates that the permit's monitoring and compliance-assurance provisions, applicability determinations, emissions inventories,

and related permit findings do not satisfy the applicable requirements of the Clean Air Act and Title V. EPA should therefore object under Clean Air Act §505(b)(2), 42 U.S.C. §7661d(b)(2), and require such permit revisions as are necessary to assure compliance with applicable requirements.

PART 1 — EXECUTIVE SUMMARY AND LEGAL AUTHORITY

This petition challenges the proposed Title V operating permit for HyCast Foundry, LLC on the ground that the administrative record does not demonstrate that the monitoring, testing, recordkeeping, reporting, emissions inventories, applicability determinations, compliance demonstrations, and related permit findings are sufficient to assure compliance with applicable Clean Air Act requirements. **As demonstrated throughout Grounds I through VI, the permit relies upon assumptions, calculations, historical testing, and permit determinations that are not independently verified under actual operating conditions, contrary to the compliance-assurance requirements of Clean Air Act § 504(c), 42 U.S.C. § 7661c(c), and 40 C.F.R. § 70.6(a)(3).**

Subsequent events transformed those preserved concerns from prospective compliance-assurance objections into concerns corroborated by actual operating evidence. On April 7, 2026, direct compliance testing of EP240 demonstrated substantial particulate-matter noncompliance. HyCast subsequently identified a tube-sheet/bag-sealing problem as the primary root cause of the excessive particulate emissions and an isolation-damper problem as a potential contributing factor. DNR classified the violations as ongoing High Priority Violations,

required corrective action, and delayed further Title V permitting activity while the compliance matter was addressed. These events do not create new Grounds for objection; they provide concrete post-comment evidence bearing directly upon objections already preserved concerning whether the permit can detect deteriorating control performance, determine compliance during routine operation, and assure continuing compliance between infrequent direct emissions tests. See Appendices F-8 and F-15.

A. What's wrong with this permit in plain terms

The central defect in this permit is no longer merely theoretical. During public comment, Petitioner repeatedly warned that the permit relies upon assumptions about pollution-control performance without sufficient monitoring to determine whether those assumptions remain true during normal operation (#31, #64, #91). The April 7, 2026 EP240 compliance test subsequently demonstrated substantial particulate-matter noncompliance, and HyCast later identified physical deficiencies in the particulate-control system as the primary and potential contributing causes of the excessive emissions. The permit nevertheless continues to depend substantially upon periodic testing and indirect monitoring to assure compliance between direct emissions tests. The subsequent compliance failure therefore provides concrete evidence corroborating the precise compliance-assurance concern raised during public comment: whether the permit contains monitoring capable of providing meaningful and timely indication when pollution-control performance deteriorates and compliance is no longer being achieved. See Appendices F-8 and F-15.

As reflected in the administrative record, emissions from the facility are influenced by scrap composition, operating conditions, and control performance, resulting in variability that cannot be verified through the permit's current monitoring framework and reinforcing the need for monitoring sufficient to assure compliance under Clean Air Act §504(c), 42 U.S.C. §7661c(c), and 40 C.F.R. §70.6(a)(3).

Because emissions are influenced by feedstock composition, the absence of any enforceable definition or limitation on allowable materials further undermines the reliability of emissions estimates and testing. Without such conditions, the permit does not ensure that the assumptions underlying emissions calculations and compliance demonstrations reflect actual operations, and therefore fails to assure compliance as required under Clean Air Act §504(c), 42 U.S.C. §7661c(c), and 40 C.F.R. §70.6(a)(3).

The permit also relies on stack testing about once every five years. **A five-year stack test is only a brief snapshot and cannot show what emissions are doing during the other 1,800+ days between tests (#31, #64).**

Past emissions reports show pollution levels have changed from year to year (#79), and the record explains that emissions are affected by scrap metal composition and economically influenced feedstock choices (#78).

In other words, emissions are not fixed, predictable, or fully captured by occasional tests and calculations.

The April 7, 2026 EP240 failure demonstrates the practical consequence of that monitoring gap. Direct compliance testing revealed substantial particulate-matter noncompliance that the permit's routine monitoring framework had not independently established. As of August 27, 2026, DNR further confirmed that it did not possess the additional underlying EP240 CAM records requested by Petitioner. Petitioner does not contend that those records were required to be routinely submitted to DNR. Rather, once direct compliance testing demonstrated substantial noncompliance, the CAM record became material to determining whether the approved monitoring had detected the condition associated with the failure and whether monitoring changes were necessary under 40 C.F.R. § 64.7(e). The available record does not establish that DNR had obtained and evaluated that underlying CAM information to make that determination. See Appendix F-18.

The record also indicates that different pollutants are not controlled equally by particulate control systems. While baghouses may achieve high overall particulate removal efficiency (often cited near 99%), available information indicates that lead-bearing particulate may be captured at substantially lower efficiency than total particulate matter, as reflected in information contained in the administrative record.

This means that even when total particulate emissions appear well controlled, hazardous metal pollutants such as lead may be escaping at significantly higher relative rates.

Because the permit relies on particulate matter as a general indicator of control performance, but does not include monitoring capable of distinguishing between total particulate

and specific hazardous metal content, it cannot verify whether the most hazardous pollutants are being effectively controlled during operation.

These deficiencies must be evaluated cumulatively, not in isolation. The permit relies upon infrequent direct emissions testing, indirect indicators of control performance, assumptions concerning control efficiency, and emissions calculations affected by changing operating and feedstock conditions. When those mechanisms are considered together with the April 7 compliance failure and the subsequently identified control-system deficiencies, the record demonstrates more than uncertainty about whether additional monitoring might be useful. It demonstrates a concrete compliance-assurance problem: the permit does not establish a monitoring framework capable of reliably determining whether the assumptions upon which continuing compliance depends remain valid during actual operation. Title V does not permit that question to remain unresolved. Clean Air Act § 504(c), 42 U.S.C. § 7661c(c), and 40 C.F.R. §§ 70.6(a)(3) and 70.6(c)(1) require monitoring and related compliance-assurance provisions sufficient to assure compliance with permit terms and conditions.

Independently, DNR's permitting determination presents a substantial reasoned-decisionmaking deficiency. Throughout the Responsiveness Summary (Appendix H-1), DNR repeatedly relied upon generalized assertions—including that Iowa cannot be more stringent than EPA, that existing permit requirements are sufficient, and that applicable requirements are already incorporated—without explaining how the permit's actual monitoring and compliance-assurance provisions resolve the

specific operational-variability, control-performance, pollutant-specific, and verification deficiencies raised during public comment. Appendix J documents both the recurring nature of these responses and the individual significant comments to which they were applied.

That reasoned-decisionmaking concern is reinforced by the circumstances of EPA's earlier 45-day review. The available record reflects that EPA and DNR discussed the HyCast permit by telephone before EPA elected not to object, but does not contain a contemporaneous written explanation identifying the issues EPA considered, the information upon which it relied, or the reasoning by which it concluded that objection was unwarranted. Petitioner does not contend that EPA was independently required to issue a written non-objection determination. Rather, the absence of contemporaneously documented reasoning is relevant because the available record does not disclose whether or how the substantial monitoring, verification, compliance-assurance, and subsequently demonstrated compliance concerns were evaluated in reaching that decision. This Petition invokes the separate Clean Air Act § 505(b)(2) petition process and requires EPA to evaluate the specific grounds and supporting record presented here.

An agency acts arbitrarily and capriciously when it fails to consider an important aspect of the problem or fails to articulate a rational connection between the facts found and the conclusion reached. *Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983). DNR's repeated reliance on generalized conclusions without addressing the material, permit-specific compliance-assurance questions presented therefore

independently supports Petitioner's contention that the permitting determination cannot be sustained on the reasoning contained in the administrative record.

B. What the law requires

- Clean Air Act §504(c), 42 U.S.C. §7661c(c)
- Clean Air Act §502(b)(5), 42 U.S.C. §7661a(b)(5)
- 40 C.F.R. §70.6(a)(3)(i)(B)
- 40 C.F.R. §70.6(c)(1)
- 40 C.F.R. §70.7(a)(1)(iv)
- 567 IAC 24.107(1)
- 567 IAC 24.107(6)
- *Sierra Club v. EPA*, 536 F.3d 673 (D.C. Cir. 2008).
- EPA Order: In the Matter of Valero Energy Partners, L.P., Valero Houston Refinery—Tank Farm, Permit No. O3784, Petition No. VI-2024-30, Order Granting in Part and Denying in Part a Petition for Objection to a Title V Operating Permit (July 18, 2025). See Appendix E-1 (supporting Title V regulatory material).

Title V does not merely require the inclusion of emission limits and permit conditions. It also requires monitoring, recordkeeping, reporting, and compliance-assurance provisions sufficient to determine whether those limits and conditions are being met during operation. Clean Air Act § 504(c), 42 U.S.C. § 7661c(c); 40 C.F.R. § 70.6(a)(3).

Where compliance cannot be determined during operation, additional monitoring is required. The relevant question is not whether a monitoring approach is commonly used, but whether

the permit contains sufficient information to assure compliance with applicable requirements throughout the permit term.

Likewise, where permit conclusions depend upon emissions inventories, applicability determinations, source-classification findings, engineering assumptions, historical testing, or compliance demonstrations, the permitting authority must demonstrate that the information relied upon is sufficient to support the permit findings being made. A permit cannot assure compliance where critical assumptions remain unverified.

Here, the need for that assurance is demonstrated by actual events. EP240 failed direct compliance testing by a substantial margin, and HyCast subsequently identified physical deficiencies in the particulate-control system associated with the excessive emissions. The relevant Title V question is therefore not whether DNR included monitoring requirements in the permit in a formal sense. It is whether those requirements are sufficient to provide reliable information representative of compliance during the periods between direct emissions tests and to reveal conditions capable of causing noncompliance. The subsequent EP240 failure provides concrete evidence that this question cannot be answered merely by pointing to the existence of periodic testing, CAM, inspections, recordkeeping, or other individual permit provisions. EPA must evaluate whether the monitoring framework, considered as a whole and in light of the demonstrated failure, satisfies Clean Air Act § 504(c) and 40 C.F.R. §§ 70.6(a)(3) and 70.6(c)(1). See Appendices F-8 and F-15.

C. Monitoring requirements apply even when a facility is not a major source

Title V monitoring applies whenever compliance cannot be determined during operation.

A permit may not rely on annual totals and infrequent testing as sufficient compliance assurance unless those measures, together with the permit's other monitoring requirements, yield reliable and representative information sufficient to assure compliance under 40 C.F.R. §70.6(a)(3).

Annual totals cannot show:

- emission spikes
- control failures
- scrap-driven variability
- boundary-level emissions

The obligation to include monitoring sufficient to assure compliance does not depend upon whether a source is classified as a major source or an area source. The relevant question is whether the permit contains monitoring sufficient to determine compliance with applicable requirements during operation.

Where emissions depend upon variable factors such as feedstock composition, operating conditions, control performance, or other changing conditions, reliance solely upon annual totals, periodic testing, calculations, or indirect indicators does not assure compliance unless the permitting authority demonstrates that those methods are sufficient to address the specific uncertainties identified in the administrative record.

That demonstration is particularly important here because subsequent direct compliance testing showed that EP240 was substantially out of compliance while operating under the

monitoring framework challenged during public comment. The April 7 failure does not establish that every existing monitoring requirement is inadequate or that any particular additional monitoring technology is automatically required. It does, however, provide concrete evidence requiring a source-specific determination of whether the permit's existing monitoring is capable of providing reliable and timely information sufficient to determine compliance under actual operating conditions. The available record does not establish that DNR made that determination in light of the demonstrated failure and the subsequently identified pollution-control deficiencies. See Appendices F-8, F-15, and F-18.

D. Why Additional Monitoring Is Required to Assure Compliance

The administrative record identifies recurring uncertainties involving operational variability, feedstock composition, pollution-control performance, pollutant-specific emissions, hazardous air pollutant inventories, source-classification determinations, applicability findings, and the absence of mechanisms capable of determining what pollutants leave the facility during operation. These concerns were raised repeatedly throughout the public-comment process and are summarized in Appendix J, including the Ground Support Matrix, Verification Matrix, Non-Discretionary Duty Matrix, Recurring DNR Boilerplate Response Matrix, and Narrative Synthesis of Unresolved Issues.

Taken together, these comments and the supporting record demonstrate that the permit relies upon assumptions, calculations, historical testing, emissions inventories,

applicability determinations, and compliance demonstrations that are not independently verified under actual operating conditions. The specific verification deficiencies identified in those comments therefore demonstrate that the monitoring contained in the permit is not sufficient to assure compliance under the operating, feedstock, control-performance, pollutant-specific, and other uncertainties identified throughout the record.

The recurring uncertainties identified throughout the administrative record, now reinforced by the April 7, 2026 demonstrated EP240 compliance failure and the subsequently identified particulate-control deficiencies, require a source-specific determination of what additional or revised monitoring is necessary to assure continuing compliance. Appropriate compliance-assurance measures may include:

- fenceline monitoring (near source verification) and downwind community monitoring (exposure verification)
- bag leak detection systems (BLDS)
- filter modernization and maintenance programs
- verification of gas-phase control performance where applicable

Subsequent events provide substantially more concrete support for the compliance-assurance concerns preserved during public comment. The April 7, 2026 EP240 performance test demonstrated substantial particulate-matter noncompliance; HyCast subsequently identified physical deficiencies in the particulate-control system as the primary and potential contributing causes of the excessive emissions; and DNR classified the violations as ongoing High Priority Violations and delayed further Title V permitting activity while the compliance matter was addressed. See Appendices F-8 and F-15. These

events do not create a new Ground for objection. They corroborate the preserved contention that the permit must contain monitoring capable of determining whether required control performance and compliance are actually being maintained during operation, rather than relying upon assumptions that may remain untested until the next direct emissions test.

A Title V permit must include enforceable conditions sufficient to assure compliance and must define the conditions under which the source is authorized to operate at the time of issuance. See 40 C.F.R. §§ 70.1(b), 70.5(c), 70.6(a)(3). Issuing a permit that authorizes higher potential-to-emit levels without corresponding enforceable limits allows operation under those higher levels until a future amendment is completed. Because permit amendments require separate review and public participation, see 40 C.F.R. § 70.7(h), reliance on a future amendment does not satisfy the requirement that the permit as issued assure compliance.

Where lower emission levels are relied upon to support the permit's applicability, source-classification, potential-to-emit, or compliance determinations, those lower levels must be reflected in enforceable permit conditions rather than left to a possible future permit amendment.

This Petition identifies monitoring deficiencies preserved in the administrative record and, where expressly identified, relies on subsequent evidence for the limited purpose of corroborating and evaluating those preserved objections; it also demonstrates that feasible compliance-assurance measures are available. An

example proposed air monitoring plan is included in Appendix C-2 for reference.

Additional issues raised in public comments that are not included within the Six Grounds, but are preserved for the record, are addressed in Appendix J together with the corresponding DNR responses.

In addition to the five monitoring-based Grounds presented in this petition, Ground VI addresses source-classification determinations, applicability findings, and hazardous air pollutant inventory development under Clean Air Act § 112(a)(1) including the absence of a documented basis for the facility's reported 24.83 tpy hazardous air pollutant determination, the sufficiency of the administrative record supporting area-source status, and the failure to require a comprehensive emissions inventory audit before permit issuance.

In addition to compliance assurance, the absence of monitoring deprives the public of the ability to understand and evaluate emissions during operation. Without accessible information reflecting actual operating conditions, the public cannot determine whether emissions are consistent with permit assumptions or whether conditions at the facility are changing over time. Monitoring therefore serves both compliance and transparency by allowing regulators and the public to evaluate emissions under real-world conditions, consistent with the public participation and information-access requirements of 40 C.F.R. § 70.7(h) and Clean Air Act § 502(b)(6), 42 U.S.C. § 7661a(b)(6).

Legal Standard

Under Clean Air Act §504(c), 42 U.S.C. §7661c(c), Title V permits must set forth inspection, entry, monitoring, compliance certification, and reporting requirements to assure compliance with permit terms and conditions. In addition, 40 C.F.R. §70.6(a)(3) requires applicable monitoring and analysis procedures and, where an applicable requirement does not itself require periodic testing or instrumental or noninstrumental monitoring, periodic monitoring sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the permit. Where emissions depend upon variable factors such as feedstock, control performance, or operating conditions, the adequacy of the permit's monitoring must therefore be evaluated in light of whether it provides sufficiently reliable and representative information to determine compliance under the conditions authorized by the permit.

The deficiencies identified in Grounds I through VI are not isolated issues but reflect a structural failure of the permit to include monitoring sufficient to assure compliance. The adequacy of monitoring is determined by whether it allows compliance to be determined during operation, not by whether the monitoring approach is typical for similar sources. Where existing monitoring is insufficient to yield reliable data representative of the source's compliance with applicable permit terms or conditions, Title V requires monitoring sufficient to assure compliance. This petition preserves issues related to the representativeness of stack testing and the adequacy of monitoring. Subsequent events have now given those preserved objections concrete significance. The April 7, 2026 EP240

performance test demonstrated substantial particulate-matter noncompliance, and HyCast subsequently identified physical deficiencies in the particulate-control system associated with the excessive emissions. Those events require evaluation not only of the representativeness of the performance test, but also of whether the permit's monitoring provided meaningful and timely indication of the condition associated with the demonstrated failure and whether the existing monitoring must be modified to assure continuing compliance. See Appendices F-8, F-15, and F-18; 40 C.F.R. § 64.7(e).

Likewise, where emissions inventories, applicability determinations, source-classification findings, compliance demonstrations, or other permit conclusions depend upon assumptions that are not independently verified, the permitting authority must demonstrate that the information relied upon is sufficient to support the permit findings being made.

Throughout this Petition, the recurring issue is that DNR never demonstrated that the monitoring, assumptions, calculations, compliance demonstrations, and permit determinations it approved are sufficient to assure compliance under the specific uncertainties identified in the administrative record. The April 7, 2026 EP240 compliance failure and the subsequently identified particulate-control deficiencies materially reinforce that conclusion: assumptions concerning continuing control performance cannot substitute for monitoring capable of detecting conditions associated with actual noncompliance. The available record further does not establish that DNR obtained and evaluated the underlying EP240 CAM information after the demonstrated failure to determine whether approved monitoring

detected the condition associated with that failure and whether monitoring changes were necessary under 40 C.F.R. § 64.7(e). See Appendices F-15 and F-18.

The failure to obtain and evaluate the underlying EP240 CAM information is significant under each of the Petition's principal analytical frameworks. Technically, comparison of the CAM indicators with the April 7 direct compliance results was necessary to determine whether the approved monitoring detected the control-device or operating conditions associated with the demonstrated failure. If the CAM indicators remained within their approved ranges while direct testing demonstrated substantial noncompliance, that would raise a fundamental question whether the approved indicators, indicator ranges, or designated conditions were capable of providing reasonable assurance of compliance and whether modification was necessary under 40 C.F.R. § 64.7(e). Leaving that question unresolved leaves the adequacy of the monitoring framework unverified; implicates the mandatory compliance-assurance requirements of Clean Air Act § 504(c), 42 U.S.C. § 7661c(c), and 40 C.F.R. §§ 70.6(a)(3) and 70.6(c)(1); and supports Petitioner's contention that DNR failed to consider an important aspect of the compliance-assurance problem before it. See *Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983); Appendix F-18.

PART 2 — Failure to Demonstrate That Required Title V Findings Remain Defensible

This Part also preserves issues concerning whether the draft Title V permit (Appendix G-1) and administrative record contain a sufficient factual basis to support source-classification

determinations, hazardous air pollutant inventories, applicability findings, and related permit determinations under CAA §112(a)(1). These issues are developed separately in Ground VI and Appendix J and include the adequacy of emissions inventories, applicability calculations, supporting assumptions, source-classification findings, and related non-discretionary duties.

Throughout the permitting process, Iowa DNR repeatedly responded to requests for additional monitoring, verification measures, compliance-assurance provisions, operational safeguards, enforceability mechanisms, permit revisions, and related compliance concerns by asserting that Iowa cannot be more stringent than EPA or cannot impose requirements beyond those required by federal law.

Petitioner's challenge does not depend upon whether Iowa may adopt independent substantive emission standards beyond federal requirements. Rather, Petitioner's challenge proceeds on two independent grounds.

First, DNR frequently relied upon a generalized statement regarding regulatory authority without directly responding to the specific concerns raised by commenter. Requests involving monitoring adequacy, compliance verification, operational variability, permit enforceability, pollution-control performance, hazardous air pollutant determinations, and compliance assurance were often answered with a generalized assertion regarding authority rather than an explanation addressing the actual concern presented. A generalized statement regarding authority does not constitute a substantive response to concerns

involving whether the permit contains sufficient mechanisms to determine and assure compliance.

Second, Title V independently requires permit conditions sufficient to assure compliance with applicable requirements. Clean Air Act § 504(c), 42 U.S.C. § 7661c(c), and 40 C.F.R. §§ 70.6(a)(3) and 70.6(c)(1) impose independent compliance-assurance obligations that apply regardless of DNR's repeated assertion that Iowa cannot be more stringent than EPA.

Clean Air Act § 504(c), 42 U.S.C. § 7661c(c), requires each Title V permit to set forth inspection, entry, monitoring, compliance certification, and reporting requirements to assure compliance with the permit terms and conditions.

Likewise, 40 C.F.R. § 70.6(c)(1) requires compliance certification, testing, monitoring, reporting, and recordkeeping requirements sufficient to assure compliance with the terms and conditions of the permit.

The regulatory requirement is not merely to include some monitoring. The requirement is to include monitoring sufficient to assure compliance. Accordingly, the relevant question is not whether a requested monitoring, verification, or compliance-assurance measure would be more stringent than EPA.

The relevant question is whether the permit already contains monitoring and related compliance-assurance requirements sufficient to assure compliance as required by Clean Air Act § 504(c), 42 U.S.C. § 7661c(c), and 40 C.F.R. §§ 70.6(a)(3) and 70.6(c)(1).

Where compliance depends upon assumptions regarding

emissions, feedstock composition, operational variability, control-device performance, hazardous air pollutant determinations, emission factors, surrogate pollutant relationships, or historical testing, DNR cannot reject requests for monitoring or verification merely by asserting that Iowa cannot be more stringent than EPA. DNR must first determine whether the permit contains monitoring sufficient to verify those assumptions and assure compliance under actual operating conditions.

The issue presented by this Petition is therefore not whether DNR could have imposed additional monitoring, but whether DNR demonstrated that the monitoring already contained in the permit is sufficient to assure compliance. Throughout the administrative record, commenter identified specific uncertainties involving operational variability, feedstock variability, pollution-control performance, hazardous air pollutant determinations, emissions calculations, emission factors, surrogate pollutant assumptions, historical testing, and the absence of mechanisms capable of verifying compliance during routine operation. DNR repeatedly rejected requests for additional monitoring and verification measures, yet the Responsiveness Summary does not identify where DNR determined that the existing monitoring is sufficient to address those concerns, nor does it explain how compliance can be determined under the conditions identified by commenter.

The deficiencies identified throughout this Petition affirmatively demonstrate that the monitoring requirements actually included in the permit are not sufficient to assure compliance under the specific uncertainties presented by HyCast's operations. The

permit and Responsiveness Summary do not identify monitoring capable of resolving the demonstrated uncertainties involving operational and feedstock variability, control-device performance, pollutant-specific emissions, emissions calculations, source-classification determinations, and compliance during routine operation. Accordingly, Petitioner demonstrates that the permit fails to contain monitoring sufficient to assure compliance as required by Clean Air Act § 504(c), 42 U.S.C. § 7661c(c), and 40 C.F.R. §§ 70.6(a)(3) and 70.6(c)(1).

At its core, this Petition does not contend that DNR was required to adopt every monitoring measure requested by commenter. Rather, Petitioner demonstrates through the specific deficiencies identified throughout the administrative record that the monitoring actually contained in the permit is insufficient to assure compliance under the operational variability, feedstock variability, pollution-control performance, hazardous-air-pollutant determinations, emissions calculations, source-classification determinations, and routine-operation conditions addressed in this Petition. The question under Clean Air Act §504(c), 42 U.S.C. §7661c(c), is whether the permit contains monitoring sufficient to assure compliance with its terms and conditions; the deficiencies demonstrated here establish that the permit does not.

DNR's repeated assertion that Iowa cannot be more stringent than EPA does not resolve the deficiencies demonstrated by this Petition. Petitioner does not seek unauthorized substantive emission standards. Rather, Petitioner demonstrates that the

permit's existing monitoring, testing, recordkeeping, reporting, and compliance-assurance provisions do not adequately address the identified uncertainties concerning operational and feedstock variability, control-device performance, pollutant-specific emissions, emissions calculations, and source-classification determinations. Clean Air Act §504(c), 42 U.S.C. §7661c(c), and 40 C.F.R. §§70.6(a)(3) and 70.6(c)(1) independently require monitoring and related compliance-assurance provisions sufficient to assure compliance with permit terms and conditions. Accordingly, the “more stringent” rationale does not cure the specific Title V deficiencies demonstrated in this Petition.

Subsequent Agency Actions Confirm the Inadequacy of DNR's Generalized "Cannot Be More Stringent Than EPA" Response

Following the close of the public comment period, Iowa DNR took enforcement actions directly involving the same facility, emission unit, and permit challenged in this Petition. Those actions are included in **Appendix F-8** for the limited purpose of illustrating subsequent agency actions concerning issues already preserved throughout the administrative record. Petitioner does not rely upon these post-comment-period documents to raise new objections. Rather, they demonstrate why DNR's repeated reliance on the generalized statement that Iowa "cannot be more stringent than EPA" failed to meaningfully address Petitioner's recurring concerns regarding monitoring, verification, permit enforceability, representative operating conditions, and compliance assurance.

As reflected in **Appendix F-8**, DNR subsequently reviewed HyCast's April 7, 2026 compliance stack test and issued a Notice of Violation concluding that the facility exceeded both the applicable federal particulate matter emission limit and the Iowa State Best Available Control Technology (BACT) particulate matter emission limit. DNR also classified these violations as ongoing High Priority Violations, identified additional NESHAP fugitive opacity compliance deficiencies, required submission of a compliance plan, delayed further Title V permitting action, and advised that it would consult EPA before determining how to proceed with the permit. See **Appendix F-8**.

These subsequent agency actions do not establish that Iowa may impose emission standards beyond those authorized by law. However, they do demonstrate that DNR routinely administers and enforces permit-specific state requirements, including an Iowa BACT emission limitation substantially more restrictive than the corresponding federal NESHAP emission limit, while simultaneously requiring additional compliance measures where warranted.

Accordingly, Petitioner's comments did not request that DNR create unauthorized emission standards or exceed its lawful authority. Rather, Petitioner repeatedly questioned whether DNR had demonstrated that the monitoring, testing, verification, recordkeeping, reporting, and compliance-assurance provisions contained in the proposed permit were sufficient to assure compliance with the applicable requirements DNR was already charged with enforcing. DNR's repeated response that Iowa "cannot be more stringent than EPA" therefore did not answer

the question actually presented by Petitioner's comments. The issue has never been whether DNR may impose unauthorized requirements. The issue is whether DNR demonstrated, based upon the administrative record, that the permit already contains monitoring and compliance-assurance provisions sufficient to satisfy the independent requirements of Clean Air Act § 504(c), 42 U.S.C. § 7661c(c), and 40 C.F.R. §§ 70.6(a)(3) and 70.6(c)(1).

A generalized assertion regarding regulatory authority does not satisfy that obligation and does not resolve whether the permit contains monitoring, recordkeeping, reporting, and verification provisions sufficient to assure compliance. Because DNR repeatedly relied upon the assertion that Iowa cannot be more stringent than EPA without identifying where it determined that the existing monitoring is sufficient to assure compliance under the conditions identified in the administrative record, the Responsiveness Summary fails to demonstrate that DNR fulfilled its obligations under Clean Air Act § 504(c), 42 U.S.C. § 7661c(c), and 40 C.F.R. § 70.6(a)(3)(i)(B). Accordingly, the recurring reliance on this rationale is relevant not only to the adequacy of DNR's responses to individual comments, but also to whether the permit itself satisfies Title V's independent compliance-assurance requirements.

PART 2A — EPA'S 45-DAY NON-OBJECTION, SUBSEQUENT CLARIFICATION OF THE REVIEW CHRONOLOGY, AND ABSENCE OF A MEMORIALIZED RATIONALE

Following completion of EPA Region 7's 45-day review of the proposed HyCast Title V permit, Petitioner submitted a Freedom

of Information Act request seeking records sufficient to identify and document EPA's final action, the legal and factual basis supporting that action, the date and officials responsible for the determination, and records documenting, memorializing, or communicating EPA's final position to Iowa DNR. Petitioner expressly excluded predecisional or deliberative materials and limited the request to records reflecting EPA's final action or memorializing or communicating that final action.

On August 6, 2026, EPA Region 7 issued its final response. That response and its accompanying calendar attachment are included as **Appendix F-9 — EPA Region 7 FOIA Response Concerning HyCast 45-Day Review, Non-Objection, and EPA–IDNR Communication (August 6, 2026).**

EPA subsequently provided additional written clarification concerning the timing and nature of its 45-day review. In an August 10, 2026 email included as Appendix F-10, EPA Region 7 Environmental Engineer David Peter stated that EPA “did not send any communication to IDNR that indicated that its review was completed prior to the conclusion of EPA’s 45-day review period.” Peter further explained that, because EPA did not object in writing within the 45-day period, IDNR “would essentially have been made aware that EPA was not objecting to the issuance of the Title V at the conclusion of EPA’s 45-day review period.” Appendix F-10 therefore clarifies that EPA did not affirmatively communicate completion of its review or its non-objection to IDNR before expiration of the statutory 45-day review period. Rather, IDNR’s knowledge of EPA’s non-objection at that point arose from expiration of the review period without a written EPA objection. See Appendix F-10.

Petitioner does not contend that EPA's failure to generate a written non-objection determination, standing alone, constitutes an independent violation of 40 C.F.R. § 70.8(c). EPA stated in its FOIA response that § 70.8(c) requires an EPA objection to be in writing but does not require EPA to document a decision not to object. Nothing in EPA's subsequent clarification in Appendix F-10 alters that distinction. See Appendices F-9 and F-10.

Petitioner subsequently submitted a supplemental FOIA request extending the search period through July 17, 2026, specifically to encompass the July 16, 2026 communication between EPA Region 7 and Iowa DNR and to identify any additional records concerning EPA's non-objection, the April 7, 2026 EP240 stack test, related compliance or enforcement issues, or their effect on the pending Title V permit. EPA Region 7 responded on August 31, 2026 that its search found no additional responsive records other than the document previously produced. See Appendix F-19. Thus, even after the search period was extended beyond the July 16 EPA-DNR communication, EPA identified no additional responsive record memorializing the substance or outcome of that communication or providing a contemporaneous factual or legal rationale for EPA's non-objection.

The absence of any additional responsive record after this expanded search presents a significant reasoned-decisionmaking concern. EPA has subsequently stated that it "reviewed and considered all documentation provided by IDNR during its 45-day review period," yet the responsive record contains no contemporaneous analysis identifying how EPA evaluated the substantial administrative record, what material issues it

considered, what conclusions it reached concerning those issues, or the reasoning supporting its decision not to object. Nor did the supplemental search, which specifically encompassed the July 15–16 EPA-DNR communications and sought records memorializing their substance or outcome, produce any additional record supplying that missing analysis. Petitioner does not contend that EPA was legally required to memorialize a non-objection in a particular form. The significance is instead evidentiary and administrative: there is no contemporaneous responsive record from which the Administrator, Petitioner, or a reviewing court could determine whether EPA actually considered the specific monitoring, compliance-assurance, representative-operation, control-performance, and verification deficiencies presented in the administrative record or how EPA resolved them. See Appendices F-9, F-10, and F-19; *Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983).

This absence of a memorialized rationale is particularly notable when compared with the statutory and regulatory requirements governing the opposite result. Had EPA determined during its 45-day review that the proposed permit was deficient and objected, Clean Air Act § 505(b)(1), 42 U.S.C. § 7661d(b)(1), would have required EPA to object in writing and provide a statement of the reasons for its objection. EPA's implementing regulation further requires an objection to describe the terms and conditions the permit must include to respond to the objections. 40 C.F.R. § 70.8(c)(1)–(2). Petitioner recognizes that neither provision imposes an equivalent requirement that EPA issue a written statement explaining a decision not to object. The comparison nevertheless illustrates the limited evidentiary

significance that can properly be attributed to EPA's earlier non-objection here: unlike a written EPA objection, the non-objection is accompanied by no contemporaneous statement identifying the issues EPA decided, the factual findings it made, the reasoning it employed, or the permit provisions it determined were sufficient. Accordingly, the mere fact of EPA's earlier non-objection cannot reasonably be treated in this § 505(b)(2) proceeding as evidence that the specific deficiencies demonstrated in this Petition were previously considered and resolved on their merits.

The significance of Appendices F-9 and F-10 to this Petition is different and substantial. Appendix F-9 establishes that EPA generated no responsive record memorializing the factual or legal rationale underlying its decision not to object. Appendix F-10 subsequently states, in general terms, that EPA “reviewed and considered all documentation provided by IDNR during its 45-day review period.” That later characterization, however, does not identify what issues EPA analyzed, what conclusions EPA reached, or the factual or legal reasoning supporting those conclusions. Consequently, there remains no contemporaneous memorialized EPA rationale available to Petitioner, the public, or the Administrator in this proceeding demonstrating whether, or how, EPA evaluated the specific monitoring, compliance-assurance, operational-variability, control-performance, pollutant-specific, source-classification, applicability, or administrative-record deficiencies now presented in this Petition. See Appendices F-9 and F-10.

That absence is particularly important because EPA's earlier non-objection could otherwise be misunderstood as substantive

confirmation that the proposed permit and DNR's Responsiveness Summary had already been evaluated against, and found sufficient to satisfy, the specific Title V requirements challenged here. Appendix F-9 provides no basis for such an inference. EPA has confirmed that no record responsive to Petitioner's narrowly drawn request memorializes the basis for the non-objection.

Accordingly, the mere fact that EPA did not object during the 45-day review cannot substitute in this citizen-petition proceeding for a reasoned evaluation of the objections presented under Clean Air Act § 505(b)(2), 42 U.S.C. § 7661d(b)(2). Nor does the prior non-objection itself establish that EPA previously determined that DNR adequately resolved the specific issues presented in Petitioner's 108 comments and developed in Grounds I through VI of this Petition.

The absence of a memorialized rationale has an additional practical consequence for Petitioner's ability to address EPA's prior review. Petitioner cannot identify, evaluate, distinguish, or rebut reasoning that EPA never memorialized in a responsive final-action record. For example, there is no responsive final-action record identified by EPA explaining whether EPA concluded that existing monitoring was sufficient to assure compliance; whether EPA accepted DNR's assumptions regarding baghouse performance; whether EPA determined that periodic stack testing adequately addressed operational and feedstock variability; whether EPA evaluated the sufficiency of pollutant-specific monitoring; whether EPA evaluated the basis for the hazardous-air-pollutant inventory and source-classification determinations challenged in Ground VI; or

whether EPA accepted DNR's repeated responses that Iowa could not impose requirements more stringent than EPA.

This loss of an identifiable EPA rationale is especially significant in light of subsequent events. As discussed in **Part 2B** and Appendix B-1, the April 7, 2026 EP240 compliance stack test subsequently demonstrated substantial exceedances of applicable particulate matter requirements. As discussed above and in Appendix F-8, DNR thereafter classified violations as ongoing High Priority Violations, required a compliance plan, delayed further Title V permitting action, and consulted EPA regarding the permitting and compliance situation. Those subsequent events directly implicate the monitoring, representative-testing, control-performance, and compliance-assurance concerns already preserved during the public-comment process.

Yet Appendices F-9 and F-10 provide no contemporaneous, memorialized rationale against which Petitioner can determine whether EPA's earlier non-objection considered, rejected, accepted, or otherwise resolved the underlying concerns that those subsequent events corroborated. Appendix F-10 contains EPA's later general assertion that it "reviewed and considered all documentation provided by IDNR during its 45-day review period," but it does not identify what analysis EPA performed, what conclusions it reached concerning the specific issues raised during public comment, or the factual or legal reasoning supporting its non-objection. The Administrator therefore should not presume, from either the fact of EPA's earlier non-objection or EPA's subsequent generalized description of its review, that those issues were previously resolved on their merits.

Appendix F-9 contains a calendar entry showing a scheduled July 16, 2026 discussion between EPA Region 7 Environmental Engineer David Peter and Iowa DNR permit writer Zane Peters. Appendix F-10 provides additional clarification concerning that communication. Peter stated that, based on entries in his work calendar, he believes conversations between EPA and IDNR occurred on July 15 and July 16, 2026 and that the HyCast Title V permit was discussed during those conversations. He further recalled that the July 15 conversation was cut short because of telephone technical problems and continued the following day. Peter expressly qualified that recollection, however, explaining that EPA and IDNR conduct periodic telephone conversations and that, although he believed those were the dates on which the HyCast permit was discussed, he could not say so with certainty. See Appendices F-9 and F-10

More importantly for the chronology of EPA's statutory review, Peter confirmed that EPA "did not send any communication to IDNR that indicated that its review was completed prior to the conclusion of EPA's 45-day review period." He explained instead that, because EPA did not object in writing within the 45-day period, IDNR "would essentially have been made aware that EPA was not objecting" when that period expired. Thus, the available record does not establish an affirmative EPA communication of non-objection to IDNR before expiration of the 45-day period; EPA's subsequent July 15–16 communications occurred only after that statutory period had concluded. See Appendix F-10.

Because the July 16 communication occurred outside Petitioner's original FOIA search period, Petitioner submitted a

supplemental FOIA request extending the search through July 17, 2026 and seeking records concerning that communication, including records relating to the HyCast permit, EPA's non-objection, the April 7, 2026 EP240 stack test, and associated compliance and enforcement matters. EPA Region 7 completed that supplemental search on August 31, 2026 and reported that it found no additional responsive records beyond the document previously produced. See Appendix F-19. Thus, the supplemental search does not alter the chronology established by Appendix F-10: EPA did not communicate completion of its review to IDNR before expiration of the 45-day review period, and IDNR instead would have understood at the conclusion of that period that EPA was not objecting because EPA had issued no written objection.

Appendices F-9 and F-10 together establish the limited record that exists concerning EPA's 45-day review. In Appendix F-10, EPA states generally that it "reviewed and considered all documentation provided by IDNR during its 45-day review period." That assertion, however, is not accompanied by any contemporaneous review record identifying what issues EPA evaluated, what analysis it performed, what conclusions it reached, or the factual or legal basis upon which it determined not to object. Appendix F-9 separately confirms that EPA located no responsive record memorializing the non-objection decision or its rationale. Thus, the later assertion that EPA "reviewed and considered" the materials submitted by IDNR does not establish that EPA substantively evaluated or resolved the specific monitoring, compliance-assurance, representative-operation, control-performance, pollutant-specific, source-

classification, applicability, and enforceability deficiencies presented in this Petition. See Appendices F-9 and F-10.

This distinction is critical. This Petition is not an appeal from EPA Region 7's decision not to object during the 45-day review. It invokes the separate statutory petition procedure Congress established in Clean Air Act § 505(b)(2). The Administrator must therefore evaluate whether Petitioner has demonstrated that the permit does not comply with applicable Title V requirements based upon the objections and supporting record presented in this Petition. EPA's expiration of the 45-day review period without a written objection cannot itself answer those objections. Appendix F-10 confirms that EPA did not communicate to IDNR that its review had been completed before expiration of the 45-day period, while Appendix F-9 confirms that EPA generated no responsive record memorializing the non-objection decision or its rationale. EPA's later general statement that it "reviewed and considered all documentation provided by IDNR" does not identify what analysis was performed or demonstrate that the specific objections now before the Administrator were considered and resolved. See Appendices F-9 and F-10.

This record also has consequences for any final EPA decision on this Petition. If the Administrator denies a petition filed under Clean Air Act § 505(b)(2), that denial is subject to judicial review under Clean Air Act § 307, 42 U.S.C. § 7607. See 42 U.S.C. § 7661d(b)(2). EPA therefore must evaluate the specific demonstrations presented in this Petition and articulate a reasoned basis for rejecting them if it denies relief. See *Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Auto. Ins. Co.*, 463 U.S.

29, 43 (1983). EPA could not reasonably substitute its earlier undocumented non-objection for that required evaluation. The records produced in Appendices F-9, F-10, and F-19 identify no contemporaneous analysis establishing that EPA previously considered and resolved the specific monitoring, compliance-assurance, representative-operation, control-performance, CAM, source-classification, applicability, and verification deficiencies now presented. Accordingly, if EPA denies this Petition, reliance upon the mere fact of its earlier non-objection, without independently addressing the material evidence and specific Title V deficiencies demonstrated here, would fail to address important aspects of the problem and would leave no reasoned connection between the record before the Administrator and the conclusion reached.

The circumstances of EPA's 45-day review also raise a substantial arbitrary-and-capricious and reasoned-decisionmaking concern. EPA subsequently stated that it “reviewed and considered all documentation provided by IDNR during its 45-day review period,” yet the records produced in response to Petitioner's original and supplemental FOIA requests contain no contemporaneous analysis identifying the material issues EPA considered, the factual findings it made, the conclusions it reached, or the reasoning connecting the administrative record to its decision not to object. The supplemental search specifically extended through the July 15–16 EPA-DNR communications and sought records memorializing their substance and outcome, yet EPA identified no additional responsive record. Petitioner does not contend that EPA was independently required to issue a written non-objection determination. Rather, the concern is that the available

record contains no contemporaneous explanation demonstrating reasoned consideration of the significant monitoring, compliance-assurance, representative-operation, control-performance, and verification issues presented by the administrative record. An agency acts arbitrarily and capriciously when it entirely fails to consider an important aspect of the problem or fails to articulate a satisfactory explanation for its action, including a rational connection between the facts found and the choice made. *Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983). The absence of any such memorialized analysis therefore substantially limits the evidentiary weight that can properly be attributed to EPA's earlier non-objection and reinforces the necessity for an independent, reasoned determination of the Grounds presented in this Petition.

For these reasons, EPA should evaluate Grounds I through VI on their merits and should not treat Region 7's earlier non-objection as substantive evidence that DNR's proposed permit satisfies Title V. Appendices F-9 and F-10 establish the fact and chronology of the non-objection, but neither provides a contemporaneous, memorialized rationale demonstrating that the deficiencies presented in this Petition were substantively considered and resolved during EPA's 45-day review.

Continuing Contaminated-Site Review

Although contaminated-site remediation and environmental covenants are administered under authorities separate from the Title V permitting program, subsequent information contained in Appendix E-8 confirms that Iowa DNR's Contaminated Sites Program continues to evaluate whether an environmental

covenant or other institutional controls are necessary for the HyCast property. This ongoing review confirms that the contamination and long-term protectiveness concerns raised during the public comment process remain active and unresolved. While this Petition does not contend that EPA should impose an environmental covenant through the Title V permit, the continuing agency review demonstrates that these concerns were neither speculative nor immaterial and remain part of the overall factual context surrounding the permitting decision.

On August 31, 2026, Iowa DNR further confirmed that its contaminated-site review, report, and resulting written findings will not be completed by the September 4, 2026 petition deadline. DNR stated that it presently has no completed factual findings or conclusions to provide concerning the ongoing review and that an environmental covenant or other institutional controls may be considered after the site assessment is completed. DNR further stated that, although its Pre-Remedial Cooperative Agreement with EPA contemplated completion of the Abbreviated Preliminary Assessment by September 30, 2026, EPA has requested additional information concerning the site's eligibility under the PRCA and that completion may therefore be delayed. See Appendix F-20.

PART 2B — April 2026 EP240 Stack Test Results and Their Significance to the Title V Permit Decision

The April 2026 EP240 compliance stack test results provide significant post-comment evidence corroborating and strengthening objections raised with reasonable specificity during the public-comment period concerning monitoring

adequacy, compliance assurance, representative operating conditions, and pollution-control performance. The results further demonstrate that the factual assumptions supporting issuance of the renewed Title V permit require reevaluation in light of the actual compliance information now available.

The significance of the April 2026 stack test is not limited to the identification of a particulate matter violation. The results demonstrate that the assumptions relied upon in the permit record regarding particulate control performance, compliance verification, and the adequacy of existing monitoring requirements were not supported by actual operating data.

Title V requires more than the inclusion of emission limits in a permit. Section 504(a) of the Clean Air Act requires each operating permit to include enforceable emission limitations and standards, compliance schedules, and “such other conditions as are necessary to assure compliance with applicable requirements.” 42 U.S.C. § 7661c(a).

EPA’s Title V regulations impose the same requirement. A permit must include monitoring requirements sufficient to assure compliance with applicable requirements. 40 C.F.R. § 70.6(a)(3). Where existing applicable requirements do not provide adequate monitoring, the permit must include periodic monitoring sufficient to assure compliance. 40 C.F.R. § 70.6(a)(3)(i)(B). Permits must also contain testing, monitoring, reporting, and recordkeeping requirements sufficient to assure compliance. 40 C.F.R. § 70.6(c).

The April 2026 EP240 stack test demonstrated substantial noncompliance with applicable particulate-matter requirements,

but newly produced DNR records materially clarify the circumstances under which the test was conducted.

The approved EP240 stack test protocol specified testing at a “Single Condition at 90%+ Capacity” operating condition. The protocol identified a historic maximum throughput of approximately 5.6 tons of metal per hour, corresponding to a 90% testing target of approximately 5.04 tons per hour. See Appendix B-2, April 2026 EP240 Stack Test Protocol.

Newly produced correspondence establishes that one of HyCast’s induction furnaces became unavailable immediately before the April 7 test. On April 6, 2026, HyCast informed Iowa DNR of the equipment failure and stated that it intended to proceed with the performance test using a single furnace unless DNR objected. HyCast represented that it could achieve the test parameters for charge, melt, and pour with a single furnace. See Appendix F-17.

The reported metal charged rates during the three compliance runs were:

- Run 1: 1.38 tons per hour;
- Run 2: 1.38 tons per hour; and
- Run 3: 4.41 tons per hour.

The average throughput during testing was approximately 2.39 tons per hour, or approximately 43% of the historic maximum throughput identified in the approved protocol. No compliance run achieved the specified 90%+ capacity condition.

In light of Appendix F-17, Petitioner does not contend that the reduced throughput, standing alone, demonstrates an unexplained or deliberate failure by HyCast to conduct the test at the protocol's targeted operating condition. The newly produced correspondence provides a substantial explanation for the reduced operating rate and must be considered in evaluating the representativeness of the April 7 test.

The same correspondence raises a separate and significant question concerning DNR's decision to allow the April 7 compliance demonstration to proceed. HyCast did not merely notify DNR after the fact that one induction furnace had been unavailable. On April 6, HyCast President Larry Doran affirmatively sought DNR's recommendation, reported that HyCast had "lost one of our melters" while starting the system for the performance testing, stated his assumption that testing should proceed and the second melter be addressed after repair, and asked DNR to "Please advise." DNR Environmental Specialist Senior Mark Fields, Air Quality Bureau — Compliance & Stack Testing Sections, responded that he would "have to discuss the issue with others who are currently in meetings." Two minutes later, Doran informed DNR that "[u]nless you or your team objects we intend to move forward" and represented that HyCast could achieve the test parameters for charge, melt, and pour using a single furnace. See Appendix F-17.

The available Appendix F-17 correspondence contains no subsequent DNR objection, and the compliance test proceeded the following day. Yet the resulting test did not achieve the approved protocol's specified "Single Condition at 90%+

Capacity”: the three runs were conducted at approximately 1.38, 1.38, and 4.41 tons per hour, no run reached the approximately 5.04-ton-per-hour 90% target, and average throughput was only approximately 43% of the historic maximum identified in the protocol. Thus, although the furnace failure explains why production was reduced and Petitioner does not contend that HyCast deliberately staged an unrepresentative test, it raises a distinct permitting and compliance-assurance question: why DNR allowed a scheduled compliance demonstration to proceed after receiving advance notice of an equipment failure affecting the tested production system, when DNR’s own stack-testing official recognized that the matter required consultation, and when the resulting test failed to achieve the operating condition specified in the approved protocol. See Appendices B-2 and F-17.

This issue is particularly significant because the purpose of a compliance performance test is not merely to obtain emissions measurements under whatever operating condition happens to exist on the test date, but to provide a compliance demonstration under the representative operating conditions required by the approved testing framework. The record identified here does not establish that DNR made and documented a determination, before allowing the test to proceed, that operation with one unavailable furnace would provide a valid compliance demonstration under the approved 90%+ capacity condition. The subsequent test results confirm that the specified condition was not achieved. EPA should therefore consider both the substantial particulate-matter exceedance and DNR’s handling of the known pre-test equipment failure when evaluating whether the permit’s testing, monitoring, and compliance-

assurance framework provides reliable and representative information sufficient to assure compliance. See Clean Air Act § 504(c), 42 U.S.C. § 7661c(c); 40 C.F.R. §§ 70.6(a)(3), 70.6(c)(1); Appendices B-2 and F-17.

That clarification does not eliminate the significance of the compliance failure itself. EP240 substantially exceeded applicable particulate-matter limits during the test, and HyCast subsequently identified deficiencies involving the pollution-control system as the primary and potential contributing causes of the excessive particulate emissions. See Appendix F-15. Those subsequently identified control deficiencies remain directly relevant to the monitoring, control-performance, and compliance-assurance issues preserved during the public-comment period.

The April 7, 2026 stack-test documentation also identifies the metal-charge composition used during testing. The melt log documents two 21,000-pound charges, each consisting of 10,000 pounds identified as “Steel,” 8,000 pounds identified as “Returns,” and 3,000 pounds identified as “Pig Iron.” Thus, each documented test charge consisted of approximately 47.6 percent Steel, 38.1 percent Returns, and 14.3 percent Pig Iron. See Appendix B-1, Full April 2026 EP240 Stack Test Report and Supporting Documentation, Appendix E (Melt Log). The test documentation identifies the composition of the test charges, but does not itself establish that this particular feedstock mixture was representative of the range of feedstock compositions used during HyCast's normal, expected, or reasonably foreseeable production. Although DNR has stated that required stack testing must be conducted during normal operation at maximum

continuous output, that operating-condition requirement does not independently establish that the particular feedstock mixture used during the April 7 test was representative of feedstock used during routine operation. This distinction is material because feedstock variability and the representativeness of materials used during compliance demonstrations were repeatedly raised during the public-comment period. The permit does not require independent verification that feedstock used during stack testing reflects the range of feedstock used during routine operation. Accordingly, the April 2026 test provides additional evidence supporting the already-preserved objection that a short-duration compliance test cannot, without verification of representative feedstock and operating conditions, establish compliance across the range of operations authorized by the permit.

The failure to achieve the protocol's targeted operating condition must now be considered in light of the induction-furnace failure disclosed in Appendix F-17. Petitioner therefore does not rely upon the reduced throughput itself as proof of a deficient compliance demonstration. The independently significant fact is that EP240 substantially exceeded applicable particulate-matter limits during the test and that HyCast subsequently attributed the exceedance principally to a tube-sheet/bag-sealing problem, while identifying an isolation-damper problem as a potential contributing factor. See Appendix F-15.

The federal particulate matter limit applicable to EP240 was 0.80 pounds per ton of metal charged. The average measured particulate matter emission rate was 8.18 pounds per ton of

metal charged, exceeding the federal limit by more than ten times.

The test also demonstrated a substantial failure under the Iowa particulate matter requirement. The average total particulate matter emission rate was approximately 8.25 pounds per ton of metal charged compared with an applicable Iowa limit of approximately 0.042 pounds per ton of metal charged, exceeding the Iowa limit by approximately 197 times.

The April 2026 EP240 stack test also demonstrates why DNR's repeated assertion that Iowa cannot be more stringent than EPA does not address the issue presented by Petitioner. Petitioner did not request creation of a new particulate matter standard more stringent than federal requirements. The permit record already contained an applicable Iowa particulate matter requirement that was more stringent than the federal PM requirement. The April 2026 stack test demonstrated that HyCast failed both requirements. Therefore, the issue was not whether Iowa could impose a more stringent standard; the issue was whether DNR included sufficient Title V compliance-assurance provisions to assure compliance with requirements that already existed.

The April 2026 Stack Test Also Demonstrates the Limits of PM as a Compliance Indicator

The April 2026 EP240 stack test also demonstrates that particulate matter cannot be relied upon as an adequate surrogate for hazardous air pollutant compliance assurance where the permit relies on particulate controls to address pollutants that are not captured by particulate filtration.

A compliance surrogate is only appropriate where there is a demonstrated and reliable relationship between the surrogate parameter and the pollutant or control objective it is intended to represent. Here, the particulate matter indicator itself failed. The facility exceeded the applicable federal particulate matter limit by more than ten times and exceeded the Iowa particulate matter limit by approximately 197 times. These results demonstrate that even the limited compliance indicator relied upon by the permit did not confirm adequate control performance.

More importantly, particulate matter testing does not establish compliance for pollutants that are not captured by particulate filtration. A baghouse is designed to control particulate-phase emissions; it does not demonstrate control of gaseous hazardous air pollutants or other gas-phase pollutants that may be generated during foundry operations.

Therefore, even if EP240 had demonstrated compliance with particulate matter limits, PM compliance alone would not establish that all pollutants of concern were adequately controlled or that the permit assured compliance with all applicable requirements.

The April 2026 failure makes this deficiency more significant. The permit cannot rely on particulate matter as a surrogate indicator of compliance when the particulate control performance itself has not been verified and the indicator relied upon has failed under actual operating conditions.

The failure of the PM compliance demonstration provides additional post-comment evidence supporting Petitioner's preserved objection that DNR must determine whether

pollutant-specific verification or additional enforceable monitoring is necessary to satisfy the Title V requirement that permits contain monitoring sufficient to assure compliance. 40 C.F.R. § 70.6(a)(3).

These results fundamentally change the compliance record before EPA.

Prior to the April 2026 test, the permit record relied upon assumptions regarding emission rates, control-device performance, and the adequacy of existing permit conditions to assure compliance. The first direct compliance demonstration following HyCast's restart showed that those assumptions were not verified under actual operating conditions.

The issue before EPA is therefore not merely whether HyCast experienced a particulate matter exceedance. The issue is whether the renewed Title V permit contains sufficient enforceable conditions to assure compliance after actual operating data demonstrated that the assumed control performance was not achieved.

The April 2026 results demonstrate a substantial compliance failure under the existing compliance-assurance framework. The presently available record does not establish whether EP240's CAM indicators or other routine monitoring detected or reflected the condition associated with that failure before or during the performance test. DNR permit writer Zane Peters subsequently stated that he was not in possession of the CAM records and therefore could not determine whether CAM monitoring indicated an excursion or exceedance during the failed test. See Appendices F-12 and F-18.

The results further demonstrate that particulate emissions vary significantly depending on operating conditions. The three compliance runs produced substantially different particulate emission rates, demonstrating that EP240 emissions cannot be reliably characterized through assumptions alone.

This variability is particularly important because Title V requires monitoring sufficient to assure compliance throughout the permit term, not merely periodic confirmation of compliance at a single point in time. 40 C.F.R. § 70.6(a)(3).

The April 2026 stack test therefore provides substantial evidence that additional compliance assurance requirements are necessary, including verification of control-device performance, representative operating-condition testing, corrective-action verification, and monitoring sufficient to identify declining performance before another violation occurs.

The stack test results also demonstrate the limitations of relying solely on particulate matter as an indicator of overall compliance. While particulate matter testing may provide information regarding particulate-control performance, it does not establish control of pollutants that are not captured by particulate filtration, including gaseous hazardous air pollutants.

The fact that the particulate indicator itself failed further demonstrates that the permit's existing compliance assurance assumptions were not sufficient. The permit cannot rely on PM performance assumptions that have now been contradicted by actual compliance data.

Under Clean Air Act §505(b)(2), 42 U.S.C. § 7661d(b)(2), EPA must object where a Title V permit does not comply with applicable requirements or does not satisfy Title V requirements.

The April 2026 EP240 stack test provides substantial evidence requiring EPA to reconsider whether the proposed permit assures compliance. The test confirms and strengthens issues already raised during the public participation process, including concerns regarding:

- inadequate compliance monitoring;
- reliance on assumed control performance;
- failure to address operating variability;
- insufficient verification of baghouse performance;
- limitations of PM-based compliance assumptions.

During the stack test, particulate emissions varied substantially between individual compliance runs. This variability demonstrates that EP240 emissions are not fixed and cannot be reliably evaluated based solely on historical emission factors, assumed control efficiencies, or a single periodic compliance demonstration.

A Title V permit must provide reasonable assurance of compliance throughout the permit term, not merely demonstrate that compliance may occur under a limited set of conditions. The monitoring provisions required by Title V must be sufficient to determine whether a source remains in compliance as operating conditions change. 40 C.F.R. § 70.6(a)(3).

The April 2026 results demonstrate that the existing permit provisions did not provide that assurance.

The April 2026 performance test directly established substantial EP240 particulate-matter noncompliance. The presently available record, however, does not establish whether routine monitoring, operational records, CAM indicators, or other control-device monitoring detected or reflected the condition associated with that failure before or during the performance test. When Petitioner subsequently asked DNR whether EP240's CAM monitoring indicated an excursion or exceedance in differential pressure, visible emissions, or another CAM indicator before or during the failed test, DNR permit writer Zane Peters stated that he was not in possession of the CAM records and therefore could not answer. See Appendices F-12 And F-18. The unresolved question is therefore whether the existing monitoring framework provided meaningful and timely indication of the condition associated with the measured exceedance and, if not, what additional monitoring or verification is necessary to assure continuing compliance.

The permit record cannot reasonably conclude that EP240 will continuously comply with applicable particulate matter requirements when the first direct compliance demonstration following restart showed emissions exceeding applicable limits by substantial margins.

The April 2026 Stack Test Demonstrates That PM Was Not Established as an Adequate Surrogate for HAP Compliance

The April 2026 stack test further demonstrates the weakness of relying on PM as a compliance indicator because even the

particulate matter control performance assumed in the permit record was not achieved. The facility exceeded applicable particulate matter limits by more than ten times the federal limit and approximately 197 times the Iowa limit.

Because the permit record does not establish PM as an adequate surrogate for gaseous or other HAPs not reliably represented by particulate emissions, and because the PM compliance demonstration itself failed, the record does not establish that PM monitoring or testing can independently provide compliance assurance for those other pollutants.

The permit relies upon particulate controls to achieve compliance. However, the April 2026 test demonstrates that the control system did not perform at the level assumed in the permit record. Where a control device is relied upon to demonstrate compliance, Title V requires sufficient monitoring and verification to determine whether the control device continues to perform as necessary to maintain compliance. 40 C.F.R. § 70.6(a)(3); 40 C.F.R. § 70.6(c).

The absence of adequate control-performance verification is especially significant because the consequences of degraded performance are substantial. The April 2026 test demonstrated that EP240 particulate emissions can increase to levels many times greater than applicable limits.

A permit structure under which a substantial control-performance failure may remain undetected by routine monitoring until periodic compliance testing raises a significant question whether that monitoring provides reliable and

representative information sufficient to assure compliance between direct emissions tests.

The April 2026 stack test also confirms that the concerns raised during the public comment period regarding variability, compliance verification, and reliance on assumed control performance were not speculative. The actual operating data now available demonstrates that these concerns were supported by the facility's own compliance results.

The test results support the need for permit revisions addressing:

- representative compliance testing requirements;
- enforceable monitoring of control-device performance;
- operational recordkeeping sufficient to evaluate compliance conditions;
- corrective-action verification following exceedances;
- reporting requirements sufficient to allow EPA and DNR to evaluate ongoing compliance.

The April 2026 EP240 stack test therefore provides substantial evidence that the renewed Title V permit, as proposed, does not contain sufficient conditions to assure compliance with applicable requirements as required by Clean Air Act § 504(a), 42 U.S.C. § 7661c(a), and 40 C.F.R. § 70.6.

The April 2026 EP240 stack test results require EPA to evaluate the renewed Title V permit based on the actual compliance information now available in the administrative record.

The purpose of Title V permitting is to ensure that operating permits provide a clear and enforceable mechanism for determining whether sources comply with applicable requirements. A permit cannot satisfy Title V where the compliance assurance provisions are based on assumptions that are contradicted by actual compliance data.

The April 2026 stack test provides direct evidence that assumptions regarding control performance and compliance assurance underlying the permit decision were not adequately supported by actual operating data.

The record now demonstrates that:

- EP240 substantially exceeded applicable particulate-matter requirements during the April 7, 2026 compliance performance test.
- Newly produced correspondence establishes that one of HyCast's induction furnaces became unavailable immediately before the test and that HyCast informed Iowa DNR on April 6, 2026 that it intended to proceed using a single furnace unless DNR objected. Accordingly, Petitioner does not rely upon the reduced production rate during the April 7 test, standing alone, as evidence of deficient or intentionally unrepresentative testing. See Appendix F-17.
- HyCast subsequently identified a tube-sheet/bag-sealing problem as the primary root cause of the April 7 particulate-matter exceedance and identified an isolation-damper problem as a potential contributing factor. HyCast reported corrective actions addressing those conditions and stated that another

EP240 compliance performance test would be conducted under normal and representative operating conditions. The date of that retest remained to be established. See Appendix F-15.

- The presently available record does not establish whether existing monitoring or CAM indicators detected or reflected the pollution-control condition associated with the substantial particulate-matter exceedance before or during the April 7 performance test, leaving unresolved whether the permit's monitoring and verification requirements were sufficient to provide meaningful and timely indication of deteriorating control performance. DNR stated on August 21 that its permit writer did not possess the CAM records and therefore could not determine what the CAM indicators showed. See Appendices F-12 and F-18. On August 27, DNR further confirmed that it did not possess the additional CAM records requested by Petitioner and that those underlying records remained at the facility for review upon direct request by a field-office inspector. See Appendix F-18. Although the underlying CAM records were not required to be submitted contemporaneously to DNR as a matter of routine reporting, the April 7 compliance failure made their content directly relevant to determining whether the approved CAM detected the condition associated with the failure and whether monitoring changes are necessary under 40 C.F.R. § 64.7(e). As of August 27, the available record does not establish that DNR had obtained and evaluated that information. See Appendix F-18.

- The April 7 failure and HyCast's subsequent identification of pollution-control deficiencies demonstrate that assumptions

concerning continuing control performance cannot substitute for monitoring and verification capable of determining whether the controls are actually performing as required during operation.

These facts materially affect whether EPA can approve the permit consistent with Title V requirements.

Clean Air Act § 505(b)(2), 42 U.S.C. § 7661d(b)(2), requires EPA to object to a Title V permit where the permit does not comply with applicable requirements or does not meet the requirements of Title V. The April 2026 EP240 stack test provides substantial post-comment evidence supporting Petitioner's preserved objection that the permit's monitoring and compliance-assurance provisions may be insufficient to assure continuing compliance and therefore require evaluation under Title V's compliance-assurance requirements.

EPA's review cannot be limited to whether HyCast has an emission limit or whether the facility can eventually correct the immediate violation. The issue is whether the permit contains enforceable conditions sufficient to assure compliance throughout the permit term.

The April 2026 stack test provides substantial post-comment evidence requiring EPA and DNR to determine whether the monitoring, testing, recordkeeping, reporting, and other compliance-assurance conditions challenged during the public-comment period are sufficient to assure continuing compliance at EP240 and, if not, what additional or revised permit conditions are necessary.

The appropriate response is not simply to document the violation and allow operation to continue under the existing permit assumptions. The permit record must therefore determine whether the test results demonstrate deficiencies in the existing compliance-assurance framework and, if so, the permit must be revised as necessary to provide monitoring, testing, recordkeeping, reporting, and other conditions sufficient to assure compliance.

At a minimum, EPA should require the permit record to address:

1. Whether the existing monitoring requirements are sufficient to detect loss of particulate control performance before a violation occurs.
2. Whether the current testing requirements adequately evaluate compliance under representative operating conditions.
3. Whether additional baghouse performance monitoring is necessary to assure compliance with applicable particulate-matter requirements during operation.
4. Whether PM-based compliance demonstrations are adequate where pollutants not controlled by particulate filtration remain unverified.
5. Whether additional recordkeeping and reporting requirements are necessary to evaluate operating variability and ongoing compliance.

The April 2026 EP240 stack test does not present a new permitting issue separate from the concerns raised during the

public participation process. Instead, it provides direct confirmation of issues already preserved in this Petition, including concerns regarding inadequate monitoring, unverified control performance, variability, and the need for enforceable compliance assurance requirements.

The stack-test results therefore strengthen the existing petition grounds by providing actual operating evidence bearing directly on whether the permit's compliance-assurance framework is sufficient to assure continuing compliance.

The April 2026 EP240 stack test results and supporting documentation are included in Appendix B-1 — April 2026 EP240 Stack Test Results and Compliance Documentation, with additional late stack-test documentation included in Appendix E-7.

The following sections of this Petition address the specific legal deficiencies demonstrated by the record, including inadequate monitoring, variability, control-performance verification, particulate surrogate limitations, and the absence of sufficient external verification mechanisms. The Grounds incorporate and rely upon this supplemental evidence only to the extent that the evidence bears upon the particular issues preserved and developed within each Ground.

PART 2C — DNR's July 31, 2026 Investigation Independently Corroborates Multiple Grounds for Objection

On July 31, 2026, Iowa DNR Environmental Specialist Senior Ryan Stouder completed DNR's investigation of the June 11,

2026 citizen complaint concerning HyCast Foundry. The investigation memorandum and Ryan Stouder's accompanying transmittal email are part of the subsequent DNR compliance record. The investigation confirms that the failed EP240 stack test, the pending Title V renewal, foundry sand management, RCRA-related metals issues, and associated compliance concerns are all being handled by the Iowa DNR Air Quality Compliance and Enforcement Section, DNR Legal Services, and U.S. EPA Region 7 Air Quality Compliance.

DNR's investigation further documents significant operational changes occurring at the facility, including management turnover, operation of only the induction furnaces, reduced production schedules, limited staffing, and continuing maintenance activities. The investigation also records HyCast's explanation that recently installed bag filters were allegedly improperly installed, that contamination entered the baghouse through an open cupola flue, that manual cleaning occurred immediately before the compliance stack test, and that failure of the stack test was therefore "not surprising." Regardless of whether those explanations ultimately account for the measured emissions, DNR's own investigation confirms that significant operational, maintenance, and compliance issues existed immediately preceding the failed compliance demonstration.

These findings provide additional post-comment evidence relevant to several of the Grounds presented in this Petition. They reinforce Ground I by demonstrating the need to determine whether existing permit monitoring provided meaningful and timely indication of the condition associated with the April 7 compliance failure during routine operation. The presently

available record does not establish whether EP240's CAM indicators detected or reflected that condition before or during the failed performance test. On August 21, 2026, DNR permit writer Zane Peters stated that he was not in possession of the CAM records and therefore could not answer that question. See Appendices F-12 and F-18. On August 27, 2026, DNR further confirmed that it did not possess the additional CAM records requested by Petitioner and explained that the underlying records are maintained at the facility for review upon request by a field-office inspector and are not required to be submitted unless directly requested. See Appendix F-18.

Petitioner does not contend that DNR was required to receive those underlying CAM records contemporaneously or as a matter of routine submission. The significance arises from the subsequent April 7 compliance failure. Under 40 C.F.R. § 64.7(e), if approved CAM failed to indicate an excursion or exceedance while providing valid data when the source failed to achieve compliance, or if performance testing documents a need to modify existing indicator ranges or designated conditions, the owner or operator must promptly notify the permitting authority and, if necessary, propose appropriate monitoring changes. Thus, after the April 7 failure, determining what EP240's CAM actually showed became directly relevant to whether the existing monitoring remained adequate. As of August 27, the available record does not establish that DNR had obtained and evaluated that underlying CAM information to make that determination. See Appendix F-18.

They reinforce Ground II by documenting changing operating conditions, reduced production, staffing limitations, and operational variability. They reinforce Ground III by demonstrating that significant baghouse-related deficiencies may exist without permit-required continuous monitoring capable of identifying degraded control performance before a compliance failure occurs.

They reinforce Ground V by showing that DNR reconstructed potential off-site impacts through citizen complaints, witness interviews, and meteorological review, providing additional post-comment evidence supporting Petitioner's preserved objection concerning whether the permit contains sufficient facility-specific monitoring or other verification capable of evaluating emissions during actual operation.

Most significantly, DNR's own investigation independently confirms Petitioner's central argument throughout this Petition: compliance cannot be presumed from permit conditions, historical assumptions, periodic stack testing, or generalized agency conclusions. Rather, where compliance depends upon operating practices, control-device performance, operational variability, feedstock characteristics, and changing facility conditions, Title V requires monitoring, testing, recordkeeping, reporting, and enforceable permit conditions sufficient to assure compliance with applicable requirements during operation. The July 31, 2026 investigation therefore does not introduce new objections outside the administrative record but provides additional post-comment evidence corroborating multiple objections already raised during the public-comment period. Instead, it independently corroborates the factual basis

underlying the issues already preserved throughout Petitioner's comments and further demonstrates why EPA should evaluate whether the proposed permit's monitoring and compliance-assurance provisions adequately address the deficiencies identified throughout this Petition and object to the permit to the extent Petitioner has demonstrated that they do not satisfy applicable Title V requirements.

PART 2D — IOWA DNR ACTION ON HYCAST'S AUGUST 10, 2026 COMPLIANCE PLAN AND UNRESOLVED NOTICE OF VIOLATION / HIGH PRIORITY VIOLATIONS

HyCast submitted its compliance plan to Iowa DNR on August 10, 2026 in response to the July 7, 2026 Notice of Violation and High Priority Violation determinations arising from the April 7, 2026 EP240 compliance performance test. The compliance plan is included as Appendix F-15.

HyCast's compliance plan identifies a tube-sheet/bag-sealing problem as the primary root cause of the excessive particulate emissions measured during the April 7 test. According to HyCast, the clean side of the tube sheet had not been adequately cleaned during filter-bag replacement, allowing residual particulate to interfere with proper bag sealing or contribute to particulate carryover. HyCast also identified wear in the isolation damper between Baghouse 4 and Baghouse 10 that prevented complete isolation and created a potential unintended airflow pathway, which HyCast identified as a possible contributing factor. See Appendix F-15.

HyCast reported that corrective actions had been taken, including inspection and cleaning of the tube sheet, verification of bag and cage seating and alignment, inspection and repair of the isolation damper, and revisions to maintenance procedures. HyCast also stated that it was evaluating additional system-integrity or leak testing following significant maintenance or on a periodic basis. As of the August 10 compliance plan, that additional preventive measure remained under evaluation rather than a completed or enforceable requirement. See Appendix F-15.

HyCast further committed to conduct another EP240 compliance performance test following the corrective actions and stated that the test would be conducted under normal and representative operating conditions to demonstrate compliance with the applicable federal and state particulate-matter requirements. The compliance plan did not establish a date for that retest; its status was identified as planned and the date remained “to be established.” See Appendix F-15.

The compliance plan also addressed fugitive-opacity testing required under 40 C.F.R. § 63.10898(h) and (i). HyCast represented that opacity testing had been conducted and that results were being compiled. The plan further stated that Dean Jensen was not then Method 9 certified and that future observations would be performed by a qualified observer. See Appendix F-15.

On August 20, 2026, Iowa DNR issued a separate written determination after reviewing the August 10 compliance plan. DNR determined that although HyCast represented that the required fugitive-opacity performance testing was being

performed, the applicable test-notification, test-protocol-submission, and test-result-reporting requirements had not been fulfilled. DNR expressly identified this as a violation of 40 C.F.R. § 63.7 and 567 IAC 21.10(7)“a.” See Appendix F-16.

DNR required HyCast, by September 21, 2026, to provide opacity-test results for tests conducted since January 1, 2025, including the information required by 40 C.F.R. § 63.7(g)(2) and documentation of the Method 9 certifications of the individuals who performed the observations. See Appendix F-16.

Accordingly, the August 10 compliance plan did not resolve all outstanding compliance matters. As of DNR’s August 20 determination, additional compliance information remained required, the EP240 particulate-matter retest remained to be scheduled, and DNR had identified a separate violation concerning opacity-test notification, protocol submission, and reporting. These matters do not independently establish every deficiency alleged in this Petition, but they are relevant post-comment evidence concerning the continuing compliance process and the adequacy of monitoring, testing, recordkeeping, reporting, and compliance-assurance requirements applicable to the facility.

Subsequent DNR Correspondence Concerning the Unresolved Compliance Process and Pending Title V Action

On August 21, 2026, Iowa DNR permit writer Zane Peters provided additional written information concerning the status of HyCast’s August 10 compliance plan, the unresolved compliance process, and DNR’s intended treatment of those

matters in the pending Title V renewal. This correspondence is included as **Appendix F-12**.

Peters stated that DNR's compliance section is continuing to work to resolve the facility's compliance issues and that "remedies will be required for the facility to get them back into compliance with all applicable requirements they are subject to." Peters further stated that, when the compliance issues are resolved, Title V staff will re-evaluate those remedies together with the proposed permit (Appendix H-2) and determine whether changes to the proposed permit are necessary. See Appendix F-12.

This confirmation establishes that DNR has not yet made a final determination concerning whether the corrective measures arising from the failed April 7, 2026 EP240 performance test, the August 10 compliance plan, or the additional violations identified by DNR on August 20, 2026 require changes to the proposed Title V permit. The NOV/HPV compliance process remains unresolved, additional compliance information and an EP240 particulate-matter retest remain outstanding, and the proposed permit therefore remains subject to re-evaluation based upon the ultimate resolution of those matters.

These circumstances reinforce the need to evaluate the final Title V permit against the complete compliance record existing when DNR takes final action, including the August 10 compliance plan, DNR's August 20 violation determination, the opacity-test information due September 21, 2026, the corrective measures ultimately required by DNR, the EP240 particulate-matter retest and any other subsequent compliance demonstration, the ultimate resolution of the NOV/HPV

compliance process, and any resulting revisions to the monitoring, testing, operating, maintenance, recordkeeping, or reporting requirements applicable to EP240.

Responsible Official Status and Certification Requirements Before Final Title V Permit Issuance

Appendix F-12 also contains DNR's August 21, 2026 written response concerning the absence of a currently designated Responsible Official and the certification status of HyCast's August 10 compliance plan. Peters stated that DNR does not consider the August 10 compliance plan, submitted in response to the NOV, to be a document requiring Responsible Official certification under 40 C.F.R. § 70.5(d) and 567 IAC 24.107(4).

More importantly for the pending Title V renewal, however, Peters expressly confirmed that **if additional information must be submitted on a Title V application form, HyCast will be required to designate a Responsible Official to sign and certify that submission before DNR will accept it.** Peters further confirmed that **a Responsible Official must be designated before the Title V permit is issued. See Appendix F-12.**

Accordingly, DNR's own subsequent correspondence confirms that the Responsible Official issue remains relevant to final permit issuance even though DNR does not consider the August 10 NOV compliance plan itself subject to the Responsible Official certification requirement. Any subsequent information that becomes part of the Title V application and requires certification must satisfy the applicable Responsible Official

requirements before DNR relies upon that submission in taking final action.

PART 2E — PENDING FINAL TITLE V PERMIT AND EFFECT OF FINAL PERMIT ACTION ON THE PETITION

DNR's May 26, 2026 transmittal of the proposed Title V permit and Responsiveness Summary is documented in Appendix F-5. DNR's May 26, 2026 transmittal and Petitioner's contemporaneous response to that transmittal are included in Appendix F-6.

As of the filing of this Petition, Iowa DNR has not issued the final Title V Operating Permit renewal for HyCast Foundry, LLC, Facility No. 51-01-005, Permit No. 99-TV-058R4. The final permit remains pending while DNR's compliance section continues to address the unresolved NOV/HPV compliance process, including the EP240 particulate-matter retest and the additional compliance information required by DNR's August 20, 2026 determination.

DNR has further stated that, once the compliance issues are resolved, Title V staff will re-evaluate the remedies together with the proposed permit and determine whether changes to the proposed permit are necessary. Accordingly, the final permit terms—and the extent to which final permit action may resolve, alter, or leave unresolved the objections presented in this Petition—cannot yet be determined. Petitioner therefore bases this Petition on the proposed permit, Responsiveness Summary, public-comment record, and subsequent compliance record

presently available, without assuming that DNR’s eventual final permit action will cure any of the deficiencies identified herein.

PART 2F — COMPLIANCE WITH 40 C.F.R. § 70.12(a)(2)(v)–(vi): CLAIM PRESERVATION AND RESPONSIVENESS-SUMMARY CITATIONS

A. Purpose and Method

40 C.F.R. § 70.12 requires a Title V petition to identify each claim, explain why the permit, permit record, or permit process does not comply with an applicable requirement, identify where the issue was raised with reasonable specificity during the public-comment period, and identify where the permitting authority responded to the issue and why that response is inadequate.

This Petition satisfies those requirements through Grounds I through VI, the supporting public comments attached in Appendix A, and the detailed comment-by-comment analysis contained in Appendix J.

For purposes of providing a concise and readily reviewable roadmap under 40 C.F.R. § 70.12(a)(2)(v)–(vi), this Part identifies **representative public comments that independently preserve each of the six Petition Grounds** and the corresponding portions of Iowa DNR's Responsiveness Summary. The representative citations below are not intended to identify every public comment supporting each Ground. Appendix J separately documents the broader preservation record and analyzes all 108 comments submitted by Petitioner.

The Petition expressly states that Appendix J performs that comment-by-comment preservation analysis.

The substantive claims themselves are contained in Grounds I through VI. This Part is therefore a preservation and response roadmap, not a substitute for the factual and legal demonstrations contained in those Grounds.

B. Ground I — The Permit Does Not Allow Compliance to Be Confirmed During Normal Operations

Ground I challenges whether the permit contains monitoring, testing, recordkeeping, and reporting sufficient to determine compliance during normal operation and during the periods between direct emissions measurements, as required by Clean Air Act § 504(c), 42 U.S.C. § 7661c(c), and 40 C.F.R. §§ 70.6(a)(3) and 70.6(c)(1).

Representative Public-Comment Preservation: Comments #31, #64, #91, and #94, together with the additional supporting comments identified in Ground I and Appendix J.

DNR Responsiveness Summary: See Appendix H-1 and the comment-specific response analysis in Appendix J.

DNR principally relied upon existing stack testing, CAM requirements, inspections, opacity observations, parametric monitoring, recordkeeping, reporting, and other existing permit provisions. As demonstrated in Ground I, that response does not adequately establish that those provisions generate reliable and representative information sufficient to determine compliance

during normal operation and during the substantial periods between direct emissions measurements.

C. Ground II — The Permit Does Not Adequately Account for Operational and Feedstock Variability

Ground II challenges whether the permit's compliance demonstrations remain representative where feedstock composition, scrap composition, production rates, operating conditions, and other emissions-affecting variables may change during the permit term.

Representative Public-Comment Preservation: Comments #31, #78, #79, and #94, together with the additional supporting comments identified in Ground II and Appendix J.

DNR relied upon emissions calculations, permit limitations, periodic testing, and existing monitoring requirements. As demonstrated in Ground II, those responses do not adequately establish that the operating and feedstock conditions underlying those calculations and tests remain representative of the range of conditions authorized by the permit.

D. Ground III — The Permit Assumes Pollution Controls Continue to Perform

Ground III challenges whether the permit contains monitoring capable of timely detecting deterioration, malfunction, leakage, improper operation, or reduced effectiveness of the baghouses and other pollution-control equipment upon which compliance depends.

Representative Public-Comment Preservation: Comments #32, #34, #91, and #94, together with the additional supporting comments identified in Ground III and Appendix J.

DNR relied upon inspections, pressure-drop monitoring, operation and maintenance requirements, CAM provisions, periodic stack testing, opacity observations, and corrective-action requirements. As demonstrated in Ground III, identifying those requirements does not establish that they are capable of detecting degraded pollution-control performance sufficiently promptly to provide reliable information sufficient to determine compliance with the applicable requirements.

The claim is not that Title V categorically requires a particular technology such as a Bag Leak Detection System. The claim is that the monitoring contained in this particular permit must be sufficient to assure compliance. Appendix J expressly preserves that distinction.

E. Ground IV — Particulate Controls Do Not Address All Pollutants

Ground IV challenges whether particulate controls and particulate-based compliance demonstrations adequately verify emissions of pollutants that may not be represented by overall particulate-control performance, including gas-phase pollutants, VOCs, organic hazardous air pollutants, and pollutant-specific emissions, and whether overall particulate performance adequately verifies pollutant-specific control of lead and other metal HAPs.

Representative Public-Comment Preservation: Comments #14, #34, #87, and #94, together with the additional supporting comments identified in Ground IV and Appendix J.

DNR relied upon applicable federal standards, emissions calculations, existing particulate controls, permit requirements, and applicability determinations. As demonstrated in Ground IV, those responses do not fully establish how particulate-control performance or particulate testing verifies pollutants that are not necessarily captured, controlled, or represented by particulate filtration.

F. Ground V — The Permit Lacks Monitoring Capable of Determining What Pollutants Are Leaving the Facility During Operation

Ground V challenges whether the permit contains a facility-specific mechanism capable of verifying emissions leaving the facility and determining whether its emissions assumptions remain valid under actual operating and meteorological conditions.

Representative Public-Comment Preservation: Comments #33, #60, #79, and #108, together with the additional supporting comments identified in Ground V and Appendix J.

DNR principally responded that ambient or fenceline monitoring is not independently required under Title V, that dispersion modeling generally occurs through other regulatory programs, and that existing permit requirements are sufficient.

Ground V does not contend that Title V categorically requires fenceline monitoring at every Title V facility. The issue is whether the monitoring contained in **this permit**, under the circumstances presented in this administrative record, is sufficient to assure compliance. The existing Ground V synthesis already identifies the absence of facility-specific boundary monitoring and DNR's response to that issue.

G. Ground VI — Near-Threshold Hazardous Air Pollutant Determinations, Source Classification, and Applicability Determinations Remain Unverified

Ground VI challenges whether the administrative record adequately establishes and documents the emissions calculations, HAP accounting, source-classification determinations, applicability determinations, and related assumptions necessary to identify the applicable requirements incorporated into the Title V permit.

Representative Public-Comment Preservation: Comments #87, #94, #98, and #101, together with the additional supporting comments identified in Ground VI and Appendix J.

DNR relied upon its emissions calculations, the federally enforceable HAP limitation, its resulting facility-wide HAP potential-to-emit calculation, applicable NESHAP requirements, and its determination that HyCast remains an area source.

Ground VI does not merely dispute DNR's ultimate numerical conclusion. It challenges whether the underlying calculations, assumptions, applicability determinations, and supporting record are sufficiently complete, transparent, reproducible, and

verifiable to support the source-classification and applicable-requirement determinations upon which the permit depends. Appendix J recognizes continuing issues concerning calculation transparency, documentation availability, and independent verification.

Petitioner also sought clarification from DNR on April 10, 2026 concerning the representation of potential-to-emit information in the draft Title V permit. That correspondence is included in Appendix F-2 and provides additional record context for the PTE and verification issues addressed in this Petition.

H. Evidence Arising After the Public-Comment Period

The April 7, 2026 EP240 stack-test results, subsequent Notice of Violation and High Priority Violation determinations, required compliance plan, DNR enforcement activity, and subsequent investigation occurred after the close of the public-comment period.

The Petition principally relies upon this evidence as corroboration of issues already raised with reasonable specificity during public comment, including monitoring sufficiency, representative testing, operational and feedstock variability, pollution-control performance, emissions verification, and compliance assurance.

To the extent EPA determines that any objection based on this subsequent evidence constitutes a separate ground for objection rather than corroborative evidence, Petitioner alternatively demonstrates that the ground arose after the public-comment period or that it was impracticable to raise the objection during

that period, consistent with Clean Air Act § 505(b)(2), 42 U.S.C. § 7661d(b)(2), and 40 C.F.R. § 70.12(a)(2)(v).

I. Relationship to Appendix J

Appendix J provides the comprehensive preservation analysis underlying this Petition. It evaluates the 108 comments individually, identifies unresolved issues, analyzes DNR's responses, and maps those issues to the Petition Grounds.

This Part does not require EPA to search Appendix J to determine what the Petition's claims are. Grounds I through VI themselves state the claims and their factual and legal bases. Part 2F instead provides a concise roadmap connecting each Ground to representative public comments and DNR's corresponding responses.

PART 2G — FAILURE TO TAKE TIMELY FINAL ACTION AND UNRESOLVED POST-COMMENT COMPLIANCE RECORD

A. Purpose and Basis of This Section

This section addresses material events that arose after the close of the public-comment period and that bear directly on the continuing legal and factual adequacy of the HyCast Foundry LLC Title V renewal proceeding.

These matters include: (1) the failure of the April 7, 2026 EP240 performance test; (2) DNR's subsequent Notice of Violation and classification of the violations as ongoing High Priority Violations; (3) HyCast's August 10, 2026 compliance-plan submission; (4) the absence from the presently available record

of a determination establishing that the violations have been resolved; (5) DNR's express statement that it will take no further Title V permitting action until the compliance issues are resolved; (6) uncertainty concerning when that resolution will occur; (7) the requirement under both federal Part 70 and Iowa's approved Title V program that final action be taken on a complete Title V renewal application within 18 months; and (8) EPA Region 7's interpretation that the 18-month requirement is determined solely by the date of the complete application, except for the specific exceptions identified in 567 IAC 24.107(1)(b)(1)-(3).

These events could not have been raised during the public-comment period because they had not yet occurred. To the extent these events are relied upon as corroborative evidence, they support objections already raised with reasonable specificity during public comment. To the extent any event gives rise to a distinct ground for objection that arose only after the public-comment period, Petitioner relies alternatively upon the statutory and regulatory provisions governing grounds that were impracticable to raise during that period, including CAA §505(b)(2) and 40 C.F.R. §70.12(a)(2)(v).

DNR correspondence concerning the submission and review timing of HyCast's Title V renewal application is included as Appendix F-13. That correspondence provides additional contemporaneous context for the application chronology addressed below and should be read together with DNR's December 2, 2024 administrative-completeness determination in Appendix F-14.

B. DNR's December 2, 2024 Administrative-Completeness Determination

DNR's subsequently produced records resolve the previously outstanding question concerning the operative completeness date for HyCast's Title V renewal application (Appendix G-2). In a written determination dated December 2, 2024, DNR notified HyCast that its Title V renewal application had been received and was “deemed administratively complete according to Iowa Administrative Code (IAC) paragraph 567—24.107(1)‘d’.” See Appendix F-14.

This affirmative administrative-completeness determination eliminates the need to infer completeness from the 60-day deemed-complete provision. DNR itself determined the application to be administratively complete on December 2, 2024.

Accordingly, for purposes of the final-action requirement in 567 IAC 24.107(1)(b), Petitioner relies upon **December 2, 2024, as DNR's documented administrative-completeness date**. Under that provision, the permitting authority “shall take final action” on each complete permit application, including a renewal, within 18 months after receiving a complete application, subject to the specifically enumerated exceptions addressed below. See Appendix F-14.

Preservation of Application-Completeness Issue. The underlying application-completeness issue was expressly raised during the public-comment period. Comment #56 challenged DNR's review of application completeness and specifically objected that the Draft Title V Fact Sheet (Appendix G-4) did

not explain when the application was deemed complete, whether supplemental information altered permitting determinations, or whether DNR revisited its review following supplementation. Comment #56 further requested that DNR address application completeness before final permit action. DNR's subsequently produced December 2, 2024 administrative-completeness determination does not introduce a new objection; it supplies the agency record answering a factual question expressly raised during public comment. The significance of that subsequently produced record to the 18-month final-action requirement is addressed below. To the extent EPA determines that the expiration of the 18-month period constitutes a distinct ground that could not have been raised during the public-comment period because the deadline had not yet expired, Petitioner alternatively relies upon CAA §505(b)(2) and 40 C.F.R. §70.12(a)(2)(v).

C. Federal and State Law Require Final Action Within 18 Months

Iowa's approved Title V program provides that the permitting authority “**shall take final action**” on each complete permit application, including a renewal, within 18 months after receiving a complete application. **567 IAC 24.107(1)(b)**.

This is not merely an internal DNR processing objective. **40 CFR §70.7(a)(2)** independently requires an approved Part 70 program to provide for final action on each permit application, including a renewal, within 18 months after receipt of a complete application, subject to specified exceptions.

Iowa's rule identifies three exceptions involving specified acid-rain circumstances, the historical initial-permit transition period, and applications containing an early-reduction demonstration under CAA §112(i)(5). Nothing presently identified in the HyCast record establishes that any of those exceptions applies.

The significance of this requirement was subsequently confirmed by David Peter of EPA Region 7. In response to Petitioner's inquiry concerning whether the pending compliance proceedings affected the 18-month requirement, Mr. Peter stated:

“It is my interpretation that the requirement for the permitting authority to take final action on each complete permit application (including a renewal) within 18 months of receiving a complete application, is based solely on the date of the complete application and no other factors, except in the instances listed in 567 IAC 24.107(1)(b)(1)-(3).”

Thus, according to EPA Region 7's stated interpretation, the pending NOV, HPV classification, compliance-plan review, enforcement process, or other subsequent developments do not themselves alter the 18-month period unless one of the expressly enumerated exceptions applies.

DNR has now provided its written December 2, 2024 administrative-completeness determination. See Appendix F-14. Eighteen months from December 2, 2024 expired on **June 2, 2026**. Accordingly, absent an applicable exception under 567 IAC 24.107(1)(b)(1)-(3), DNR's 18-month period for taking final action on the HyCast Title V renewal expired on June 2, 2026.

Significantly, **neither the April 7, 2026 failed EP240 performance test, the resulting NOV and HPV classification, the submission or review of a compliance plan, nor the pendency of an enforcement or compliance proceeding is identified in 567 IAC 24.107(1)(b) as an exception to, or basis for suspending or extending, the 18-month final-action period.** The rule identifies three specific exceptions, none of which concerns source noncompliance or a pending enforcement proceeding. Moreover, 567 IAC 24.107(1)(d) expressly permits DNR, after an application has been determined complete, to request additional information necessary to evaluate or take final action on the application; the rule does not state that such a request restarts or suspends the 18-month period.

The presently available record does not establish that DNR has taken final action on the renewal or that any of the enumerated exceptions applies.

D. DNR Has Expressly Withheld Further Title V Action Pending Resolution of the Compliance Matter

DNR permit writer Zane Peters subsequently informed Petitioner:

“DNR will not be taking any Title V permitting action until the compliance issues are resolved.”

Mr. Peters further stated:

“I do not know how long this will take.”

This creates a material procedural conflict because DNR's stated decision to defer further Title V action does not suspend or extend the applicable 18-month final-action requirement.

On one hand, **40 CFR §70.7(a)(2)** and **567 IAC 24.107(1)(b)** require final action within 18 months after receipt of a complete application. On the other, DNR has expressly determined that it will take no further Title V permitting action until the present compliance matter is resolved, without identifying when that resolution will occur.

Accordingly, DNR's decision to defer further permitting action until the compliance issues are resolved does not itself alter the June 2, 2026 final-action date established above.

Petitioner does **not** contend that DNR should resolve this conflict by hastily issuing a final Title V permit before the failed performance test and resulting compliance issues have been adequately addressed.

To the contrary, DNR's own determination that the compliance issues must be resolved before further Title V action demonstrates the materiality of those issues to the permit proceeding.

E. Failed EP240 Performance Test and Ongoing High Priority Violations

The post-comment record fundamentally altered the factual basis upon which the proposed permit had been developed.

On April 7, 2026, EP240 was subjected to performance testing. DNR subsequently determined that the performance test

demonstrated violations of applicable particulate-matter requirements and issued a Notice of Violation dated July 7, 2026. DNR classified the violations as ongoing High Priority Violations.

The NOV required HyCast to submit a compliance plan to DNR by August 10, 2026. HyCast submitted that compliance plan.

As of August 27, 2026, the records produced to Petitioner do not establish that HyCast has demonstrated restored compliance with the applicable EP240 particulate-matter requirements. The August 10 compliance plan identifies corrective actions and a planned compliance retest, but does not establish a date for that retest. See Appendix F-15.

As detailed in Part 2D, HyCast's August 10 compliance plan identified pollution-control deficiencies associated with the April 7 exceedance, described corrective actions, identified additional system-integrity or leak testing as still under evaluation, and proposed another EP240 compliance performance test under normal and representative operating conditions on a date “to be established.” See Appendix F-15.

HyCast's voluntary statement that it intends to conduct another compliance performance test does not itself establish an enforceable requirement that the test occur or establish restored compliance. Before DNR treats the April 7, 2026 particulate-matter violations as resolved for purposes of the pending Title V renewal, DNR should require an enforceable compliance demonstration, including a new EP240 performance test conducted after completion of the corrective actions under documented normal and

representative operating conditions sufficient for DNR to independently verify that the test reflects representative EP240 operation. The compliance demonstration should include sufficient documentation of feedstock, production rate, process conditions, control-device operation, and other material operating parameters to permit that determination. EPA should not permit the Title V renewal record to rely upon anticipated future testing, voluntary commitments, or an unsupported characterization of test conditions as “representative” in place of an enforceable and completed demonstration of compliance under demonstrably representative operating conditions.

Nor should DNR treat HyCast's statement that it is “evaluating” additional system-integrity or leak testing as a completed corrective measure or enforceable compliance-assurance requirement. Because HyCast identified physical baghouse and isolation-system deficiencies as the primary and potential contributing causes of the April 7 failure, DNR should require enforceable system-integrity or leak-testing requirements sufficient to verify control-device integrity following significant maintenance and during subsequent operation, detect conditions capable of impairing particulate-matter control before they result in renewed noncompliance, and require timely corrective action when such conditions are identified. A preventive measure that remains discretionary and “under evaluation” does not provide enforceable assurance against recurrence of the conditions HyCast identified following the April 7 failure.

The corrective actions described in HyCast’s August 10 compliance plan also raise a more fundamental compliance-assurance question that cannot be resolved merely by completing those repairs after the April 7 failure. The conditions HyCast identified—including inadequate cleaning of the tube sheet during filter-bag replacement, potential interference with proper bag sealing, bag and cage seating and alignment issues requiring verification, and deterioration of an isolation damper sufficient to prevent complete isolation—concern physical conditions ordinarily subject to inspection, preventive maintenance, operation-and-maintenance practices, or control-device monitoring. DNR therefore should determine how those conditions developed or persisted without being identified and corrected through the existing inspection, maintenance, monitoring, and corrective-action program before EP240 demonstrated severe particulate-matter noncompliance on April 7, 2026. Correcting the identified conditions after the failed performance test does not, by itself, establish that the existing compliance-assurance system was adequate to detect and prevent recurrence of comparable control-device deficiencies. DNR should require additional or revised enforceable inspection, maintenance, monitoring, recordkeeping, and corrective-action requirements sufficient to detect and correct comparable control-device deficiencies before they result in renewed noncompliance, and should not treat the completed repairs alone as demonstrating restored and continuing compliance.

F. The Unresolved Compliance Record Bears Directly on the Adequacy of the Title V Permit and Permit Record

Petitioner does not rely upon the NOV merely to ask EPA to supervise DNR's exercise of enforcement discretion.

The relevance to this Title V petition is narrower and more fundamental.

Under **40 CFR §70.7(a)(1)(iv)**, a Title V permit or renewal may be issued only if the permit conditions provide for compliance with all applicable requirements and the requirements of Part 70. Iowa imposes the corresponding requirement through **567 IAC 24.107(1)(a)(4)**.

CAA §504(a), **42 U.S.C. §7661c(a)**, further requires each Title V permit to contain enforceable emission limitations and standards, a schedule of compliance, required monitoring, and other conditions necessary to assure compliance with applicable Clean Air Act requirements.

Similarly, **40 CFR §70.6(c)(1)** requires compliance certification, testing, monitoring, reporting, and recordkeeping sufficient to assure compliance with permit terms and conditions. Iowa's corresponding provision, **567 IAC 24.108(15)(a)**, requires compliance certification, testing, monitoring, reporting, and recordkeeping sufficient to ensure compliance.

The failed performance test and resulting compliance proceedings therefore constitute post-comment evidence bearing directly upon whether the proposed permit, permit record, monitoring requirements, testing requirements, compliance-assurance provisions, and underlying factual assumptions are adequate to assure compliance with applicable requirements.

DNR itself has demonstrated the materiality of these developments by refusing to proceed with Title V permitting until the compliance issues are resolved.

G. Continued Operation or Submission of a Compliance Plan Does Not Establish Compliance

HyCast's continued operation during the enforcement process cannot itself establish that compliance has been restored.

Nor does submission of a compliance plan, standing alone, demonstrate compliance.

The applicable Title V requirements demand an enforceable basis for assuring compliance. **40 CFR §70.6(a)(3)** requires applicable monitoring and analysis procedures and, where applicable requirements do not themselves require periodic testing or monitoring, periodic monitoring sufficient to yield reliable data representative of the source's compliance. **40 CFR §70.6(c)(1)** separately requires compliance certification, testing, monitoring, reporting, and recordkeeping sufficient to assure compliance.

Iowa's approved program similarly requires periodic monitoring sufficient to yield reliable data representative of the source's compliance and requires compliance certification, testing, monitoring, reporting, and recordkeeping sufficient to ensure compliance. **567 IAC 24.108(3) and 24.108(15)(a).**

Accordingly, the relevant Title V question is whether DNR possesses an adequate factual and enforceable basis for

determining that the permit will assure compliance under representative operating conditions.

As of August 27, 2026, that determination remains unresolved. HyCast's August 10 compliance plan identifies corrective actions and a planned EP240 compliance retest, but the retest date remained to be established. DNR's August 20 determination also identified separate violations involving fugitive-opacity test notification, protocol submission, and result reporting and required additional records by September 21, 2026. See Appendices F-15 and F-16.

H. Iowa's Separate Enforcement Requirement Further Demonstrates the Unresolved Nature of the Record

Iowa Code §455B.138 provides that when the director has evidence of an air-pollution violation, DNR is to notify the alleged violator and attempt to resolve the matter through informal negotiation. If those negotiations fail to resolve the problem within a **reasonable period of time**, the director shall issue an order directing the violator to prevent, abate, or control the emissions or air pollution involved and prescribing a date by which the violation shall cease.

Petitioner recognizes that §455B.138 does not establish a universal numerical definition of “reasonable period of time.”

Petitioner therefore does not ask EPA through this Title V petition to adjudicate an independent state-law enforcement claim.

Rather, §455B.138 is relevant to the administrative context because it demonstrates that the unresolved enforcement proceeding cannot itself establish that the Title V compliance deficiencies have been cured.

Following review of HyCast's August 10 compliance plan, DNR issued an August 20, 2026 determination identifying an additional violation involving the notification, protocol-submission, and reporting requirements applicable to the required fugitive-opacity performance testing. DNR required HyCast to submit specified opacity-test results and Method 9 certification information by September 21, 2026. See Appendix F-16. The August 20 determination therefore confirms that the compliance process remained ongoing following submission of the August 10 plan.

I. DNR and EPA Were Asked to Clarify the Conflict Before Filing

Petitioner sought clarification from DNR and EPA rather than assuming the agencies' positions.

Petitioner asked, among other things:

what provision, if any, pauses, suspends, or extends the 18-month requirement during a pending enforcement or compliance proceeding;

how DNR reconciles its refusal to proceed with Title V permitting until compliance issues are resolved with the mandatory final-action requirement; and

how DNR views its enforcement obligations while the HPV remains unresolved and the facility continues operating.

DNR's subsequent public-records production resolved the previously outstanding completeness-date question. DNR's December 2, 2024 written determination expressly states that HyCast's renewal application was “deemed administratively complete” under 567 IAC 24.107(1)(d). See Appendix F-14. That determination establishes December 2, 2024 as DNR's documented administrative-completeness date and June 2, 2026 as the corresponding 18-month date under 567 IAC 24.107(1)(b).

The remaining question is therefore not when the 18-month period began, but what legal basis, if any, DNR contends permits final action to remain outstanding after June 2, 2026. Neither the failed EP240 performance test, the NOV/HPV determination, the compliance-plan process, nor a pending enforcement proceeding appears among the exceptions specified in 567 IAC 24.107(1)(b)(1)-(3).

EPA Region 7 responded concerning the 18-month requirement and stated that, in its interpretation, the requirement is based solely upon the complete-application date except for the three enumerated regulatory exceptions.

J. Subsequently Produced Compliance Records

On August 27, 2026, DNR produced records responsive to Petitioner's public-records request, including HyCast's signed August 10, 2026 compliance plan and DNR's August 20, 2026 determination concerning additional notification, protocol-

submission, and reporting violations. See Appendices F-15 and F-16.

These records materially clarify the post-comment compliance record. The August 10 plan identifies what HyCast considers the primary root cause and a potential contributing cause of the April 7 particulate-matter exceedance, describes corrective actions already undertaken, identifies additional preventive measures under evaluation, and states that another EP240 compliance performance test will be conducted under normal and representative operating conditions on a date still to be established. See Appendix F-15.

DNR's August 20 determination separately establishes that the compliance process did not end with submission of that plan. DNR identified additional violations involving the fugitive-opacity performance-testing notification, protocol-submission, and reporting requirements and required further information by September 21, 2026. See Appendix F-16.

Accordingly, these records eliminate the earlier public-records uncertainty concerning the contents of the August 10 plan while confirming that the underlying compliance process remained unresolved as of August 27, 2026.

K. Subsequent Evidence and Any Grounds Based Specifically Upon Those Events Arose After the Public-Comment Period

The principal facts addressed in this Part did not exist during the public-comment period.

The April 7, 2026 failed performance test, DNR's subsequent compliance determination, July 7, 2026 NOV and HPV classification, August 10 compliance-plan submission, subsequent withholding of further Title V action pending compliance resolution, and related agency communications all arose after the close of public comments.

Accordingly, Petitioner invokes the post-comment exception under CAA § 505(b)(2), 42 U.S.C. § 7661d(b)(2), and 40 C.F.R. § 70.12(a)(2)(v) only to the extent EPA determines that any objection based specifically upon these subsequent events constitutes a separate ground for objection. Petitioner's principal Grounds I through VI remain based upon issues raised with reasonable specificity during the public-comment period; the subsequent events additionally corroborate and strengthen those preserved Grounds.

To the extent these developments confirm or strengthen issues Petitioner raised during public comment concerning monitoring, control-device performance, compliance assurance, pollutant-specific emissions, and enforceability, they constitute additional record evidence supporting those preserved claims. Newly produced April 6, 2026 correspondence provides a substantial explanation for the reduced production rate during the April 7 test, and Petitioner therefore does not rely upon that reduced production rate, standing alone, as corroboration of the previously preserved representative-operating-condition objection. See Appendix F-17.

L. DNR Cannot Resolve the Timing Problem by Issuing an Inadequately Supported Final Permit

Petitioner expressly does not request that EPA compel DNR to issue a final permit merely because the 18-month period expired on June 2, 2026.

Such a result would defeat the requirements of Title V if material compliance questions remain unresolved.

40 CFR §70.7(a)(1)(iv) and **567 IAC 24.107(1)(a)(4)** prohibit issuance unless the permit conditions provide for compliance with applicable requirements. CAA §504(a), **42 U.S.C. §7661c(a)**, independently requires enforceable limitations, compliance provisions, monitoring, and other conditions necessary to assure compliance.

The relevant point is therefore that DNR must satisfy **both obligations**: it must comply with the procedural requirements governing timely final action, and any permit ultimately issued must contain legally and technically adequate conditions assuring compliance.

Agency delay cannot substitute for an adequate permit.

Likewise, expiration of a permitting deadline cannot substitute for resolution of factual and legal deficiencies demonstrated by a failed performance test and unresolved compliance proceeding.

If HyCast remains out of compliance when DNR proceeds toward permit issuance, Iowa's Title V rules themselves contemplate a **schedule of compliance** and progress reports addressing milestones toward compliance. **567 IAC 24.108(15)(c)-(d)**.

M. The 18-Month Final-Action Requirement Is an Express Part 70 Program Requirement

As established in Sections B through D above, DNR's December 2, 2024 administrative-completeness determination produced a June 2, 2026 final-action date, and the presently identified compliance and enforcement proceedings do not themselves alter that date. The significance here is that the 18-month final-action requirement is an express requirement of the federally approved Title V permitting program, not merely an internal DNR processing deadline.

Petitioner does not contend that expiration of the 18-month period automatically dictates a particular enforcement remedy or authorizes issuance of a permit that otherwise fails to satisfy Title V. Rather, the significance here is that timely final action on a complete renewal application is an express requirement of the federally approved Title V permitting program and must be addressed together with the independent requirements governing the legal adequacy of any permit ultimately issued.

DNR's Available Alternatives to Premature Renewal Issuance, Including Suspension of the Existing Permit

Iowa's approved Title V program provides enforcement and permit-management alternatives when their applicable legal prerequisites are satisfied. Under 567 IAC 24.115, a Title V permit may be suspended, modified, revoked, or reissued for cause, including violation of permit terms and conditions. Federal Part 70 likewise provides enforcement and existing-permit mechanisms, including reopening where the applicable

regulatory criteria are satisfied. See 40 C.F.R. §§ 70.6(a)(6) and 70.7(f); 567 IAC §§ 24.114 and 24.115.

Accordingly, expiration of the 18-month final-action period does not compel DNR to issue a renewal permit whose compliance basis remains unresolved. If the unresolved NOV/HPV establishes continuing violation of HyCast's existing permit, DNR may consider suspension or other action for cause where legally warranted while resolving the violations and determining what conditions are necessary for a legally adequate renewal. Petitioner does not contend that expiration of the 18-month period automatically requires suspension or any particular enforcement remedy. The point is that DNR need not choose between indefinite administrative inaction and premature issuance of an inadequately supported renewal permit.

N. Required EPA Action

Petitioner requests that EPA evaluate the complete post-comment record and determine whether the Title V permit, permit record, and permitting process comply with the Clean Air Act, 40 CFR Part 70, and Iowa's approved Title V program.

Specifically, Petitioner requests that EPA:

1. determine that DNR's December 2, 2024 administrative-completeness determination establishes December 2, 2024 as the operative completeness date for purposes of the final-action requirement in 40 C.F.R. § 70.7(a)(2) and 567 IAC 24.107(1)(b);
2. determine that the corresponding 18-month final-action period expired on June 2, 2026, absent an applicable

exception under 567 IAC 24.107(1)(b)(1)–(3), and address the legal significance of DNR’s failure to take final action within that period;

3. ensure that any final permit satisfies CAA § 504(a), 40 C.F.R. §§ 70.6(a)(3), 70.6(c)(1), and 70.7(a)(1)(iv), and 567 IAC 24.107(1)(a)(4), 24.108(3), and 24.108(15) by containing monitoring, testing, recordkeeping, reporting, and compliance-assurance conditions adequate to assure continuing compliance with all applicable requirements under representative operating conditions;
4. ensure that DNR does not rely upon unresolved compliance assumptions contradicted by its own post-comment enforcement record; and
5. require correction of any resulting deficiency in the permit, permit record, or permit process before the Title V renewal is allowed to become effective.

N-1. Unresolved Post-Proposal Compliance, Monitoring, and Continued-Operation Issues Arising From the April 7, 2026 EP240 Performance-Test Failure

The April 7, 2026 EP240 performance test and DNR's subsequent NOV/HPV determination raise additional material questions that remain unresolved while the Title V renewal remains pending. These matters concern not merely enforcement of a past violation, but the factual and regulatory basis upon which DNR may ultimately determine that the final Title V permit provides for and assures compliance with applicable requirements.

Among the presently unresolved matters are: whether HyCast will be required to conduct and successfully complete a

subsequent performance test demonstrating restored compliance before final permit issuance; what objective evidence DNR will rely upon to determine that EP240 has returned to compliance; whether the monitoring applicable to EP240 adequately detected, or was capable of detecting, the conditions associated with the April 7 failure; whether the failed performance test demonstrates a need for improved monitoring under the Compliance Assurance Monitoring requirements of **40 CFR Part 64**, including **40 CFR §§ 64.3 and 64.7(e)**; whether the existing monitoring is sufficient to provide reliable and representative information adequate to assure continuing compliance and, if not, what additional or revised monitoring—including, as appropriate, continuous emissions monitoring, bag-leak detection, additional operating parameters, revised indicator ranges, or other enhanced monitoring—is necessary to satisfy applicable Title V and CAM requirements; and whether any subsequent performance test is conducted under conditions representative of normal operations as required by **40 CFR § 63.10898(c)**.

DNR’s August 21, 2026 correspondence confirms that these questions remain unresolved. In response to Petitioner’s specific inquiry whether HyCast will be required to conduct and pass a new EP240 performance test before final Title V issuance, or alternatively what testing, measurements, or other objective evidence DNR will rely upon to establish restored compliance, DNR did not identify either a required retest or an alternative objective compliance demonstration. Instead, DNR stated that its compliance section continues to work to resolve the facility’s compliance issues, that remedies will be required to return the facility to compliance with applicable requirements,

and that, after those issues are resolved, Title V staff will re-evaluate the remedies together with the proposed permit and determine whether changes are necessary. **See Appendix F-12.**

DNR likewise did not identify a completed determination concerning whether the April 7 failure warrants PM CEMS, another continuous particulate-matter stack-monitoring method, or BLDS. Instead, DNR again deferred those matters to the ongoing compliance process and subsequent Title V re-evaluation. **See Appendix F-12.** Accordingly, as of August 21, 2026, both the objective means by which restored EP240 compliance will be demonstrated and the monitoring necessary to assure continuing compliance remained unresolved matters for DNR's final Title V determination.

Federal Title V and Enforcement Precedent Further Supports Evaluation of Enhanced Particulate Monitoring

Accordingly, the April 7, 2026 EP240 failure provides additional post-comment evidence supporting Petitioner's preserved monitoring objections and requires DNR to evaluate whether the monitoring applicable to EP240—including CAM indicators, baghouse monitoring, BLDS, periodic stack testing, and any other existing indicators—is sufficient to identify deterioration or loss of particulate-control performance before another substantial exceedance occurs. Additional unresolved issues concern the regulatory consequences of the post-test compliance process itself. These include whether the August 10, 2026 compliance-plan submission, and any subsequent compliance certification or other Title V submission upon which DNR relies, was or must be certified by a duly authorized Responsible Official consistent with 40 CFR § 70.5(d), and

whether the person making any such certification satisfies the regulatory definition and possesses authority to certify on behalf of the permittee. These issues are particularly material where the administrative record does not presently identify a confirmed current Responsible Official and where DNR may rely upon post-test submissions in determining whether the NOV/HPV has been resolved and whether final permit issuance may proceed.

The final permit and supporting record should identify whether DNR evaluated the significance of the April 7 performance-test failure under the applicable CAM requirements, including whether the criteria of 40 CFR § 64.8 concerning a Quality Improvement Plan or associated corrective measures are implicated by the CAM record. This post-comment issue is identified as part of the subsequent compliance record and is not asserted as an independent Ground for objection. Further, if DNR responds to the April 7 failure by materially changing EP240's monitoring, reporting, recordkeeping, CAM indicators, indicator ranges, monitoring parameters, instrumentation, or other compliance-assurance requirements, the final record must identify the legal and procedural basis for those changes and demonstrate compliance with the applicable permit-revision procedures of 40 CFR § 70.7, including the requirements applicable to significant changes in existing monitoring permit terms or conditions.

The April 7 failure also raises unresolved questions concerning HyCast's continued operation while the resulting NOV/HPV remains unresolved. Iowa's excess-emissions and maintenance provisions, including 567 IAC 21.7 and 21.8, provide for corrective measures under specified circumstances, including

repair, shutdown, emissions-minimization measures, and, where the regulatory criteria are satisfied, maintenance planning. These post-comment matters are identified as additional context concerning the unresolved compliance record and are not asserted as an independent Ground for objection. Separately, 567 IAC 24.115 identifies circumstances under which a Title V permit may be suspended, modified, revoked, or reissued for cause, including violation of permit terms and conditions.

DNR's August 21, 2026 correspondence provides additional evidence that this monitoring question remains unresolved. Petitioner specifically asked whether EP240's CAM monitoring indicated any excursion or exceedance in differential pressure, visible emissions, or any other CAM indicator before or during the April 7 performance test. DNR permit writer Zane Peters responded: **"I am not in possession of any CAM records, so I am not able to provide an answer."** See Appendixes F-12 And F-18.

Petitioner also specifically asked whether DNR had evaluated requiring continuous particulate-matter monitoring through PM CEMS, another continuous stack-monitoring method, or BLDS in light of the April 7 failure. DNR did not identify a completed determination concerning those alternatives and instead stated that the compliance process remains underway and that Title V staff will re-evaluate the resulting remedies together with the proposed permit after the compliance issues are resolved. See **Appendix F-12.**

Accordingly, the record presently does not establish whether the CAM indicators operating during the failed April 7 performance test detected the condition associated with the substantial

measured PM exceedance, nor does it establish that DNR has completed its evaluation of whether additional or strengthened monitoring is necessary. That unresolved issue became substantially more significant on August 27, 2026. In response to Petitioner's request for the underlying CAM information, DNR stated: "We do not have any of the additional CAM records Mr. Smistik requested. All CAM records are kept at the facility for review by the [sic] upon request by the field office inspector. There is no requirement for these to be submitted to DNR unless an inspector directly requests them." See Appendix F-18. Thus, as of August 27, after the April 7 compliance test had demonstrated substantial PM noncompliance and HyCast had subsequently identified a tube-sheet/bag-sealing problem as the primary root cause and an isolation-damper problem as a possible contributing factor, DNR confirmed that it did not possess the additional underlying CAM records requested by Petitioner and that those records remained at the facility unless directly requested by a field-office inspector.

That circumstance raises a substantial compliance-assurance issue. Under 40 C.F.R. § 64.9(b), the owner or operator must maintain monitoring data, monitor-performance data, corrective-action records, monitoring-maintenance records, and other supporting information, including information used to document the adequacy of monitoring. Section 64.7(e) specifically addresses the circumstance in which compliance or performance testing identifies noncompliance that approved monitoring did not indicate while providing valid data, or demonstrates a need to modify existing indicator ranges or designated conditions. In that circumstance, the owner or operator must promptly notify the permitting authority and, if necessary, submit a proposed

Title V permit modification addressing the necessary monitoring changes. 40 C.F.R. § 64.7(e).

The April 7 failure therefore presented a regulatory question that could not reasonably be left unanswered: whether EP240's approved CAM detected the control-system condition associated with the demonstrated PM noncompliance and, if it did not, whether the existing monitoring required modification under 40 C.F.R. § 64.7(e). Yet DNR's August 27 response establishes that, as of that date, DNR did not possess the additional underlying CAM records Petitioner requested and that obtaining those facility-held records required a direct request by a field-office inspector. The available record therefore does not establish that DNR had examined the underlying CAM information necessary to resolve that question before proceeding toward final disposition of the Title V permit.

DNR's treatment of other facility-held compliance records demonstrates that the absence of the CAM records was not simply an unavoidable consequence of records being maintained at the source. Only seven days earlier, in its August 20, 2026 enforcement determination, DNR exercised its authority to require HyCast to produce specified fugitive-opacity compliance records, including opacity-test results dating to January 1, 2025, information required by 40 C.F.R. § 63.7(g)(2), and documentation of the Method 9 certifications of the individuals who performed the observations, with production required by September 21, 2026. See Appendix F-16. DNR therefore demonstrated in the same ongoing enforcement matter that, when it determined facility-held compliance records were necessary to evaluate compliance, it could affirmatively require

their production. Yet DNR's August 27 response establishes that the additional EP240 CAM records requested by Petitioner—records directly relevant to determining whether approved monitoring detected the control-system condition associated with a demonstrated particulate-matter violation—had not similarly been obtained by DNR and remained at the facility unless directly requested by a field-office inspector. See Appendix F-18.

The contrast is significant. DNR affirmatively demanded historical opacity-testing records to investigate notification, protocol, reporting, and observer-certification violations, while the available record does not establish that DNR had obtained the underlying CAM records needed to determine whether EP240's approved compliance-assurance monitoring actually detected the control-system condition associated with the April 7 emissions failure. Given the function of CAM and the specific consequences prescribed by 40 C.F.R. § 64.7(e) when compliance testing reveals noncompliance not indicated by approved monitoring, the failure to establish that this inquiry had even been completed leaves a critical compliance-assurance determination unresolved.

Petitioner does not contend that DNR is required routinely to maintain physical copies of every underlying CAM record kept at the facility. The deficiency is narrower and more consequential. Once direct compliance testing demonstrated substantial noncompliance and HyCast subsequently identified physical defects in the associated pollution-control system, determining what the approved CAM showed became directly material to evaluating whether that monitoring continued to

provide reasonable assurance of compliance. EPA describes CAM as monitoring intended to determine that pollution-control measures are properly operated and maintained, to indicate excursions from established performance ranges, and to prompt correction of the causes of those excursions.

On the record available as of August 27, DNR could not demonstrate that it had made that determination from the underlying CAM information because it expressly stated that it did not have the additional CAM records requested. In these circumstances, leaving the actual performance of the approved monitoring unevaluated would be incompatible with the obligation to determine whether the permit contains monitoring sufficient to assure continuing compliance. See Clean Air Act § 504(c), 42 U.S.C. § 7661c(c); 40 C.F.R. §§ 64.7(e), 64.9(b), 70.6(a)(3), and 70.6(c)(1). Those questions bear directly upon whether the final EP240 monitoring requirements will provide reliable and representative information sufficient to assure continuing compliance.

DNR's August 21, 2026 responses provide additional information concerning that continued operation but do not resolve the underlying evidentiary question. DNR expressly stated that “[t]he **NOV did not require a shutdown of any equipment**” and further stated that “[a]ny interim operating restrictions, production limitations, repairs, maintenance requirements, or other measures would have been identified in the NOV letter.” See Appendix F-12. Thus, DNR confirmed that the NOV itself did not impose a shutdown and did not identify additional interim operating restrictions beyond those contained in the NOV.

When Petitioner separately asked whether DNR had determined that the condition causing the April 7 excess emissions had been corrected, whether excess emissions were no longer occurring, and what objective evidence supported such a determination, DNR did not identify such evidence and instead referred again to the ongoing compliance process. **See Appendix F-12.**

Likewise, when Petitioner specifically asked whether DNR had evaluated a maintenance plan under 567 IAC 21.8(2), DNR did not identify a determination that § 21.8(2) applies or does not apply. **See Appendix F-12.**

These responses do not establish that shutdown or a § 21.8(2) maintenance plan was legally required. They do, however, leave unresolved the factual question central to this Petition: **what objective evidence demonstrates that the condition producing the April 7 EP240 PM exceedance has been corrected and that the monitoring and operating requirements ultimately incorporated into the Title V permit will be sufficient to detect and prevent recurrence.**

These issues are particularly significant because DNR has deferred final action on the pending Title V renewal while the compliance matter is being addressed. Accordingly, the ultimate resolution of the NOV/HPV, the August 10, 2026 compliance-plan submission, any subsequent testing, the factual basis for determining restored compliance, and any resulting changes to monitoring, operating, maintenance, testing, or other permit requirements must be evaluated against the final permit and final administrative record.

Accordingly, the final permit and supporting administrative record must demonstrate how DNR resolved these post-proposal

compliance issues and must provide an adequate factual and legal basis for any determination that EP240 has returned to compliance and that the final permit contains monitoring, testing, operating, maintenance, and other conditions sufficient to assure continuing compliance with all applicable requirements. Any final action taken without resolving these matters must be evaluated in light of the April 7, 2026 performance-test failure, the resulting NOV/HPV, the August 10, 2026 compliance-plan submission, any subsequent compliance testing, and the complete record existing at the time of final permit issuance.

O. Conclusion

The post-comment record presents an extraordinary procedural and substantive circumstance.

DNR's own enforcement process established serious compliance deficiencies after the public-comment period. DNR subsequently determined that those deficiencies were sufficiently material that no further Title V permitting action would occur until they were resolved.

At the same time, **40 CFR §70.7(a)(2)** and **567 IAC 24.107(1)(b)** require final action on a complete renewal application within 18 months, and EPA Region 7 has stated that, in its interpretation, the requirement depends solely upon the complete-application date except for the expressly enumerated exceptions.

Petitioner does not ask EPA to resolve this conflict by encouraging premature permit issuance.

Petitioner asks EPA to ensure that neither **delay nor premature issuance** is used to avoid the substantive requirements of Title V.

The presently available record does not document a factual and enforceable basis for treating the post-comment violations as resolved for purposes of the

final permitting determination.

Part 2H — Reconciliation Of The Draft And Proposed Title V Permits And Effect Of Post-Comment Permit Changes On Petitioned Objections

A. Purpose and Scope of Reconciliation

Petitioner's 108 timely public comments addressed the draft Title V permit made available for public review, while this Petition challenges the proposed Title V permit transmitted by Iowa DNR to EPA on May 26, 2026. This section reconciles material changes between those two permit versions to determine whether each change cured, partially addressed, modified, or left unresolved the objections preserved during the public-comment period.

This reconciliation does not assume that an objection was resolved merely because DNR changed language between the draft and proposed permits. Each material change must be evaluated according to its actual effect on the monitoring, testing, recordkeeping, reporting, operating, control-device, applicability, and compliance-assurance deficiencies raised during public comment. Where the proposed permit leaves the

underlying deficiency unchanged, or modifies the permit without curing the preserved objection, the corresponding objection remains applicable to the proposed permit.

B. Reconciliation Method

The draft and proposed permits are compared on an issue-by-issue basis against the objections preserved in Petitioner's 108 public comments. The comparison focuses on substantive changes capable of affecting the merits of those objections rather than immaterial wording, formatting, pagination, or organizational changes. For each material revision, the analysis identifies the relevant public-comment issue, the change made in the proposed permit, whether that change fully resolved, partially resolved, or did not resolve the preserved objection, and, where the objection remains unresolved, the corresponding Ground of this Petition.

Conversely, where a change in the proposed permit fully addresses a specific objection raised during public comment, this reconciliation identifies that objection as resolved by the proposed-permit revision rather than relying upon the superseded draft-permit language. Where a revision addresses only part of an objection, the reconciliation distinguishes the portion addressed from the portion that remains unresolved and identifies the corresponding Ground of this Petition to which the remaining deficiency relates.

The absence of a material change to a provision challenged during public comment is also significant. Where the proposed permit carried forward the challenged requirement without a substantive revision capable of curing the identified deficiency,

the objection remains directed to the same permit condition as incorporated into the proposed permit. Accordingly, this reconciliation addresses both affirmative changes made after public comment and material challenged provisions that remained unchanged in the proposed permit.

1. Removal of EP201 Cupola and Associated Afterburner — Appendix G-1 Compared with Appendix H-2

The Draft Title V Permit contained in **Appendix G-1** expressly included **EP201, EU102 Cupola**, under Construction Permit No. **92-A-474-S10**, together with permit conditions applicable to the cupola and its associated control equipment. The Proposed Title V Permit contained in **Appendix H-2** removes EP201 from the facility equipment list and eliminates the permit conditions governing future operation of that emission unit. This is a material post-comment change rather than a wording or formatting revision.

The change substantially resolves the equipment-specific portions of **Comments #9 and #34** challenging continued operation of the cupola and its aging afterburner. DNR's Responsiveness Summary states that the cupola construction permit was rescinded, the cupola was dismantled, and the cupola would be removed from the Title V permit. Appendix J likewise recognizes that removal substantially resolves the objections directed specifically to future cupola and afterburner operation.

The revision does **not**, however, resolve the broader preserved objections concerning verification of control-device performance, assumed control efficiencies, or mitigation and compliance assurance for gas-phase VOC and organic HAP

emissions from the emission units that remain authorized by the Proposed Permit. Appendix J expressly distinguishes those continuing issues from the now-resolved cupola-specific objection. Those remaining objections continue to support **Ground III — Internal Baghouse Integrity Monitoring** and **Ground IV — Internal Gas-Phase Control Gaps**, as applicable to the remaining emission units and control devices.

2. Addition of Plant-Wide Subpart ZZZZZ Fugitive-Opacity Testing Requirements

Appendix G-1 did not contain a plant-wide Subpart ZZZZZ opacity-monitoring provision in Part II. Its plant-wide conditions identified general opacity, particulate-matter, fugitive-dust, and NESHAP applicability requirements, but the specific fugitive-opacity testing requirements appeared only within individual emission-point conditions.

Appendix H-2 adds a new plant-wide “**NESHAP Subpart ZZZZZ Requirements**” provision establishing the 20-percent fugitive-opacity limit and expressly requiring opacity tests under 40 CFR 63.6(h)(5) and Table 1 of Subpart ZZZZZ, with subsequent performance tests at least every six months and whenever a process change likely to increase fugitive emissions is made. DNR’s Responsiveness Summary characterizes this revision as the addition of opacity-testing requirements intended to provide greater clarity regarding compliance obligations.

This revision **partially addresses** the preserved objections concerning opacity and fugitive-emission compliance by making the Subpart ZZZZZ testing obligation expressly applicable at the plant-wide level. It does not, however, provide direct or

continuous measurement of particulate-matter emissions, verify baghouse collection efficiency between performance tests, or establish monitoring for pollutants that opacity cannot reliably quantify. The broader monitoring and compliance-assurance objections therefore remain unresolved and continue to support Ground I and, where control-device performance is implicated, Ground III.

3. Express Incorporation of Subpart ZZZZZ Metallic-Scrap Management Requirements

Appendix H-2 adds the substantive requirements of **40 C.F.R. §63.10885** directly into the permit, including requirements for written metallic-scrap specifications and restrictions addressing scrap containing used oil filters, chlorinated plastics, accessible lead-containing components, mercury switches, free liquids, organics, and HAP metals.

Appendix G-1 did not set out those §63.10885 requirements. Instead, it stated only that the owner/operator must comply with the pollution-prevention management practices in §§63.10885 and 63.10886.

This revision **partially addresses Comment #30's objection to incorporation of Subpart ZZZZZ requirements through broad references rather than express permit terms**, but it does not resolve the broader objections concerning verification of the actual composition and variability of scrap charged to the furnaces or continuing compliance with the HAP limitations. Those objections remain applicable to the Proposed Permit and continue to support Grounds II and VI.

Effective-Date and Stack-Test Significance. The addition of the detailed §63.10885 requirements to the Proposed Permit did not create those federal obligations for the first time. The applicable Subpart ZZZZZ scrap-management requirements predated both the Proposed Permit and the April 7, 2026 EP240 performance test. Accordingly, to the extent those requirements applied to HyCast, they were already applicable when the April 7 test was conducted. Their express incorporation into Appendix H-2 therefore clarifies and makes explicit existing federal requirements rather than establishing requirements that first became applicable after the stack test.

4. EP240 PM Stack-Test Deadline Changed from “Every 5 Years” to April 7, 2031

Appendix G-1 required EP240 particulate-matter stack testing “**Every 5 years.**” Appendix H-2 replaces that language with a specific next-test date of **April 7, 2031**, while retaining Method 5 and the Subpart ZZZZZ five-year performance-testing requirement.

This revision was made after the **April 7, 2026 EP240 performance test** and uses that test date as the starting point for the next five-year testing deadline. It therefore **did not govern or alter the requirements applicable to the April 7, 2026 test itself**. More importantly, the Proposed Permit treats April 7, 2026 as the predicate performance test for the next five-year deadline even though that test subsequently demonstrated severe noncompliance. Accordingly, the April 7, 2031 date cannot establish continuing compliance during the intervening permit term and does not resolve the preserved objections concerning

representative testing and monitoring sufficient to assure compliance.

5. Addition of Detailed EP240 Subpart ZZZZZ O&M, Baghouse-Inspection, and Optional BLDS Requirements

Appendix H-2 expressly adds detailed EP240 requirements under **40 C.F.R. §§63.10896–63.10899**, including a written O&M plan, inspections of **baghouse CE317 and its ductwork**, and the provision allowing HyCast to elect a **bag leak detection system (BLDS) in lieu of the prescribed baghouse inspections**.

These requirements were **not created by the Proposed Permit**. They are Subpart ZZZZZ requirements incorporated expressly into H-2 and therefore, to the extent applicable to EP240, were already applicable independently of the proposed-permit revision. The revision consequently **did not first become effective after the April 7, 2026 EP240 stack test and cannot be treated as a new requirement triggered by that failed test**.

The revision partially addresses the preserved objections concerning baghouse monitoring by stating the applicable inspection and O&M obligations more explicitly. It does **not require a BLDS**; H-2 expressly provides that HyCast “**may elect**” to install one instead of conducting the prescribed baghouse inspections. Accordingly, it does not resolve the broader objection that the permit lacks continuous bag-leak detection capable of identifying loss of baghouse integrity between inspections or performance tests, and that objection remains applicable under **Ground III**.

PART 2I — COMPLIANCE ASSURANCE MONITORING (CAM) RECORDS AND EFFECT ON EP240 COMPLIANCE ASSURANCE

The presently unavailable CAM records are material under each of the principal factual outcomes that their review may disclose. First, if the approved CAM monitoring was providing valid data and remained within its approved indicator ranges during conditions associated with the April 7, 2026 demonstrated compliance failure, the records would bear directly upon whether the existing indicators, indicator ranges, or designated conditions provided reasonable assurance of compliance and whether the performance-test results documented a need to modify the existing CAM approach under 40 C.F.R. § 64.7(e). Second, if the CAM monitoring detected an excursion or exceedance before, during, or surrounding the April 7 failure, the records would bear upon whether HyCast responded as required by 40 C.F.R. § 64.7(d), including whether the emissions unit, control device, and associated capture system were restored to normal operation as expeditiously as practicable and whether necessary corrective action was taken to prevent likely recurrence. Third, if the CAM records are incomplete, unavailable, contain periods in which required monitoring was not performed, or otherwise do not provide valid monitoring data sufficient to determine what the approved CAM system indicated during the relevant period, that circumstance would itself require evaluation under the applicable CAM monitoring, data-availability, recordkeeping, and reporting requirements. Thus, the presently unavailable records are not peripheral evidence: their contents are necessary to determine which CAM regulatory issue is presented by the April 7 demonstrated

compliance failure and whether the existing CAM approach provided meaningful compliance assurance.

Petitioner emphasizes that the present unavailability of the requested CAM records does not establish, and Petitioner does not contend, that HyCast failed to create, maintain, retain, or produce any record required by the CAM regulations or its Title V permit. The requested records may exist in full and simply may not yet have been collected and transmitted in response to DNR's request. Because those records have not yet been available for Petitioner's review, no conclusion concerning HyCast's compliance with applicable CAM recordkeeping requirements can presently be drawn. The issue is addressed below solely to identify the applicable requirements and to permit the eventual production to be evaluated according to what the records actually establish, without prejudging that outcome.

The present unavailability of the requested CAM records also raises a distinct recordkeeping issue if subsequent production establishes that records required by the CAM regulations were not created, maintained, retained, or cannot be produced because they do not exist. Under 40 C.F.R. § 64.9(b)(1), an owner or operator subject to CAM must comply with the recordkeeping requirements of 40 C.F.R. § 70.6(a)(3)(ii) and must maintain records of monitoring data, monitor-performance data, corrective actions taken, any required quality-improvement plan and associated implementation activities, and other supporting information required under Part 64, including records of monitoring maintenance and corrective actions. Section 70.6(a)(3)(ii) requires retention of required monitoring data and

supporting information for at least five years from the applicable monitoring sample, measurement, report, or application. Section 64.9(b)(2) permits records to be maintained electronically or on other alternative media where the method of storage allows expeditious inspection and review. Accordingly, the fact that DNR had not yet received the requested CE317 CAM records does not itself establish a recordkeeping violation; HyCast may possess complete records that simply had not yet been transmitted. If, however, subsequent production establishes that particular records required to be maintained under the applicable CAM and Title V requirements do not exist or were not maintained or retained as required, DNR should evaluate that circumstance under 40 C.F.R. § 64.9(b) and the incorporated recordkeeping requirements of § 70.6(a)(3)(ii). DNR should therefore determine both what the requested CAM records show and whether the production contains the monitoring data and supporting records required by the applicable CAM and Title V requirements.

The significance of obtaining and reviewing these records is heightened by DNR Field Office 6's September 2, 2026 correspondence. Ryan Stouder advised Petitioner that Dean Jensen was gathering approximately eight weeks of CAM Plan data and stated: "There is several items that will likely be violates associated with the CAM Plan just by Dean's statements." See Appendix F-18. Although this statement does not establish that a CAM violation occurred, it indicates that DNR's investigating field-office specialist had already received information from HyCast's representative that caused him to anticipate that the CAM records may disclose compliance issues. This makes production and review of the underlying

CE317 CAM records particularly material to determining what the approved CAM indicators showed before, during, and after the April 7, 2026 failed performance test and whether applicable monitoring, recordkeeping, excursion-response, corrective-action, and reporting requirements were satisfied.

The approved CAM Plan for CE317 makes the records necessary to conduct this evaluation source-specific and identifiable. For CE317, which controls particulate matter and PM10 emissions from EP240, the approved CAM compliance indicators are visible emissions and differential pressure. The acceptable visible-emissions indicator is no visible emissions, and the acceptable differential-pressure indicator range is 2–6 inches water column. The CAM Plan requires differential pressure to be checked daily and visible emissions to be observed weekly during material handling. It further requires monthly inspection of the dust-collector cleaning sequence and hopper function and performance, quarterly inspection of bags for leaks and wear, and semiannual inspection of dust-collector components not subject to wear or plugging, including structural components, housing, ducts, and hoods. The Plan defines an excursion as an observed compliance indicator outside its defined acceptable indicator range and requires corrective action to begin as soon as possible, but no later than eight hours after observation of the excursion; abnormal conditions discovered through equipment inspection and maintenance likewise require implementation of remediation within eight hours.

The CE317 CAM Plan also expressly requires HyCast to maintain daily logs of differential-pressure readings; weekly logs of emissions observations and differential pressure; records

of all required daily, monthly, quarterly, and semiannual inspections and maintenance; records documenting bag replacement by date, time, and the location of the bag in relation to the other bags; all corrective actions resulting from compliance indicators, inspections, and maintenance; and excursion, indicator-opacity-exceedance, and excess-emissions reports. These records must be retained for at least five years and made available upon request. Accordingly, Petitioner specifically requested production of these CE317 CAM record categories for March 1 through April 30, 2026, including the underlying daily differential-pressure readings and weekly visible-emissions records surrounding the April 7 performance test. See Appendix F-18. Review of those records should determine whether the required monitoring and inspection records exist for the applicable periods; what the daily differential-pressure readings and weekly visible-emissions observations showed before, during, and after the April 7 performance test; whether any differential-pressure reading fell outside the approved 2–6-inch-water-column range or any visible emissions were observed; whether inspections or maintenance identified abnormal conditions; and, if an excursion or abnormal condition was identified, what corrective action was taken and whether the applicable CAM response, recordkeeping, and reporting requirements were satisfied.

The technical framework for this evaluation is provided by EPA’s Compliance Assurance Monitoring Technical Guidance Document, included in Appendix E-1. The CAM TGD explains that CAM is designed around performance indicators and indicator ranges selected to provide reasonable assurance of compliance and to identify conditions indicating potential control-device or process-performance problems. The April 7, 2026 EP240 performance-test failure therefore makes the relationship between the actual CE317 CAM data and the

demonstrated particulate-matter exceedance directly relevant to determining whether the existing CAM approach provided meaningful compliance assurance.

The CAM issues addressed in this section were expressly raised during the public-comment period. Comment #32, “Bag Leak Detection Systems and Compliance Assurance Monitoring,” specifically challenged the adequacy of the permit’s reliance upon pressure-drop monitoring, visible-emissions observations, periodic inspections, operation-and-maintenance plans, and periodic stack testing to assure compliance, and requested enhanced continuous baghouse monitoring, alarms, corrective-action procedures, and recordkeeping. DNR’s response to Comment #32 expressly relied upon the permit’s Compliance Assurance Monitoring plans, pressure-drop monitoring, visible-emissions observations, inspections, corrective-action provisions, and stack testing as compliance-assurance mechanisms. The CAM information now being obtained therefore does not present an unrelated objection first raised after the public-comment period; it bears directly upon the preserved question whether the monitoring mechanisms specifically identified by DNR actually provided meaningful compliance assurance for EP240/CE317. The April 7, 2026 performance-test failure provides subsequent evidence corroborating that preserved objection, and the CAM records concerning the period surrounding that failure, once obtained and reviewed, will provide additional evidence with which to evaluate it.

EPA’s CAM guidance further explains that the selection of appropriate indicator ranges is critical to the validity of the

CAM approach. Those ranges are to be established so that operation within them provides reasonable assurance of compliance with the applicable requirement over the anticipated range of operations. EPA specifically identifies baghouse pressure drop as an indicator of control-device performance and explains that a more complete baghouse monitoring approach may also include other indicators, such as visible-emissions observations and periodic inspections. Thus, the relevant inquiry is not merely whether CE317 had a CAM parameter and numerical operating range, but whether the selected indicator, indicator range, monitoring frequency, and associated monitoring approach were adequate to provide reasonable assurance of compliance under the operating conditions actually encountered at EP240.

The CAM regulations specifically address the significance of a subsequent compliance or performance test. Under 40 C.F.R. § 64.7(e), after CAM has been approved, if the owner or operator identifies a failure to achieve compliance for which the approved monitoring, while providing valid data, did not indicate an excursion or exceedance, or if compliance or performance testing documents a need to modify the existing indicator ranges or designated conditions, the owner or operator must promptly notify the permitting authority and, if necessary, propose a Title V permit modification addressing the necessary monitoring changes. Those changes may include reestablishing indicator ranges, changing monitoring frequency, or monitoring additional parameters. Accordingly, the April 7, 2026 EP240 performance-test failure requires evaluation not only of the measured PM exceedance itself, but also of what the approved CE317 CAM monitoring indicated during the failure and

whether the test results demonstrated a need to modify the existing CAM approach.

The CAM regulations also prescribe how monitoring information must be used when an excursion or exceedance is detected. Under 40 C.F.R. § 64.7(c), the owner or operator must use the valid CAM data collected during operation in assessing the operation of the control device and associated control system. Under § 64.7(d), detection of an excursion or exceedance requires the owner or operator to restore the emissions unit, control device, and associated capture system to normal operation as expeditiously as practicable and to take necessary corrective actions to prevent likely recurrence. The adequacy of that response may be evaluated using monitoring results, operation-and-maintenance records, and inspection of the control device, capture system, and process. Accordingly, the CE317 CAM records are relevant not merely to whether an excursion occurred, but also to whether the monitoring identified deteriorating control performance and whether any resulting condition was appropriately investigated and corrected.

HyCast's August 10, 2026 compliance plan identifies physical causes and corrective measures associated with the April 7 performance-test failure, including a tube-sheet/bag-sealing problem, possible isolation-damper leakage, inspection and cleaning, verification of bag and cage seating, damper repair, revised maintenance procedures, evaluation of additional system-integrity or leak testing, and a planned EP240 compliance retest. See Appendix F-15. The compliance plan, however, does not identify an evaluation of the April 7 failure against the approved CE317 CAM indicators or indicator

ranges, state whether CAM detected an excursion or exceedance associated with the demonstrated compliance failure, or state whether the failed performance test required modification of the existing CAM approach. Those omissions are material because 40 C.F.R. § 64.7(e) requires prompt notification to the permitting authority when the owner or operator identifies a failure to achieve compliance for which approved monitoring, while providing valid data, did not indicate an excursion or exceedance, or when compliance or performance testing documents a need to modify existing indicator ranges or designated conditions. The CAM records now being obtained are therefore necessary to determine whether the corrective response described in the August 10 plan addressed not only the physical cause of the April 7 failure, but also the adequacy of the monitoring system intended to provide reasonable assurance of compliance.

The timing and availability of the underlying CAM records are independently significant. The presently available record indicates that, although DNR Field Office 6 had previously requested the underlying CE317 CAM records from HyCast, those records had not been provided and therefore were not available for examination during DNR's investigation and review of HyCast's August 10 compliance plan to determine what the approved monitoring actually indicated before, during, and after the April 7 performance-test failure. Without examination of those records, the available record could support evaluation of HyCast's explanation of the physical causes of the failure and its proposed corrective measures, but could not establish whether the existing CAM system detected the condition associated with the demonstrated exceedance, whether

an excursion or exceedance occurred under the approved CAM approach, or whether the performance-test results demonstrated a need to modify the CAM indicators, indicator ranges, monitoring frequency, or other designated conditions. Accordingly, evaluation of the CAM records is necessary before the compliance record can support a fully informed determination concerning the adequacy of the existing EP240/CE317 compliance-assurance framework.

This is not a peripheral compliance-assurance issue. The April 7, 2026 performance test demonstrated that EP240 was operating in substantial violation of applicable particulate-matter limits, and HyCast subsequently attributed that failure principally to conditions involving the baghouse itself. See Appendix F-15. Yet the presently available record does not establish that, before evaluating HyCast's corrective-action response, DNR had obtained and examined the underlying CAM data necessary to determine whether the approved monitoring detected those same control-device conditions or provided any warning of the resulting compliance failure. Until the CAM data generated by that control device during the period surrounding the failure are obtained and examined, the investigation necessarily leaves unresolved the separate and critical question whether the monitoring relied upon to provide reasonable assurance of compliance was itself adequate. That question bears directly on whether the existing CAM approach can continue unchanged in the renewed Title V permit and cannot be answered solely by repairing the identified equipment and conducting another performance test.

The September 1 effort to obtain these records did not originate from DNR's permitting staff's earlier review of the April 7 performance-test failure or HyCast's August 10 compliance plan. The chronology, however, requires an important distinction concerning DNR Field Office 6 investigator Ryan Stouder. Ryan Stouder had previously requested CAM records from HyCast for purposes of his investigation, but the records had not been provided to him by the time Petitioner subsequently sought the same records. The records consequently remained unavailable when Petitioner subsequently sought them through a public-records request in an effort to determine what the EP240/CE317 CAM monitoring had actually shown during the period surrounding the failed performance test. Petitioner then requested Stouder's assistance in obtaining the **requested records**. Stouder again requested the records from HyCast and subsequently advised that HyCast was assembling them for submission to him and DNR permitting staff. Thus, although the Field Office investigator had previously recognized the need for and attempted to obtain the CAM records during his investigation, the requested records had not been provided and remained unavailable for agency and public review during the subsequent investigation and DNR's review of HyCast's August 10 corrective-action plan. Petitioner's public-records request and follow-up with the Field Office brought that unresolved evidentiary gap back to the forefront and resulted in renewed efforts to obtain the records. This chronology is significant because it establishes that the Field Office investigator had independently recognized the need for the CAM records and attempted to obtain them, while Petitioner's subsequent public-records inquiry independently identified that the same records remained unavailable. Petitioner's follow-up therefore did not

originate the Field Office's CAM inquiry; it renewed attention to an evidentiary gap that the Field Office had already identified but that remained unresolved because the requested records had not been provided.

The April 7, 2026 performance-test report further confirms that Mark Fields of DNR's Air Quality Bureau was onsite to witness the EP240 compliance testing. The approved protocol identifies Fields as the DNR regulatory representative for the test. The report, however, documents testing under EPA Methods 1, 2, modified 3/3A, 4, 5, and 202 and contains no Method 9 fugitive-opacity performance test or opacity-observation results. DNR's subsequent July 7, 2026 Notice of Violation states that, while onsite for this testing, DNR observed fugitive emissions from the induction furnaces being vented through roof vents and further states that DNR had no record of HyCast scheduling, completing, or submitting the federally required fugitive-opacity performance testing under 40 C.F.R. § 63.10898(h) and (i). Thus, the same compliance event that produced the severe EP240 particulate-matter exceedances also produced a direct DNR observation of fugitive emissions while the federally required opacity-testing record was missing. This further demonstrates why the outstanding monitoring and compliance information must be resolved and communicated across DNR's field, compliance, and permitting functions before DNR relies upon the existing monitoring framework as adequate to assure compliance.

The circumstances surrounding these outstanding CAM records also reveal a broader weakness in the coordination between DNR's permitting, field-investigation, and compliance functions.

The issue is not whether any particular DNR employee personally should have possessed these records. The concern is that material compliance information directly relevant to a pending Title V permit can remain within a separate component of the permitting authority without being obtained, communicated to, and evaluated by the personnel responsible for determining whether the permit's monitoring provisions are adequate to assure compliance. That concern is particularly significant here because the outstanding CAM records cover the period surrounding the April 7, 2026 performance test, which demonstrated Federal PM emissions of 8.20 lb/ton against a 0.80 lb/ton limit and State PM emissions of 8.27 lb/ton against a 0.042 lb/ton limit, while DNR personnel also observed fugitive emissions from the induction furnaces venting through roof vents.

A permitting determination concerning the adequacy of CAM and other monitoring provisions cannot reasonably be made on a record that excludes potentially material compliance information simply because that information is being sought, developed, or evaluated by another component of the same agency. Before taking final Title V action, DNR should obtain and evaluate the outstanding CAM information, ensure that any resulting compliance findings are provided to and considered in the permitting review, determine whether those findings reveal deficiencies in the existing CAM requirements, and revise the permit as necessary to assure compliance. Without such coordination, the Title V process risks precisely the systemic failure presented here: a permit decision being made without the decisionmaker having considered material compliance information concerning whether the permit's own monitoring

requirements functioned during a documented period of severe noncompliance.

PART 3— GROUND I

The April 2026 EP240 stack test provides direct confirmation of the compliance-assurance concerns identified throughout this Ground. The formal performance test demonstrated substantial particulate-matter noncompliance. The presently available record, however, does not establish whether EP240’s routine monitoring or CAM indicators detected or reflected the condition associated with that failure before or during the performance test. On August 21, 2026, when Petitioner specifically asked whether CAM monitoring indicated an excursion or exceedance in differential pressure, visible emissions, or another CAM indicator before or during the failed test, DNR permit writer Zane Peters responded: **“I am not in possession of any CAM records, so I am not able to provide an answer.”** See Appendices F-12 and F-18. Accordingly, the unresolved issue is whether the existing monitoring actually provided meaningful and timely indication of the condition associated with the measured exceedance and, if not, what additional or revised monitoring is necessary to assure continuing compliance during normal operation.

Petitioner's Demonstration Under Clean Air Act § 505(b)(2)

Petitioner affirmatively demonstrates that the permit's existing monitoring framework is insufficient to assure compliance during normal operation. This Ground does not rest merely upon an absence of proof from DNR. The demonstrated violation, considered together with the monitoring deficiencies raised

during the public-comment period and documented throughout this Ground, provides substantial post-comment evidence corroborating Petitioner's preserved objection that the permit's existing monitoring framework does not provide reliable and representative information sufficient to assure continuing compliance during normal operation and between direct emissions measurements. The April 7, 2026 EP240 performance test directly demonstrated substantial particulate-matter noncompliance and provides significant post-comment evidence corroborating the monitoring deficiencies raised during the public-comment period, particularly because the presently available record does not establish that the permit's routine monitoring or CAM indicators provided meaningful and timely indication of the condition associated with that failure before or during the performance test. On August 21, 2026, DNR stated that its permit writer did not possess the CAM records and therefore could not determine what those indicators showed. See Appendices F-12 and F-18. On August 27, 2026, DNR further confirmed that it did not possess the additional CAM records requested by Petitioner and that the underlying records remained at the facility unless directly requested by a field-office inspector. See Appendix F-18. Petitioner does not contend that those underlying records were required to be submitted to DNR contemporaneously as a matter of routine CAM reporting. Rather, once the April 7 performance test demonstrated substantial noncompliance, the content of those records became directly material to determining whether the approved CAM had indicated the condition associated with the failure and whether monitoring changes were necessary under 40 C.F.R. § 64.7(e). Subsequent correspondence establishes that the Field Office investigator had previously requested CAM information during

his investigation and later renewed that request; however, as of September 2, the requested records had not yet been provided to Petitioner for review. See Appendix F-18.

The applicable question under Clean Air Act § 504(c), 42 U.S.C. § 7661c(c), and 40 C.F.R. §§ 70.6(a)(3) and 70.6(c)(1) is whether the permit contains monitoring, testing, recordkeeping, and reporting sufficient to assure compliance. For the reasons demonstrated throughout this Ground, Petitioner has satisfied the burden imposed by Clean Air Act § 505(b)(2): the permit does not contain monitoring sufficient to determine and assure compliance during normal operation and during the substantial periods between direct emissions measurements.

This Ground is evaluated under the Legal Standard set forth in Part 1.

The permit does not allow compliance to be confirmed during normal operations

Issue Raised in Public Comments

Commenter repeatedly challenged whether the permit contains monitoring sufficient to determine compliance during routine operation (#1, #2, #6, #10, #13, #14, #17, #18, #22, #23, #29, #30, #31, #36, #40, #41, #43, #44, #45, #47, #48, #62, #64, #65, #71, #72, #74, #75, #80, #81, #82, #84, #85, #87, #90, #91, #94, #97, #98, #99, #100, #101, #103, #104, #105, #106, #108).

Commenter repeatedly argued that the permit relies upon calculations, assumptions, inspections, records, annual reports, opacity observations, and periodic testing rather than monitoring capable of determining actual emissions during operation.

Commenter further argued that periodic stack testing provides only a limited snapshot of facility operation and cannot establish compliance during the substantial periods between tests (#18, #31, #40, #45, #47, #61, #63, #64, #75, #81, #84, #91, #94, #102, #105, #106, #108). Concerns were repeatedly raised regarding the infrequency of testing, the representativeness of testing conditions, and the inability of stack tests to evaluate operational variability occurring throughout the permit term.

The permit does not establish enforceable criteria requiring compliance demonstrations to reflect representative feedstock conditions, representative production conditions, representative process conditions, representative throughput conditions, or worst-case operating conditions (#18, #31, #40, #45, #47, #61, #63, #64, #75, #81, #84, #91, #94, #105, #106, #108).

Commenter repeatedly questioned whether testing conditions reflect the full range of operations authorized by the permit.

Commenter also raised concerns that emissions are influenced by scrap composition, feedstock variability, contaminant variability, production levels, operating conditions, and pollution-control performance (#3, #6, #21, #29, #30, #31, #40, #47, #64, #76, #78, #79, #81, #84, #91, #94, #105, #106, #108). Because emissions are affected by these variables, commenter argued that compliance cannot be reliably demonstrated through infrequent testing alone.

Commenter further argued that annual emissions inventories, annual reports, annual certifications, and annual compliance demonstrations are retrospective accounting mechanisms rather than operational compliance-assurance mechanisms (#6, #8, #22, #29, #31, #37, #64, #74, #75, #79, #81, #82, #85, #86, #87,

#94, #102, #106, #107, #108). Annual reports may identify what a facility reports after operations have occurred, but they do not determine when emissions occurred, whether emissions spikes occurred, whether short-term exceedances occurred, or whether assumptions relied upon in emissions calculations remained valid throughout the reporting period.

Commenter also questioned whether the permit framework allows EPA, regulators, or the public to independently evaluate compliance, emissions calculations, monitoring assumptions, applicability determinations, and source-classification conclusions (#13, #23, #24, #31, #44, #64, #71, #75, #80, #85, #87, #88, #94, #95, #97, #98, #99, #100, #101, #102, #103, #107, #108). The recurring concern throughout the administrative record is that compliance remains inferred from assumptions, calculations, and periodic demonstrations rather than verified during actual operation.

Accordingly, commenter repeatedly argued that the permit does not contain monitoring sufficient to determine compliance during normal operations and does not provide a reliable basis to assure compliance throughout the permit term.

DNR Response

DNR states that the proposed Title V permit contains all monitoring, recordkeeping, reporting, and compliance requirements required by applicable federal and state regulations. DNR maintains that compliance is demonstrated through required stack testing, Compliance Assurance Monitoring (CAM) plans, operation and maintenance (O&M) plans, periodic monitoring, inspections, visible emissions

observations, recordkeeping, and annual emissions inventory reporting.

DNR further states that required stack testing must be conducted during normal operation at maximum continuous output and that testing requirements were established in accordance with applicable federal requirements, CAM regulations, DNR Periodic Monitoring Guidance, and source-specific permit requirements. DNR maintains that pressure-drop monitoring, visible emissions observations, inspections, operation and maintenance plans, corrective-action requirements, and stack testing provide adequate assurance of compliance.

DNR also states that annual emissions inventories, required recordkeeping, compliance certifications, and applicable monitoring requirements provide sufficient information to demonstrate compliance with permit conditions. DNR concluded that the proposed permit contains all monitoring required by applicable regulations, that the facility satisfies the criteria for Title V permit issuance, and that the public comments did not provide evidence requiring permit denial or additional monitoring requirements.

Petitioner's Claim

The permit fails to include monitoring requirements sufficient to assure compliance during operation, as required under Clean Air Act §504(c) and 40 C.F.R. §70.6(a)(3). Specifically, the permit relies on periodic stack testing and emissions estimates without requiring demonstration that such testing is conducted under conditions representative of normal or maximum operations, and

without ensuring that monitoring reflects the full range of variability in emissions during actual operation.

Petitioner's Response

Comparison of historical stack test reports to more recent testing (Appendix B) provides a framework for evaluating consistency of measured emissions, differences in testing conditions, and whether testing reflects representative operating loads. Under Clean Air Act §504(c) and 40 C.F.R. §70.6(a)(3), monitoring must be sufficient to assure compliance during operation, which requires that monitoring reflect actual operating conditions rather than isolated or unrepresentative test scenarios.

However, neither the permit nor applicable Iowa DNR requirements establish criteria or require demonstration that stack testing is conducted under conditions representative of normal or maximum operations. Where Iowa DNR intends to require representative operating conditions, it has done so explicitly in other regulatory contexts, demonstrating that such requirements are feasible and enforceable. The absence of any comparable requirement here leaves representativeness undefined and unverified.

DNR's statement that testing must be conducted during normal operation at maximum continuous output does not resolve the absence of enforceable permit criteria defining representative feedstock conditions, representative production conditions, representative operating conditions, or documentation sufficient to verify that testing reflects the full range of operations authorized by the permit.

This deficiency is further compounded by the absence of any requirement that stack testing reflect representative feedstock conditions. Where emissions are influenced by input materials, a demonstration of representativeness must include the composition of materials processed during testing. Without enforceable requirements to document or constrain feedstock during testing and operation, there is no basis to conclude that stack testing reflects normal or maximum operating conditions. See 40 C.F.R. §70.6(a)(3); 40 C.F.R. §70.7(a)(1)(iv).

Consistent with EPA guidance recognizing that stack testing should reflect representative operating conditions in order to demonstrate compliance during operation, the lack of defined criteria or required demonstration of representativeness means that stack testing cannot be relied upon to provide a consistent or comparable basis for verifying compliance across time.

The administrative record includes a long-term emissions inventory spanning approximately 1999–2024 (Appendix D), which demonstrates orders-of-magnitude variability in reported emissions over time. For example, reported lead emissions range from approximately 5.78 tons per year in 2000 to approximately 0.01–0.02 tons per year in recent years, reflecting differences of several orders of magnitude. These emissions are derived from production levels, material inputs, emission factors, and assumed control efficiencies, and therefore reflect changing operating conditions rather than fixed or predictable emission rates.

Although induction furnaces were authorized in 2008 (Permit 08-A-222-P), Iowa DNR has confirmed that there is no single construction permit or clearly identified document in the

administrative record that explains the transition from cupola operations or establishes how changes in operating configuration relate to emissions trends (Appendix F-1; DNR correspondence). Accordingly, any assertion that emissions variability is explained by changes in equipment or process is not supported by the record and cannot be relied upon to demonstrate stable or predictable emissions over time.

Because emissions vary substantially over time and are influenced by factors such as scrap composition, production levels, and control performance, discrete stack test results cannot be assumed to represent normal operation or worst-case conditions. As a result, neither individual stack tests nor comparisons between them provide a reliable basis to verify compliance across normal operations.

The adequacy of monitoring is determined by whether it assures compliance during operation, not by whether it is typical for similar sources.

Accordingly, reliance on emissions estimates combined with infrequent, snapshot-based testing does not satisfy the requirement that monitoring be sufficient to assure compliance during operation under Clean Air Act §504(c), 42 U.S.C. §7661c(c), and 40 C.F.R. §70.6(a)(3).

Verification Analysis

The central issue raised throughout the administrative record is whether compliance can be verified during routine operation rather than inferred from periodic testing, calculations, annual reporting, or assumptions. The permit relies primarily upon

emissions estimates, infrequent stack testing, recordkeeping, and indirect indicators of control-device performance. However, these mechanisms do not determine actual emissions during routine operation and do not verify whether emissions remain within permitted levels between testing events.

Commenter repeatedly identified uncertainties involving feedstock variability, production variability, pollution-control performance, representative operating conditions, and pollutant-specific emissions. The permit does not identify how these uncertainties are verified during operation, nor does the Responsiveness Summary explain how the approved monitoring framework is sufficient to address those concerns. As a result, compliance remains inferred rather than verified.

Because compliance cannot be determined from assumptions alone, the absence of operational verification weighs heavily against a finding that the permit contains monitoring sufficient to assure compliance under Clean Air Act § 504(c), 42 U.S.C. § 7661c(c), and 40 C.F.R. § 70.6(a)(3). The record therefore demonstrates a recurring inability to verify compliance during routine operation, which is the central concern raised throughout Ground I.

Non-Discretionary Duty Analysis

Clean Air Act §504(c), 42 U.S.C. §7661c(c), requires each Title V permit to set forth inspection, entry, monitoring, compliance certification, and reporting requirements to assure compliance with the permit terms and conditions. Likewise, 40 C.F.R. § 70.6(a)(3)(i)(B) requires periodic monitoring sufficient to yield reliable data from the relevant time period that are representative

of the source's compliance with the permit where the applicable requirement does not otherwise require periodic testing or monitoring, while 40 C.F.R. § 70.6(c)(1) requires monitoring, testing, reporting, and recordkeeping requirements sufficient to assure compliance with the terms and conditions of the permit.

These requirements are mandatory, not discretionary. Before issuing a Title V permit, DNR must determine that the monitoring, recordkeeping, reporting, and compliance-certification requirements contained in the permit are sufficient to assure compliance with applicable requirements. See 40 C.F.R. §70.7(a)(1)(iv). Throughout the administrative record, commenter repeatedly challenged whether compliance could be verified during operation in light of feedstock variability, operational variability, pollution-control performance, representative testing conditions, and pollutant-specific emissions. However, neither the permit nor the Responsiveness Summary identifies where DNR evaluated those concerns and determined that the approved monitoring framework remains sufficient to assure compliance despite the uncertainties identified by commenter. Because Title V requires monitoring sufficient to assure compliance, DNR must satisfy the applicable permit-issuance and compliance-assurance requirements. Neither the permit nor the Responsiveness Summary identifies an analysis resolving the specific monitoring-adequacy concerns described above.

Arbitrary and Capricious Analysis

The administrative record demonstrates that commenter repeatedly challenged whether compliance can be verified during routine operation using the monitoring framework

contained in the permit. These comments specifically identified concerns regarding representative operating conditions, feedstock variability, emissions variability, pollution-control performance, pollutant-specific emissions, and the inability of periodic stack testing to verify compliance during normal operation.

In response, DNR repeatedly defended the existing monitoring framework but did not identify where it determined that the monitoring contained in the permit is sufficient to assure compliance under the conditions identified by commenter. Nor did DNR explain how periodic stack testing, emissions calculations, annual reporting, or indirect operating parameters can verify compliance during the substantial periods between testing events.

An agency acts arbitrarily and capriciously when it fails to address an important aspect of the problem presented, fails to provide a reasoned explanation connecting the facts found to the conclusions reached, or responds to significant concerns with generalized statements that do not address the specific issue raised. See *Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983).

Here, the central issue raised by commenter was not whether some monitoring exists, but whether the monitoring included in the permit is sufficient to assure compliance during operation as required by Clean Air Act § 504(c), 42 U.S.C. § 7661c(c), and 40 C.F.R. § 70.6(a)(3). The Responsiveness Summary does not identify where DNR performed that analysis or explain how the approved monitoring framework resolves the specific uncertainties identified throughout the administrative record.

Accordingly, the specific deficiencies identified above demonstrate that DNR's conclusion that the permit contains monitoring sufficient to assure compliance is not supported by a reasoned connection between the compliance-verification concerns raised during public comment and the monitoring actually contained in the permit. Petitioner has identified the particular uncertainties that remain unaddressed—including representative operating conditions, feedstock variability, emissions variability, pollution-control performance, pollutant-specific emissions, and the substantial periods between stack tests—and has demonstrated why the existing monitoring framework does not resolve those uncertainties. This deficiency independently supports EPA objection under Clean Air Act §505(b)(2), 42 U.S.C. §7661d(b)(2).

Additional Compliance-Assurance Deficiency Affecting Synthetic Minor Status

The monitoring deficiencies identified in this Ground have additional significance because the permit relies upon federally enforceable limitations to maintain the facility below major-source hazardous air pollutant thresholds. A source may operate as a synthetic minor source only where the limitations relied upon to restrict emissions are legally and practically enforceable and supported by monitoring sufficient to assure ongoing compliance.

The permit relies primarily upon emissions calculations, periodic testing, recordkeeping, and assumptions regarding feedstock, operations, and control-device performance. However, the permit does not include monitoring sufficient to verify during actual operation that emissions remain below the

levels used to support the facility's claimed synthetic minor status. Where emissions are influenced by variable factors such as feedstock composition, operating conditions, production levels, and control performance, compliance cannot be assured through assumptions alone.

The issue presented here is not whether HyCast presently qualifies as a major source. Rather, the issue is whether the permit contains monitoring sufficient to verify continued compliance with the federally enforceable limitations relied upon to support synthetic minor status.

Accordingly, the same monitoring deficiencies that prevent verification of compliance with permit conditions also prevent meaningful verification that emissions remain below the levels necessary to support synthetic minor status on a continuing basis. This further confirms that the permit fails to satisfy the compliance-assurance requirements of Clean Air Act §504(c), 42 U.S.C. §7661c(c), and 40 C.F.R. §70.6(a)(3), which require monitoring sufficient to assure compliance with applicable requirements on a continuing basis.

Direct Source-Specific Monitoring Provides an Available Means of Addressing the Verification Deficiency

The deficiencies identified in this Ground do not arise from the absence of any conceivable means of obtaining more direct emissions information. The administrative record expressly raised continuous emissions monitoring or equivalent verification methods as alternatives to reliance upon periodic stack testing and emissions calculations. See Comment #22 and Appendix J.

Direct source-specific monitoring, where technically feasible and appropriate for the pollutant and emission point, would address a different and important component of the verification problem. Unlike periodic stack testing, which measures emissions only during discrete testing events, continuous or more frequent source-specific monitoring can provide contemporaneous information concerning emissions during actual facility operation and can identify changes associated with production, feedstock, process conditions, or pollution-control performance.

Such monitoring also avoids the source-attribution problem that can arise after pollutants have dispersed into the surrounding ambient air. Measurements obtained directly from a HyCast emission point identify emissions from that source before dispersion and before those emissions can become mixed with particulate matter or other pollutants from nearby railroad traffic, roadway traffic, or other outside sources.

This does not eliminate the separate value of facility-boundary monitoring addressed in Ground V. Emissions measured at a HyCast stack subsequently enter the ambient air and may travel across the facility boundary, while fugitive and other non-stack releases may not be characterized by monitoring at a particular stack. Source-specific monitoring and facility-boundary verification therefore provide different forms of evidence concerning the same ultimate compliance-assurance question: whether emissions associated with HyCast's actual operations remain consistent with applicable requirements and the assumptions underlying the permit.

Petitioner does not contend that Title V categorically requires a particular continuous emissions monitoring system for every pollutant or emission unit. Rather, where the existing permit relies upon infrequent testing and indirect indicators that do not adequately determine compliance during routine operation, DNR was required to determine what monitoring, testing, or equivalent verification measures are sufficient to satisfy Clean Air Act § 504(c), 42 U.S.C. § 7661c(c), and 40 C.F.R. § 70.6(a)(3). The record does not demonstrate that DNR evaluated whether more direct or more frequent source-specific emissions monitoring could address the verification deficiencies repeatedly identified during public comment.

The April 7, 2026 EP240 compliance stack test further demonstrates the significance of this issue. Direct measurement at the emission point revealed substantial particulate-matter exceedances that had not been established through the permit's routine indirect monitoring framework. That subsequent result does not establish that continuous monitoring is required as a matter of law, but it reinforces the preserved concern that periodic testing and indirect indicators alone may not provide sufficient information to determine compliance throughout actual operation.

EPA should therefore object and require DNR to revise the permit to include source-specific monitoring, testing, or equivalent verification measures sufficient to assure compliance during operation. The particular monitoring method should be selected based upon the applicable emission limits, operating conditions, control-device performance, and demonstrated compliance-assurance deficiencies, and may include continuous

or more frequent direct emissions monitoring where DNR determines such monitoring is technically appropriate and necessary to satisfy Title V's compliance-assurance requirements.

EPA Title V Precedent Requires the Permitting Authority to Demonstrate That Existing PM Monitoring Actually Assures Compliance

EPA's Title V order concerning **Nucor Steel Louisiana** provides relevant precedent concerning the obligation to evaluate the adequacy of particulate-matter monitoring under Title V. EPA explained that Clean Air Act §504(c), 42 U.S.C. §7661c(c), and 40 C.F.R. §§70.6(a)(3) and 70.6(c)(1) require Title V permits to contain monitoring sufficient to assure compliance with applicable requirements. The existence of some monitoring does not itself establish that the monitoring is adequate. Rather, the permitting record must demonstrate how the monitoring provides sufficiently reliable and representative information to determine compliance with applicable numerical emission limitations and must supply additional monitoring where the existing applicable requirements do not provide monitoring sufficient to assure compliance.

Petitioner does not contend that Nucor Steel Louisiana is comparable to HyCast in facility size, production capacity, process scale, or surrounding industrial setting. Nucor Steel Louisiana is a substantially larger steel-manufacturing complex. Petitioner therefore does not rely upon Nucor as evidence that monitoring appropriate for that facility must automatically be imposed upon HyCast. Its relevance here is legal rather than technological or facility-specific: EPA's Title V analysis

demonstrates that the existence of monitoring does not end the inquiry where the permitting record fails to demonstrate that the monitoring actually provides sufficient information to assure compliance with the applicable numerical emission limitation.

That distinction is important here. HyCast must be evaluated on its own operating circumstances, emission limits, control equipment, compliance history, and monitoring framework. See Appendix E-6 (Iowa DNR Compliance Database). The April 7, 2026 EP240 compliance test provides unusually direct source-specific evidence for that evaluation. EP240 exceeded the federal particulate-matter limitation by more than ten times and the applicable Iowa particulate-matter limitation by approximately 197 times while the existing routine monitoring framework had not established the magnitude of that noncompliance.

Accordingly, the issue is not whether HyCast should receive a monitoring requirement merely because a different and substantially larger facility was subjected to enhanced monitoring analysis. The issue is whether, after the demonstrated EP240 failure, DNR has established that the monitoring incorporated into HyCast's own permit will provide sufficiently reliable and timely information to determine whether EP240 remains in compliance between periodic performance tests.

Nucor therefore supports a narrow but important proposition: **existing baghouse, parametric, opacity, inspection, recordkeeping, or other monitoring does not end the Title V inquiry unless the permitting authority demonstrates that**

the monitoring is sufficient to assure compliance with the applicable emission limitation.

That principle has particular force here because the inadequacy identified during public comment is no longer hypothetical. The April 7 compliance test demonstrated substantial particulate-matter noncompliance under the monitoring framework upon which the proposed permit relies. DNR and EPA therefore must determine whether that monitoring framework remains sufficient or whether additional direct or enhanced monitoring is necessary to satisfy Clean Air Act §504(c) and 40 C.F.R. §§70.6(a)(3) and 70.6(c)(1).

Federal Clean Air Act Enforcement Precedent Demonstrates That Continuous Stack PM Monitoring Is an Established and Enforceable Compliance-Assurance Remedy

Federal Clean Air Act enforcement actions further demonstrate that continuous particulate-matter monitoring is not merely a theoretical monitoring technology. EPA and the Department of Justice have obtained enforceable requirements for installation and operation of continuous particulate-matter emissions monitoring systems in federal Clean Air Act resolutions where enhanced direct verification of particulate emissions was warranted.

In the **Westar Energy** Clean Air Act enforcement resolution, continuous particulate-matter emissions monitoring was required as part of the compliance framework applicable to affected generating units. The monitoring operated in addition to other compliance obligations rather than merely replacing periodic performance testing. The significance of Westar for this

Petition is therefore limited but important: federal Clean Air Act enforcement has actually employed continuous direct particulate monitoring as an enforceable means of obtaining continuing information concerning particulate emissions.

Similarly, the federal enforcement resolution involving **Wisconsin Power & Light** required continuous particulate-matter emissions monitoring as part of an extensive emissions-control and compliance-assurance program. Again, Petitioner does not contend that an electric generating facility is technologically comparable to HyCast or that requirements imposed upon a utility must automatically be transferred to a gray-iron foundry. The precedent demonstrates instead that continuous particulate measurement is an available and enforceable Clean Air Act compliance mechanism where EPA and DOJ determine that continuing direct emissions information is warranted.

The **DTE Energy** enforcement resolution is additionally significant because monitoring and other requirements established through the federal resolution were required to be incorporated into applicable Title V operating permits. DTE therefore demonstrates that continuous particulate monitoring imposed to address Clean Air Act compliance concerns can become part of the enforceable operating-permit framework rather than remaining merely a temporary investigative or enforcement measure.

These authorities do not establish a categorical rule requiring PM CEMS at HyCast, and Petitioner does not ask EPA to create such a rule. Nor does Petitioner contend that electric generating facilities or other facilities involved in these enforcement

matters are directly comparable to HyCast in size, production, processes, emissions characteristics, or control technology.

Their relevance is considerably narrower. They demonstrate that **continuous stack particulate monitoring is a technically and legally available Clean Air Act compliance-assurance mechanism that EPA and DOJ have actually required when circumstances warranted continuing direct measurement.**

That matters because DNR cannot dismiss consideration of enhanced monitoring for EP240 merely on the ground that periodic stack testing or indirect baghouse indicators are traditionally used at foundries. Title V asks whether the monitoring contained in the permit is **sufficient to assure compliance**, not whether it represents the minimum or most customary monitoring historically imposed upon similar sources.

The April 7, 2026 EP240 compliance failure supplies the source-specific factual basis for that inquiry. The existing monitoring framework did not establish the magnitude of the particulate-matter noncompliance before direct stack testing revealed it. The resulting exceedances were not marginal: EP240 exceeded the federal PM limitation by more than ten times and the Iowa PM limitation by approximately 197 times.

Consequently, EPA should require DNR to determine what monitoring will provide reliable and sufficiently timely information to identify recurrence of a comparable loss of particulate-control performance between formal stack tests. That evaluation should expressly consider PM CEMS or other continuous direct particulate monitoring, BLDS, strengthened

CAM indicators and indicator ranges, substantially increased performance-testing frequency, additional baghouse-performance parameters, or an enforceable combination of those measures.

If DNR determines that PM CEMS is not technically appropriate or necessary for EP240, Title V does not require installation merely because the technology has been imposed elsewhere.

But the permitting record must still explain what alternative monitoring will provide sufficiently reliable and representative information to assure compliance and to provide reliable and sufficiently timely information for determining whether EP240 remains in compliance between periodic stack tests.

This requested relief therefore does not depend upon establishing that EPA has previously required PM CEMS at a gray-iron foundry identical to HyCast. It rests upon the independent Title V requirement that monitoring be sufficient to assure compliance, the demonstrated availability of continuous particulate monitoring as a federal Clean Air Act compliance mechanism, and HyCast's own extraordinary compliance evidence demonstrating the need to reassess whether the existing monitoring framework is sufficient.

Conclusion

The administrative record repeatedly demonstrates that compliance during routine operation remains unverified. The permit relies upon emissions calculations, periodic stack testing, annual reporting, inspections, recordkeeping, and other indirect indicators rather than mechanisms capable of determining actual

emissions during operation. Because emissions are influenced by feedstock variability, production variability, operating conditions, and pollution-control performance, compliance cannot be reliably inferred from assumptions or infrequent testing alone.

Neither the permit nor the Responsiveness Summary identifies where DNR determined that the approved monitoring framework is sufficient to assure compliance under the conditions identified throughout the administrative record. **EPA should therefore object and require monitoring, verification, and compliance-assurance provisions sufficient to assure compliance during routine operation as required by Clean Air Act §504(c), 42 U.S.C. §7661c(c), and 40 C.F.R. §70.6(a)(3).**

PART 4 — GROUND II

This Ground is evaluated under the Legal Standard set forth in Part 1.

Operational and Feedstock Variability Prevent the Permit From Assuring Compliance at All Times

Issue Raised in Public Comments

Commenter repeatedly argued that emissions from foundry operations are directly influenced by scrap composition, metal content, contaminants, coatings, oils, paints, plastics, and other feedstock characteristics (#3, #6, #8, #14, #21, #29, #30, #31, #40, #46, #61, #63, #64, #75, #76, #78, #79, #81, #84, #85, #90, #91, #94, #105, #106, #108). Multiple comments challenged the

assumption that emissions remain constant despite foreseeable changes in feedstock quality and composition.

Commenter further questioned whether stack testing, emissions calculations, and compliance demonstrations are based upon feedstock conditions representative of actual authorized operation (#21, #29, #30, #31, #40, #47, #61, #63, #64, #75, #76, #78, #79, #81, #84, #91, #94, #105, #106, #108). The permit does not establish enforceable criteria requiring representative scrap conditions, representative contaminant levels, representative feedstock mixtures, or representative operating inputs during compliance demonstrations.

Commenter also argued that emissions may vary substantially over time due to changes in production rates, throughput, process conditions, feedstock conditions, maintenance practices, operating schedules, and economic conditions (#3, #6, #22, #29, #37, #64, #74, #75, #78, #79, #81, #84, #85, #94, #105, #106, #108). Because emissions are influenced by these variables, commenter questioned whether emissions calculations, emission factors, stack testing results, and permit assumptions remain representative throughout the permit term.

Accordingly, commenter repeatedly argued that operational variability and feedstock variability undermine the reliability of emissions assumptions, compliance demonstrations, and permit conclusions unless those assumptions are independently verified during actual operation.

DNR Response

DNR states that potential emissions were calculated using construction permit limits, stack test data, engineering estimates, PSD/MACT emission limits, and EPA AP-42 emission factors. DNR further states that compliance is demonstrated through required stack testing, recordkeeping, periodic monitoring, Compliance Assurance Monitoring (CAM) plans, operation and maintenance plans, and annual emissions inventory reporting. DNR maintains that the proposed Title V permit contains all monitoring, recordkeeping, reporting, and compliance requirements required by applicable federal and state regulations and that the permit contains monitoring sufficient to assure compliance. DNR also states that required stack testing must be conducted during normal operation at maximum continuous output and that applicable operation and maintenance plans, pressure-drop monitoring, inspections, visible emissions observations, and corrective-action requirements provide adequate compliance assurance. Finally, DNR concluded that HyCast meets the applicable criteria for issuance of a Title V permit and that the public comments did not provide evidence requiring permit denial.

Petitioner's Claim

The permit fails to include monitoring, limits, verification requirements, or enforceable operating conditions sufficient to account for feedstock variability, operational variability, and changing emissions characteristics over time. Because emissions are influenced by scrap composition, production conditions, operating conditions, and pollution-control performance, the permit does not contain mechanisms sufficient to assure compliance under all authorized operating conditions as required

by Clean Air Act §504(c), 42 U.S.C. §7661c(c), and 40 C.F.R. §70.6(a)(3).

Petitioner's Response

The administrative record demonstrates that emissions from foundry operations are influenced by the composition of scrap and other feed materials. Variability in feedstock—including differences in metal content, coatings, contaminants, and residual materials—can directly affect emissions of particulate matter and hazardous air pollutants, including metals.

Despite this, the permit does not include requirements to characterize, monitor, limit, or verify the composition of scrap or other feedstock used during operation. Nor does the permit require documentation or verification that materials used during stack testing or assumed in emissions calculations are representative of materials used during normal operations.

DNR states that required stack testing must be conducted during normal operation at maximum continuous output. However, that requirement does not establish that the feedstock used during testing is representative of the range of scrap, contaminants, coatings, residual materials, and other inputs authorized during routine operation. Nor does it ensure that future feedstock conditions remain consistent with the assumptions underlying emissions calculations, emission factors, stack test results, or compliance demonstrations. Accordingly, testing at maximum continuous output does not resolve the variability concerns repeatedly identified throughout the administrative record.

Because emissions are dependent on feedstock characteristics, the absence of such requirements means that emissions may vary significantly based on input materials without any mechanism to detect or evaluate those changes. This includes the potential for differences between materials used during testing and those used during routine operation, which may result in materially different emission profiles.

The permit's reliance on emissions estimates, emission factors, and periodic testing, without accounting for variability in feedstock, further undermines the ability to verify compliance during normal operation. Where emissions are influenced by changing feedstock conditions, changing production conditions, and changing operating conditions, compliance cannot be assured through assumptions alone.

DNR's own June 6, 2025 fee audit independently documents substantial operational variability at this facility. In

Appendix F-11 — *Iowa DNR HyCast Foundry LLC 2024 Fee Audit (June 6, 2025)*, DNR reported that Faircast closed in spring 2024 and reopened as HyCast in fall 2024, and recorded the facility's statement that it was then pouring only two days per week. DNR further reported that facility emissions decreased from 21.58 tons in 2023 to 0.53 tons in 2024, a 97.5 percent reduction, while the volume of metal cast decreased from 9,875.41 tons to 273.35 tons, a 96.2 percent reduction. Appendix F-11 therefore provides DNR's own contemporaneous documentation that production levels and operating conditions changed dramatically during the period relevant to the renewal.

These extraordinary changes reinforce the verification problem presented in this Ground. Emissions information generated

during a shutdown, restart, reduced-production period, or operation limited to two pouring days per week cannot, without an adequate demonstration of representativeness, simply be assumed to characterize emissions throughout the range of production rates, feedstocks, equipment configurations, and operating conditions authorized during the Title V permit term. Appendix F-11 therefore independently supports Petitioner's contention that the permit record must demonstrate that its emissions calculations, testing, and compliance-assurance mechanisms remain representative as actual operating conditions change.

The record further demonstrates that commenter repeatedly raised concerns regarding representative feedstock conditions, representative operating conditions, representative production levels, and the relationship between feedstock variability and emissions variability. However, neither the permit nor the Responsiveness Summary identifies enforceable mechanisms ensuring that future operations remain consistent with the assumptions relied upon in emissions calculations, compliance demonstrations, or stack testing.

Accordingly, the permit relies upon assumptions regarding feedstock and operational conditions without providing a reliable mechanism to verify those assumptions during actual operation. Because emissions may vary as feedstock and operating conditions change, the permit does not contain monitoring sufficient to assure compliance under all authorized operating conditions as required by Clean Air Act §504(c), 42 U.S.C. §7661c(c), and 40 C.F.R. §70.6(a)(3).

Verification Analysis

The administrative record repeatedly identifies feedstock variability, scrap composition, contaminant variability, production variability, and changing operating conditions as factors capable of influencing emissions. Commenter repeatedly challenged whether emissions calculations, stack testing, emission factors, and compliance demonstrations remain representative when those underlying conditions change.

The permit relies upon assumptions regarding feedstock composition, operating conditions, production levels, and emissions characteristics. However, the permit does not contain mechanisms capable of independently verifying that actual operating conditions remain consistent with those assumptions throughout the permit term. Nor does the permit require verification that feedstock conditions during stack testing are representative of feedstock conditions during routine operation.

Because emissions are influenced by variable operating conditions and variable feedstock characteristics, verification of compliance depends upon verification of the assumptions underlying emissions calculations and compliance demonstrations. Where those assumptions remain unverified, compliance likewise remains unverified.

The record therefore demonstrates a recurring inability to verify whether actual operating conditions remain consistent with the assumptions relied upon to support emissions calculations, stack testing, and compliance demonstrations. This verification deficiency directly affects DNR's ability to determine whether the permit can assure compliance under all authorized operating conditions.

Non-Discretionary Duty Analysis

Clean Air Act §504(c), 42 U.S.C. §7661c(c), requires each Title V permit to set forth inspection, entry, monitoring, compliance-certification, and reporting requirements to assure compliance with the permit terms and conditions. Likewise, where an applicable requirement does not otherwise require periodic testing or instrumental or no instrumental monitoring, 40 C.F.R. §70.6(a)(3)(i)(B) requires 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(c)(1) requires compliance certification, testing, monitoring, reporting, and recordkeeping requirements sufficient to assure compliance with the terms and conditions of the permit; and 40 C.F.R. §70.7(a)(1)(iv) provides that a permit may be issued only if its conditions provide for compliance with all applicable requirements and the requirements of Part 70.

These requirements are mandatory, not discretionary. Before issuing a Title V permit, DNR must determine that the monitoring, recordkeeping, reporting, and compliance-certification requirements contained in the permit are sufficient to assure compliance with applicable requirements.

Throughout the administrative record, commenter repeatedly challenged whether emissions assumptions remain valid where emissions depend upon changing feedstock conditions, changing production conditions, changing operating conditions, and changing emissions characteristics. However, neither the permit nor the Responsiveness Summary identifies where DNR evaluated those concerns and determined that the approved

monitoring framework remains sufficient to assure compliance despite the variability identified by commenter.

Because Title V requires monitoring sufficient to assure compliance, the administrative record must demonstrate that DNR made that determination. The record does not identify where that analysis occurred.

Arbitrary and Capricious Analysis

The administrative record demonstrates that commenter repeatedly challenged whether emissions assumptions, emissions calculations, stack testing, and compliance demonstrations remain reliable when feedstock conditions and operating conditions change over time.

In response, DNR defended the existing monitoring framework and emissions-calculation methodologies but did not identify where it determined that the permit contains mechanisms sufficient to verify that actual operating conditions remain consistent with the assumptions underlying compliance demonstrations.

An agency acts arbitrarily and capriciously when it fails to address an important aspect of the problem presented, fails to provide a reasoned explanation connecting the facts found to the conclusions reached, or responds to significant concerns without addressing the substance of those concerns. See *Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983).

Here, commenter repeatedly identified variability as a central compliance-assurance concern. The issue presented was not whether feedstock variability exists in theory, but whether the permit contains mechanisms sufficient to verify that emissions remain compliant when feedstock and operating conditions change. Neither the permit nor the Responsiveness Summary identifies where DNR evaluated that issue or determined that the monitoring framework remains sufficient despite the variability identified throughout the administrative record.

Accordingly, the specific variability and compliance-verification deficiencies identified above demonstrate that DNR's conclusion that the permit contains monitoring sufficient to assure compliance is not supported by a reasoned connection between the concerns raised during public comment and the monitoring actually contained in the permit. Petitioner has identified the particular variability affecting feedstock composition, production conditions, operating conditions, emissions calculations, stack testing, and compliance demonstrations, and has demonstrated that the permit lacks mechanisms sufficient to verify that the assumptions underlying those determinations remain valid during actual operation. This deficiency independently supports EPA objection under Clean Air Act §505(b)(2), 42 U.S.C. §7661d(b)(2).

Conclusion

Petitioner has affirmatively demonstrated that the permit does not contain monitoring and verification mechanisms sufficient to assure compliance across the range of feedstock composition, production conditions, operating conditions, throughput, and other emissions-affecting variables authorized during the permit

term. This deficiency is not based merely upon DNR's failure to supply additional explanation. The permit itself allows operational variability while lacking enforceable mechanisms sufficient to verify that the assumptions underlying its emissions calculations and compliance demonstrations remain representative during actual operation.

The April 7, 2026 EP240 performance test provides additional operating evidence relevant to this deficiency, but newly produced DNR records materially clarify the circumstances surrounding the test. The approved protocol specified a “Single Condition at 90%+ Capacity,” based upon a historic maximum throughput of approximately 5.6 tons per hour and a corresponding 90% testing target of approximately 5.04 tons per hour. The three compliance runs were conducted at approximately 1.38, 1.38, and 4.41 tons per hour, and no run achieved the specified 90%+ capacity condition. See Appendices B-1 and B-2.

Newly produced April 6, 2026 correspondence establishes, however, that one of HyCast’s induction furnaces became unavailable immediately before the test. HyCast notified Iowa DNR of the equipment failure and stated that, unless DNR objected, it intended to proceed using a single furnace and believed it could achieve the test parameters for charge, melt, and pour. See Appendix F-17. Petitioner therefore does not rely upon the reduced throughput during the April 7 test, standing alone, as proof that the test conditions were intentionally or inexplicably unrepresentative.

The test nevertheless demonstrated substantial exceedances of applicable particulate-matter limits, and HyCast’s subsequent

compliance plan identified a tube-sheet/bag-sealing problem as the primary root cause of the exceedance and an isolation-damper problem as a potential contributing factor. HyCast further stated that another EP240 compliance performance test would be conducted under normal and representative operating conditions. See Appendix F-15. These subsequent facts remain relevant to the preserved objection that the permit must contain monitoring and verification sufficient to address actual variability in operating conditions and pollution-control performance throughout the permit term.

Accordingly, Petitioner has satisfied the burden imposed by Clean Air Act § 505(b)(2) by demonstrating that the permit's compliance framework does not establish compliance under the range of operating conditions the permit authorizes. Under Clean Air Act § 504(c), 42 U.S.C. § 7661c(c), and 40 C.F.R. § 70.6(a)(3), EPA should object and require enforceable monitoring, representative-testing, operational-recordkeeping, and compliance-assurance provisions sufficient to verify that feedstock conditions, production levels, operating conditions, and emissions assumptions remain representative and compliant throughout the permit term.

PART 5— GROUND III

This Ground is evaluated under the Legal Standard set forth in Part 1.

The permit assumes pollution controls continue to perform

The April 2026 EP240 stack test provides direct confirmation that concerns regarding assumed pollution-control performance

were not speculative. The permit record relied upon particulate-control performance assumptions, but the first direct compliance demonstration following restart showed that applicable particulate-matter limits were substantially exceeded during operation. HyCast subsequently identified a tube-sheet/bag-sealing problem as the primary root cause of the exceedance and an isolation-damper problem as a potential contributing factor and reported corrective actions addressing those conditions. See Appendix F-15. These findings directly demonstrate the need for enforceable verification of control-device performance rather than reliance solely upon assumed control efficiency.

Petitioner's Demonstration Under Clean Air Act § 505(b)(2)

Petitioner affirmatively demonstrates that the permit does not contain sufficient enforceable monitoring and verification to assure that the pollution-control devices upon which compliance depends continue to perform at the level necessary to satisfy applicable requirements. This Ground does not rest merely upon an absence of additional documentation from DNR or upon speculation that control-device performance might deteriorate in the future. The April 7, 2026 EP240 performance test provides direct operating evidence that the particulate-control performance assumed in the permit record was not achieved during actual operation.

Newly produced records provide additional information concerning the circumstances of the April 7 test. One induction furnace became unavailable immediately before testing, and HyCast informed Iowa DNR that it intended to proceed using a single furnace. See Appendix F-17. Petitioner therefore does not rely upon the resulting reduced production rate as evidence that

the particulate-control failure occurred under a less demanding operating condition. The material control-performance evidence is instead the substantial particulate-matter exceedance itself together with HyCast's subsequent identification of specific pollution-control deficiencies as the primary and potential contributing causes of that exceedance. See Appendix F-15.

Accordingly, the April 7, 2026 performance test provides substantial post-comment evidence supporting Petitioner's preserved objection that the permit relies upon continued pollution-control performance without containing monitoring and verification sufficient to determine whether that performance is actually being maintained between direct emissions tests. Clean Air Act § 504(c), 42 U.S.C. § 7661c(c), and 40 C.F.R. §§ 70.6(a)(3) and 70.6(c)(1) require monitoring, testing, recordkeeping, and reporting sufficient to assure compliance. For the reasons developed throughout this Ground, EPA should object and require enforceable control-device performance monitoring and verification sufficient to assure compliance throughout the permit term.

Relationship to Continuous Particulate-Matter Monitoring Precedent

As discussed more fully in Ground I, federal Title V and Clean Air Act enforcement precedent demonstrates both that the adequacy of existing monitoring must be evaluated based upon whether it actually assures compliance and that continuous particulate-matter monitoring is an available compliance-assurance mechanism where circumstances warrant enhanced direct verification.

Petitioner does not contend that Title V categorically requires PM CEMS or BLDS at every baghouse-controlled source, nor does Petitioner contend that facilities involved in the federal precedents discussed in Ground I are directly comparable to HyCast in size, production, industrial process, or surrounding setting. Their relevance is instead to demonstrate the legal obligation to evaluate monitoring adequacy and the availability of enhanced particulate monitoring as a potential remedy.

For EP240, that evaluation must be source-specific. The April 7, 2026 performance test demonstrated substantial particulate-matter noncompliance, and HyCast subsequently identified a tube-sheet/bag-sealing problem as the primary root cause of the excessive particulate emissions and an isolation-damper problem as a possible contributing factor. Yet the presently available record does not establish whether EP240's approved CAM indicators or other routine monitoring detected or reflected those deteriorated control-system conditions before or during the performance test.

On August 21, 2026, when Petitioner specifically asked whether CAM monitoring indicated any excursion or exceedance in differential pressure, visible emissions, or another CAM indicator before or during the failed test, DNR permit writer Zane Peters responded: "I am not in possession of any CAM records, so I am not able to provide an answer." See Appendix F-18. DNR's subsequent August 27 public-records response materially sharpened that issue. DNR stated that it did not have the additional CAM records requested by Petitioner and explained that the records are maintained at the facility for field-

office review and are not submitted to DNR unless an inspector directly requests them. See Appendices F-12 and F-18.

This is not merely a public-records issue. Under 40 C.F.R. § 64.7(e), where compliance or performance testing identifies a failure to achieve compliance and approved monitoring did not indicate an excursion or exceedance while providing valid data, the owner or operator must promptly notify the permitting authority and, if necessary, submit a proposed permit modification addressing necessary monitoring changes. The regulation likewise applies where compliance or performance testing documents a need to modify existing CAM indicator ranges or designated conditions.

The underlying CAM record therefore bears directly upon whether the approved monitoring detected the conditions associated with the April 7 compliance failure and, if it did not, whether modification of the monitoring is required under 40 C.F.R. § 64.7(e). As discussed in Part 2I, the CAM records necessary to resolve that question had not been produced as of August 27, 2026. See Appendix F-18.

Accordingly, the April 7 performance test, HyCast's subsequently identified control-system deficiencies, and DNR's August 21 and August 27 CAM-record responses provide substantial post-comment evidence corroborating Petitioner's preserved objection that the permit lacks a demonstrated monitoring framework sufficient to assure compliance. EPA should object and require DNR, before relying upon the existing EP240 monitoring framework, to conduct and document a source-specific evaluation of the underlying CAM record and of the adequacy of the existing CAM indicators, indicator ranges,

pressure-drop monitoring, inspections, visible-emissions observations, maintenance requirements, and periodic stack testing under Clean Air Act § 504(c), 42 U.S.C. § 7661c(c), 40 C.F.R. §§ 64.7(e), 64.9(b), 70.6(a)(3), and 70.6(c)(1).

Appropriate permit revisions may include BLDS, continuous particulate monitoring, revised CAM indicators or ranges, additional monitored parameters, more frequent testing, or another enforceable combination of measures sufficient to assure continuing compliance.

Issue Raised in Public Comments

Commenter repeatedly challenged the assumption that pollution-control efficiencies incorporated into emissions calculations, applicability determinations, permit limits, potential-to-emit determinations, hazardous air pollutant determinations, and compliance demonstrations will continue to be achieved throughout the permit term (#6, #7, #8, #9, #12, #14, #17, #18, #31, #32, #34, #35, #40, #46, #57, #61, #63, #64, #72, #75, #79, #81, #82, #84, #90, #91, #94, #97, #105, #108).

Commenter also raised concerns regarding aging pollution-control equipment, baghouse systems, maintenance history, equipment degradation, filter wear, system deterioration, and the potential effect of aging equipment on emissions performance (#9, #12, #31, #32, #34, #35, #48, #57, #61, #64, #72, #75, #90, #91, #94, #105, #108).

Commenter further identified baghouse integrity as central to compliance assurance because baghouse performance directly affects PM, PM₁₀, PM_{2.5}, lead, metal HAP, and particulate emissions (#6, #7, #31, #32, #40, #57, #61, #63, #64, #72, #91,

#94, #105, #108). Commenter argued that inspections, maintenance, pressure-drop readings, visible-emissions observations, and recordkeeping do not provide the same assurance as mechanisms capable of directly verifying continued baghouse integrity and control performance.

Commenter also challenged DNR's reliance on historical testing, indirect monitoring, operating parameters, inspections, maintenance requirements, and after-the-fact enforcement rather than mechanisms capable of verifying continued control-device performance during routine operation (#6, #7, #8, #9, #12, #14, #17, #18, #31, #32, #34, #35, #40, #46, #57, #61, #63, #64, #72, #75, #79, #81, #82, #84, #90, #91, #94, #97, #105, #108).

Accordingly, commenter repeatedly argued that the permit assumes continued pollution-control performance without independently verifying that the control efficiencies relied upon throughout the permit remain valid during actual operation.

DNR Response

DNR states that the proposed Title V permit contains all monitoring, recordkeeping, reporting, and compliance requirements required by applicable federal and state regulations. DNR maintains that compliance is demonstrated through required stack testing, Compliance Assurance Monitoring (CAM) plans, operation and maintenance (O&M) plans, periodic monitoring, inspections, visible emissions observations, recordkeeping, and annual reporting requirements.

DNR further states that all six baghouse-controlled emission points are subject to EPA Method 5 particulate matter stack

testing and that the monitoring requirements were established in accordance with DNR's Periodic Monitoring Guidance, CAM regulations, and applicable federal foundry requirements. DNR asserts that the permit contains all required methods for verifying proper baghouse operation, including hourly pressure-drop monitoring, visible emissions observations, quarterly bag inspections, inspections of baghouses and associated ductwork, and corrective-action requirements for excursions.

DNR also states that baghouse maintenance requirements require replacement of bags, seals, and gaskets in accordance with manufacturer specifications and that corrective actions must begin promptly when excursions are observed. DNR concludes that these requirements provide adequate assurance that pollution-control devices continue to operate properly.

With respect to bag leak detection systems (BLDS), DNR states that installation of a BLDS is not required under 40 C.F.R. Part 63 Subpart ZZZZZ and that the owner or operator may elect to install a BLDS in lieu of certain baghouse inspection requirements. DNR therefore declined to require BLDS installation as a permit condition.

DNR additionally states that particulate matter monitoring, stack testing, CAM plans, and operation and maintenance plans provide appropriate monitoring for particulate-bound pollutants, including lead, and that the proposed permit contains monitoring sufficient to demonstrate compliance with applicable requirements.

Petitioner's Claim

The permit relies upon assumed pollution-control efficiencies, historical testing results, and indirect operating parameters without requiring verification that pollution-control devices continue to achieve the performance levels relied upon in emissions calculations, potential-to-emit determinations, hazardous air pollutant compliance demonstrations, and permit compliance determinations. Because the permit does not contain mechanisms sufficient to verify continued control performance during actual operation, it does not contain monitoring sufficient to assure compliance as required by Clean Air Act §504(c), 42 U.S.C. §7661c(c), and 40 C.F.R. §70.6(a)(3).

Petitioner's Response

The application calculates emissions using control efficiencies derived from historical stack testing, EPA emission factors, and guidance-based assumptions, as documented in Appendix C-1. These assumed control efficiencies are incorporated directly into the permit's emission limits, potential-to-emit determinations, and overall compliance framework.

Pollution Control Devices and Lack of Performance Verification

The permit relies on pollution control devices, including baghouses and associated control systems, to achieve the control efficiencies used in the application, as documented in Appendix C-1. These control devices form the basis for particulate matter limits, metal hazardous air pollutant (HAP) surrogate determinations, and emissions calculations reflected in the permit.

The permit incorporates these control devices into the compliance framework through emission limits and assumed control efficiencies, but does not require that these devices be demonstrated to achieve those efficiencies during operation. The permit instead relies on assumed performance levels without requiring confirmation that those levels are maintained.

The permit does not require direct measurement of emissions from these control devices to verify performance. It does not require metals-specific testing to confirm control of metal hazardous air pollutants and does not require any mechanism to demonstrate that the control efficiencies used in the application are achieved under actual operating conditions.

Baghouses are the primary control devices relied upon in the permit. These systems are subject to wear, failure, and degradation over time. Despite this, the permit does not require the use of a bag leak detection system or any equivalent method capable of identifying failures or degradation in performance during operation. DNR's assertion that BLDS is not expressly required by Subpart ZZZZZ does not resolve whether the permit nevertheless contains monitoring sufficient to assure compliance under Clean Air Act §504(c) and 40 C.F.R. §70.6(a)(3).

The permit's monitoring framework relies substantially on operating parameters and indirect indicators rather than direct verification of emissions. Although the permit and applicable CAM requirements establish indicator ranges, visible-emissions observations, and corrective-action requirements, the record does not demonstrate an enforceable relationship establishing that operation within those monitored parameters necessarily corresponds to compliance with the applicable emission limits.

The April 7, 2026 EP240 compliance failure makes that unresolved relationship particularly material.

As a result, the permit records operating data but does not determine compliance and therefore does not assure compliance as required under Clean Air Act §504(c), 42 U.S.C. §7661c(c), and 40 C.F.R. §70.6(a)(3).

Recordkeeping requirements are enforceable only to the extent that they require the creation and maintenance of records. They do not, by themselves, establish that emission limits are met. Where the permit does not demonstrate that recorded parameters are reliably linked to compliant emission levels, enforcement of recordkeeping requirements does not equate to enforcement of emission limits and therefore does not assure compliance as required under Clean Air Act §504(c), 42 U.S.C. §7661c(c), and 40 C.F.R. §70.6(a)(3).

Lack of Real-World Verification of Metal HAP Emissions

The permit relies on periodic stack testing as a surrogate for metal hazardous air pollutant emissions, yet provides no mechanism to verify whether those emissions result in real-world deposition or exposure under normal operating conditions. While stack testing may provide a limited snapshot of emissions under test conditions, it does not capture variability in operations, materials, or control performance over time.

The Clean Air Act requires that Title V permits include conditions sufficient to assure compliance with applicable requirements. This requirement is not satisfied by reliance on periodic testing alone where emissions may vary significantly

under real-world conditions and no independent verification mechanism exists.

As demonstrated in Appendix C, feasible monitoring approaches exist to provide continuous or near-source verification of emissions. The permit, however, relies on periodic testing and recordkeeping without incorporating such verification methods.

The importance of verifying real-world outcomes is further underscored by the public health context reflected in Appendix I. While Title V does not require evaluation of health outcomes, this context highlights the need for reliable verification of emissions under actual operating conditions. At the same time, Appendix I reflects data influenced by multiple potential confounding variables, meaning that without direct verification of emissions and deposition, it is not possible to isolate or evaluate the facility's contribution. This uncertainty further reinforces the need for monitoring sufficient to assure compliance.

Appendix A (Comment Letter #79 – Lead Deposition and Verification Concerns) further supports the relevance of evaluating off-site deposition by documenting information consistent with particulate-bound metal emissions and potential deposition pathways. As further demonstrated in Appendix K, practical and widely accepted methods exist to evaluate whether particulate-bound metals emitted from foundry operations result in measurable off-site deposition. These methods provide an independent means of assessing real-world emission outcomes.

Despite the feasibility of such verification approaches, the permit contains no mechanism—whether through monitoring,

sampling, or otherwise—to confirm whether emissions behave as assumed. Instead, the permit relies on assumed control performance and limited periodic testing without any means to evaluate actual environmental outcomes.

The absence of any verification mechanism is particularly significant given that the permit relies on particulate matter as a surrogate for metal HAP emissions. Without verification, there is no assurance that particulate control performance corresponds to actual metal HAP emissions under real-world operating conditions.

Verification Analysis

The administrative record repeatedly challenges whether the pollution-control efficiencies relied upon throughout the permit remain valid during actual operation. Commenter questioned whether baghouses and associated control systems continue to achieve the control efficiencies assumed in emissions calculations, hazardous air pollutant compliance demonstrations, permit limits, and potential-to-emit determinations.

The permit relies upon historical stack testing, emissions calculations, and assumed control efficiencies but does not contain mechanisms capable of independently verifying that those efficiencies continue to be achieved throughout the permit term. While the permit requires monitoring of certain operating parameters, it does not establish that those parameters reliably demonstrate continued compliance with emission limits or continued achievement of the control efficiencies relied upon throughout the permit.

Because compliance depends upon continued control-device performance, verification of compliance necessarily depends upon verification of control-device performance. The record does not identify where DNR verified that the monitoring framework is capable of determining whether the assumed control efficiencies remain valid under actual operating conditions. As a result, continued compliance remains dependent upon assumptions that are not independently verified during routine operation.

Accordingly, the administrative record does not demonstrate that DNR verified the continuing validity of the control-efficiency assumptions relied upon throughout the permit. The permit therefore relies upon assumed control performance rather than verified control performance for pollution-control devices that are central to permit compliance determinations.

Non-Discretionary Duty Analysis

Clean Air Act §504(c), 42 U.S.C. §7661c(c), requires each Title V permit to set forth inspection, entry, monitoring, compliance-certification, and reporting requirements to assure compliance with the permit terms and conditions.

The obligation to include monitoring sufficient to assure compliance exists independently of whether a particular monitoring technology is expressly required by an underlying applicable requirement. Where an applicable requirement does not otherwise require periodic testing or instrumental or no instrumental monitoring, 40 C.F.R. §70.6(a)(3)(i)(B) requires 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(c)(1) requires compliance certification, testing, monitoring, reporting, and recordkeeping requirements sufficient to assure compliance with the terms and conditions of the permit; and 40 C.F.R. §70.7(a)(1)(iv) permits issuance only where the conditions of the permit provide for compliance with all applicable requirements and the requirements of Part 70.

These obligations are mandatory, not discretionary. Where permit compliance depends upon continued operation of pollution-control devices at assumed performance levels, DNR must determine that the permit contains monitoring sufficient to assure that those assumptions remain valid throughout the permit term.

Commenter repeatedly challenged whether baghouses and associated control devices continue to achieve the control efficiencies relied upon in emissions calculations, hazardous air pollutant determinations, permit limits, and compliance demonstrations. However, neither the permit nor the Responsiveness Summary identifies where DNR determined that the monitoring framework is sufficient to verify continued achievement of those assumed efficiencies during actual operation.

Because Title V requires monitoring sufficient to assure compliance, DNR was required to determine whether the permit contains mechanisms capable of verifying continued control-device performance. The administrative record does not identify where that determination was made.

Arbitrary and Capricious Analysis

The administrative record repeatedly raised concerns regarding assumed control efficiencies, aging pollution-control equipment, the absence of bag leak detection systems, indirect monitoring approaches, and the lack of mechanisms capable of verifying continued control performance during operation.

In response, DNR defended the existing monitoring framework and existing permit requirements but did not identify where it determined that those requirements are sufficient to verify that control devices continue to achieve the efficiencies relied upon throughout the permit.

An agency acts arbitrarily and capriciously when it fails to address an important aspect of the problem presented, fails to provide a reasoned explanation connecting the facts found to the conclusions reached, or responds to significant concerns without addressing the substance of those concerns. See *Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983).

Here, commenter repeatedly identified continued pollution-control performance as a central compliance-assurance issue. The issue presented was not whether pollution controls existed, but whether the permit contains mechanisms capable of verifying that those controls continue to perform at the levels relied upon throughout the permit. Neither the permit nor the Responsiveness Summary identifies where DNR evaluated that issue or determined that the monitoring framework is sufficient to verify continued achievement of assumed control efficiencies.

Accordingly, the specific control-performance and compliance-verification deficiencies identified above demonstrate that

DNR's conclusion that the permit contains monitoring sufficient to assure compliance is not supported by a reasoned connection between the concerns raised during public comment and the monitoring actually contained in the permit. Petitioner has identified the particular deficiencies involving assumed control efficiencies, aging pollution-control equipment, the absence of bag leak detection systems, indirect monitoring, and the lack of mechanisms capable of verifying continued control performance during actual operation. These demonstrated deficiencies independently support EPA objection under Clean Air Act §505(b)(2), 42 U.S.C. §7661d(b)(2).

Conclusion

The permit relies upon assumed pollution-control efficiencies, historical testing, indirect monitoring indicators, and pollution-control performance assumptions without requiring verification that pollution-control devices continue to achieve the performance levels relied upon throughout the permit. **Because compliance depends upon continued control-device performance and the permit does not contain mechanisms sufficient to verify that performance during actual operation, the permit does not contain monitoring sufficient to assure compliance as required by Clean Air Act §504(c), 42 U.S.C. §7661c(c), and 40 C.F.R. §70.6(a)(3).**

EPA should therefore object to the permit and require monitoring, verification, and compliance-assurance provisions sufficient to demonstrate that the pollution-control efficiencies relied upon throughout the permit remain valid during actual operation before the permit may be issued.

PART 6 — GROUND IV

This Ground is evaluated under the Legal Standard set forth in Part 1.

Petitioner's Demonstration Under Clean Air Act § 505(b)(2)

Petitioner affirmatively demonstrates that the permit does not contain monitoring and verification sufficient to assure compliance for pollutant categories that are not adequately addressed by particulate controls or particulate monitoring. This Ground does not merely contend that DNR failed to provide additional information. Rather, the deficiencies identified below demonstrate that the permit relies upon pollutant-specific emissions assumptions, control-efficiency assumptions, emissions calculations, applicability determinations, and source-classification determinations without requiring sufficient pollutant-specific verification during actual operation.

The April 7, 2026 EP240 performance-test failure provides additional direct evidence supporting this demonstrated compliance-assurance deficiency. The test established that applicable particulate-matter limits were substantially exceeded during actual operation, and HyCast subsequently identified a tube-sheet/bag-sealing problem as the primary root cause and an isolation-damper problem as a potential contributing factor. See Appendix F-15. At the same time, particulate testing does not establish control of gaseous pollutants that are not captured by particulate filtration. The failed particulate compliance demonstration therefore cannot establish compliance for separate pollutant categories for which particulate matter has not been demonstrated to be an adequate surrogate.

Accordingly, Petitioner has satisfied the burden imposed by Clean Air Act § 505(b)(2) by demonstrating that the permit lacks monitoring and verification sufficient to assure compliance for the pollutant categories addressed throughout this Ground.

Particulate controls do not address all pollutants

Issue Raised in Public Comments

Commenter repeatedly argued that particulate controls do not address all pollutant categories emitted by the facility and that reliance on particulate matter monitoring does not necessarily demonstrate control of gaseous pollutants, volatile organic compounds, organic hazardous air pollutants, metal hazardous air pollutants, or pollutant-specific emissions (#7, #9, #14, #17, #21, #34, #35, #40, #46, #51, #58, #59, #74, #77, #83, #90, #91, #94, #95, #105, #108).

Commenter further argued that baghouses are designed to control particulate matter and do not control many gaseous pollutants, including volatile organic compounds and other gas-phase hazardous air pollutants (#7, #14, #21, #34, #35, #46, #51, #58, #59, #77, #83, #90, #94, #95, #105, #108).

Commenter also questioned the use of particulate matter as a surrogate for metal hazardous air pollutants and other pollutant categories where capture efficiencies may differ from overall particulate control efficiencies (#7, #17, #21, #40, #74, #77, #83, #90, #91, #94, #105, #108).

Commenter repeatedly argued that the permit does not contain pollutant-specific monitoring, testing, or verification sufficient

to determine whether gaseous pollutants, volatile organic compounds, organic hazardous air pollutants, metal hazardous air pollutants, and other pollutant categories remain consistent with assumptions relied upon in emissions calculations, applicability determinations, and permit conclusions.

DNR Response

DNR states that the proposed Title V permit contains all monitoring, recordkeeping, reporting, and compliance requirements required by applicable federal and state regulations. DNR maintains that compliance is demonstrated through required stack testing, Compliance Assurance Monitoring (CAM) plans, operation and maintenance plans, periodic monitoring, inspections, visible emissions observations, corrective-action requirements, recordkeeping, and annual emissions inventory reporting.

DNR further states that particulate matter emissions are monitored through applicable stack-testing requirements, pressure-drop monitoring, visible emissions observations, CAM requirements, and operation and maintenance plans. DNR maintains that these requirements provide sufficient assurance of compliance with applicable permit requirements. DNR further maintains that these monitoring mechanisms provide adequate assurance of compliance for pollutants addressed by the permit and that no additional pollutant-specific monitoring requirements are required by applicable federal or state regulations.

DNR also states that the facility is not subject to additional monitoring requirements beyond those contained in applicable

federal and state regulations and that the proposed permit contains all monitoring necessary to demonstrate compliance. DNR further maintains that ambient monitoring, fence-line monitoring, boundary monitoring, and community monitoring are not required by applicable federal or state regulations and are not necessary to demonstrate compliance with Title V permit requirements.

DNR concluded that the facility satisfies the applicable criteria for issuance of a Title V permit and that the public comments did not identify deficiencies requiring permit denial or additional monitoring requirements.

Petitioner's Claim

The permit relies upon particulate controls, particulate monitoring, particulate testing, and pollutant-surrogate assumptions without providing pollutant-specific verification sufficient to assure compliance for all pollutant categories emitted by the facility.

Petitioner's Response

The permit relies on particulate matter control systems, including baghouses, as the primary means of controlling emissions from the facility, as documented in Appendix C-1.

These control systems are designed to capture particulate matter, but the permit applies them more broadly by using particulate matter as a surrogate for other pollutants, including metal hazardous air pollutants.

As reflected in Appendix C-1, the application identifies different assumed control efficiencies for particulate matter and certain metal hazardous air pollutants. The application therefore recognizes that particulate matter and individual pollutant categories may not be controlled identically. Despite these differences, the permit does not distinguish between pollutants in its compliance framework and instead relies primarily upon particulate matter monitoring and particulate matter compliance demonstrations to support broader pollutant-control assumptions.

The permit does not include pollutant-specific monitoring, testing, or verification requirements sufficient to determine whether gaseous pollutants, volatile organic compounds, organic hazardous air pollutants, or other non-particulate emissions remain consistent with the assumptions relied upon in emissions calculations, applicability determinations, or permit findings. As a result, the permit relies upon emissions assumptions for these pollutants without providing a mechanism to independently verify those assumptions during operation.

The permit does not require separate evaluation of pollutants that are not captured at the same efficiency as particulate matter. Nor does it establish pollutant-specific monitoring, testing, or verification demonstrating that all regulated pollutants remain consistent with the assumptions relied upon in emissions calculations, applicability determinations, source-classification determinations, or permit findings.

Appendix F-11 provides DNR's own example of the pollutant-specific verification problem presented by this Ground. In evaluating emissions from the induction furnaces,

DNR stated that the underlying June 13, 2017 stack test measured PM₁₀, while the facility used the same emissions factor for PM, PM₁₀, and PM_{2.5}. DNR acknowledged that available AP-42 information for pouring, cooling, and shakeout indicates differing fractions of PM_{2.5} and PM₁₀ and stated that use of the PM₁₀ result “may be estimating PM_{2.5} twice as high as it should.” DNR further acknowledged that it did not know what proportion of the relevant emissions came from pouring/cooling as opposed to shakeout and therefore accepted the assumption that PM₁₀ equals PM_{2.5}. See Appendix F-11.

This does not establish that DNR's assumption was nonconservative; DNR's analysis indicates that it may overestimate PM_{2.5} for that inventory calculation. Its significance is evidentiary: **the PM₁₀ stack test did not directly measure PM_{2.5}**, and DNR used an assumption to derive a pollutant-specific emissions quantity in the face of acknowledged uncertainty concerning process contributions. Appendix F-11 therefore reinforces this Ground's broader contention that compliance information for one pollutant or particulate fraction cannot automatically be treated as direct verification of another pollutant-specific emissions quantity.

The administrative record reflects repeated concerns regarding benzene, toluene, formaldehyde, phenol, naphthalene, phthalates, volatile organic compounds, and other organic hazardous air pollutants that may not be adequately addressed through particulate monitoring alone. While DNR relied upon emissions calculations, emissions inventories, permit requirements, and applicability determinations, those responses

do not independently verify whether pollutant-specific assumptions remain valid during actual operation.

Where pollutant-specific assumptions affect compliance determinations, applicability determinations, source-classification determinations, emissions calculations, or permit findings, independent verification becomes increasingly important. Reliance upon particulate monitoring alone does not establish that other pollutant categories remain consistent with the assumptions used throughout the permitting process.

The permit therefore relies upon particulate controls, particulate monitoring, particulate testing, emissions inventories, and applicability determinations as proxies for broader pollutant control without establishing that these mechanisms adequately address all pollutant categories emitted by the facility. Because the permit does not provide pollutant-specific verification for gas-phase pollutants, volatile organic compounds, organic hazardous air pollutants, metal hazardous air pollutants, and other non-particulate emissions identified throughout the administrative record, it does not provide sufficient assurance that all regulated pollutants remain consistent with the assumptions relied upon in permit determinations.

Verification Analysis

DNR relies upon emissions calculations, emissions inventories, stack testing, particulate monitoring, CAM requirements, and operation and maintenance plans to support permit issuance. However, these mechanisms do not independently verify whether pollutant-specific assumptions remain valid for all pollutant categories addressed by the permit. Where permit

determinations rely upon assumptions regarding volatile organic compounds, organic hazardous air pollutants, metal hazardous air pollutants, or other pollutant categories, Title V requires monitoring sufficient to assure compliance rather than reliance upon unverified assumptions.

The administrative record reflects repeated concerns that particulate monitoring and particulate-control performance do not necessarily demonstrate compliance for all pollutant categories relied upon in permit determinations. Although DNR concluded that existing monitoring requirements are sufficient, the permit does not contain pollutant-specific verification capable of determining whether non-particulate pollutants remain consistent with the assumptions relied upon in emissions calculations, applicability determinations, and permit findings.

Because the permit does not include pollutant-specific verification sufficient to determine whether those assumptions remain valid during operation, compliance cannot be independently confirmed for all regulated pollutants. The permit therefore relies upon assumed relationships between particulate controls and broader pollutant categories without demonstrating that those assumptions remain accurate throughout the permit term. The permit therefore relies upon pollutant-surrogate assumptions rather than pollutant-specific verification for several pollutant categories identified throughout the administrative record.

Non-Discretionary Duty Analysis

Clean Air Act §504(c), 42 U.S.C. §7661c(c), requires each Title V permit to set forth inspection, entry, monitoring, compliance-

certification, and reporting requirements to assure compliance with the permit terms and conditions. Likewise, 40 C.F.R. §70.6(a)(3)(i)(B) requires monitoring sufficient to assure compliance with permit terms and conditions, 40 C.F.R. §70.6(c)(1) requires compliance certification requirements sufficient to assure compliance with permit terms and conditions, and 40 C.F.R. §70.7(a)(1)(iv) requires the permitting authority to determine that the permit satisfies applicable Title V requirements before issuance.

These requirements are mandatory, not discretionary. Before issuing a Title V permit, DNR must determine that the monitoring, recordkeeping, reporting, and compliance-certification requirements contained in the permit are sufficient to assure compliance with applicable requirements for the pollutants and emission sources addressed by the permit.

Here, the permit relies upon assumptions regarding volatile organic compounds, organic hazardous air pollutants, metal hazardous air pollutants, and other pollutant categories without providing pollutant-specific verification sufficient to determine whether those assumptions remain valid during actual operation. While DNR concluded that existing monitoring requirements are adequate, Title V requires monitoring sufficient to assure compliance, not merely reliance upon emissions calculations, emissions inventories, or surrogate assumptions that are not independently verified during operation.

Because the permit does not contain pollutant-specific verification sufficient to assure compliance for all pollutant categories relied upon in permit determinations, DNR failed to satisfy its non-discretionary obligations under Clean Air Act

§504(c), 42 U.S.C. §7661c(c), 40 C.F.R. §70.6(a)(3)(i)(B), 40 C.F.R. §70.6(c)(1), and 40 C.F.R. §70.7(a)(1)(iv).

Arbitrary and Capricious Analysis

An agency acts arbitrarily and capriciously when it fails to examine relevant evidence, fails to consider important aspects of the problem, offers explanations that run counter to the evidence before the agency, or relies upon assumptions that are not adequately supported by the administrative record. *Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983).

Here, commenter repeatedly identified concerns regarding volatile organic compounds, organic hazardous air pollutants, metal hazardous air pollutants, pollutant-specific verification, and the limitations of particulate monitoring as a surrogate for broader pollutant categories. Commenter further identified specific pollutant categories, including benzene, toluene, formaldehyde, phenol, naphthalene, phthalates, volatile organic compounds, and other non-particulate pollutants that may not be adequately addressed through particulate monitoring alone.

Although DNR relied upon emissions calculations, emissions inventories, particulate monitoring, stack testing, CAM requirements, and operation and maintenance plans, the record does not demonstrate that pollutant-specific assumptions remain verified during operation for all pollutant categories relied upon in permit determinations. Nor does the permit establish a mechanism for independently determining whether those assumptions remain valid throughout the permit term.

By relying upon particulate monitoring and pollutant-surrogate assumptions without addressing whether pollutant-specific verification is necessary to assure compliance, DNR failed to adequately address a central issue repeatedly raised throughout the administrative record. The agency therefore failed to fully consider an important aspect of the problem and relied upon assumptions that remain unverified under actual operating conditions.

Accordingly, DNR's conclusion that the permit contains monitoring sufficient to assure compliance for all pollutant categories is arbitrary and capricious under *State Farm*, 463 U.S. at 43.

Conclusion

The permit relies upon particulate controls, particulate monitoring, particulate testing, emissions inventories, and pollutant-surrogate assumptions without providing pollutant-specific verification sufficient to assure compliance for all pollutant categories emitted by the facility.

Although DNR concluded that existing monitoring requirements are sufficient, the permit does not contain monitoring capable of independently verifying whether volatile organic compounds, organic hazardous air pollutants, metal hazardous air pollutants, and other non-particulate emissions remain consistent with the assumptions relied upon in emissions calculations, applicability determinations, source classifications, and permit findings.

Because the permit relies upon pollutant-specific assumptions that are not independently verified during operation, it does not

provide monitoring sufficient to assure compliance as required by Clean Air Act §504(c), 42 U.S.C. §7661c(c), and 40 C.F.R. §70.6(a)(3).

EPA should therefore object to the permit and require pollutant-specific monitoring, verification, and compliance-assurance provisions sufficient to determine whether volatile organic compounds, organic hazardous air pollutants, metal hazardous air pollutants, and other pollutant categories remain consistent with the assumptions relied upon in permit determinations during actual operation before the permit may be issued.

PART 7 — GROUND V

This Ground is evaluated under the Legal Standard set forth in Part 1.

Petitioner's Demonstration Under Clean Air Act § 505(b)(2)

Petitioner affirmatively demonstrates that the permit lacks facility-specific monitoring and verification sufficient to determine whether emissions leaving the facility remain consistent with the emissions assumptions, control-efficiency assumptions, applicability determinations, source-classification determinations, and compliance demonstrations upon which the permit relies. This Ground does not merely assert that DNR failed to investigate off-site emissions or that additional information would be desirable. Rather, the permit contains no facility-specific mechanism capable of verifying actual emissions behavior after pollutants leave the source during operation.

The deficiency is demonstrated by the permit's reliance upon calculated and assumed emissions behavior without a corresponding verification mechanism capable of determining whether actual facility-boundary emissions remain consistent with those assumptions under varying operating, meteorological, and emissions conditions. The issues documented throughout this Ground—including fugitive emissions, pollutant transport, lead deposition, particulate-bound metal transport, atmospheric inversions, stagnant-air conditions, low wind speeds, and sensitive receptors—identify circumstances under which the absence of such verification directly affects the permit's ability to assure compliance.

Accordingly, Petitioner has satisfied the burden imposed by Clean Air Act § 505(b)(2) by demonstrating the specific compliance-assurance deficiency addressed in this Ground: the permit relies upon assumptions concerning actual emissions behavior without containing facility-specific monitoring or verification capable of testing those assumptions during operation.

The permit lacks monitoring capable of determining what pollutants are leaving the facility during operation

Issue Raised in Public Comments

The commenter repeatedly argued that the permit contains no facility-specific mechanism capable of determining what pollutants are leaving the facility during actual operation (#1, #2, #10, #13, #16, #23, #25, #28, #29, #33, #40, #41, #44, #50, #57, #58, #59, #60, #66, #73, #74, #77, #79, #90, #91, #98, #99, #100, #101, #103, #108).

The commenter repeatedly raised concerns regarding atmospheric inversions, stagnant-air conditions, low wind speeds, seasonal conditions, fugitive emissions, off-site transport, lead deposition, particulate-bound metal transport, and the absence of any mechanism capable of evaluating pollutant behavior after emissions leave the source (#1, #2, #4, #9, #10, #11, #14, #23, #28, #33, #38, #41, #53, #55, #57, #58, #59, #60, #61, #66, #68, #69, #73, #74, #75, #79, #90, #94, #105, #108).

The commenter also repeatedly referenced nearby residents, schools, workplaces, businesses, public spaces, and other sensitive receptors while questioning whether the permit contains any mechanism capable of verifying assumptions regarding pollutant transport and exposure beyond the facility boundary (#5, #10, #13, #16, #19, #25, #28, #41, #50, #57, #58, #59, #60, #66, #73, #77, #79, #90, #108).

A recurring theme throughout the administrative record is that compliance demonstrations end at the stack while permit assumptions continue beyond the stack. The commenter repeatedly questioned how emissions behavior can be verified once pollutants enter the surrounding environment and whether any mechanism exists to determine whether emissions remain consistent with permit assumptions after leaving the source.

DNR Response

DNR repeatedly stated that ambient monitoring is not required under Title V, that ambient monitoring is administered through separate regulatory programs, and that the proposed permit already contains all monitoring, recordkeeping, reporting,

testing, and compliance requirements required by applicable federal and state regulations.

DNR further relied upon existing permit requirements, stack-testing requirements, Compliance Assurance Monitoring (CAM) plans, operation and maintenance plans, emissions calculations, emissions inventories, opacity observations, pressure-drop monitoring, inspections, and annual reporting requirements as sufficient demonstrations of compliance.

DNR also relied upon existing ambient-monitoring programs, statewide monitoring networks, applicable ambient air standards, and regulatory programs outside the Title V permitting process. DNR repeatedly maintained that the proposed permit contains all applicable requirements and that additional ambient, fence-line, boundary, or community monitoring is not required under applicable federal or state regulations.

DNR concluded that the facility satisfies the applicable criteria for issuance of a Title V permit and that the public comments did not identify deficiencies requiring permit denial or the inclusion of additional monitoring requirements.

Petitioner's Claim

The permit does not contain monitoring sufficient to determine whether pollutants leaving the facility remain consistent with permit assumptions, emissions calculations, control-efficiency assumptions, applicability determinations, source-classification determinations, and compliance demonstrations relied upon throughout the permit record. As a result, the permit does not

contain monitoring sufficient to assure compliance as required by Clean Air Act §504(c), 42 U.S.C. §7661c(c), and 40 C.F.R. §70.6(a)(3).

Petitioner's Response

As documented in Appendix C-1, the permit relies on a monitoring framework consisting of periodic stack testing, opacity observations, parametric monitoring, and inspection-based Compliance Assurance Monitoring (CAM) plans to demonstrate compliance.

These monitoring approaches focus primarily on process operations, control-device performance, emissions calculations, and compliance demonstrations occurring at or before the point of emission. They do not provide a mechanism capable of determining whether pollutants leaving the facility remain consistent with permit assumptions after emissions enter the surrounding environment.

Stack testing is conducted at infrequent intervals and provides only a limited snapshot of facility performance under specific test conditions. While stack testing may provide information regarding emissions during the test period, it does not determine whether emissions remain consistent with permit assumptions between test events, under changing meteorological conditions, during varying production conditions, or under changing feedstock conditions.

Similarly, opacity observations, pressure-drop monitoring, parametric monitoring, inspections, and Compliance Assurance Monitoring (CAM) plans evaluate equipment operation and

control-device performance rather than the behavior of pollutants after they leave the source. These monitoring mechanisms may provide information regarding equipment conditions, but they do not determine whether pollutants remain consistent with assumptions relied upon in emissions calculations, control-efficiency determinations, applicability determinations, or source-classification conclusions.

The administrative record repeatedly raised concerns regarding emissions behavior beyond the stack, including pollutant transport, fugitive emissions, lead deposition, particulate-bound metal transport, community exposure, sensitive receptors, atmospheric inversions, stagnant-air conditions, seasonal meteorological influences, and off-site movement of pollutants. These concerns focus on whether emissions behave as assumed after they leave the source rather than whether permit paperwork, calculations, or equipment-monitoring requirements exist.

The permit contains no facility-specific mechanism capable of determining what pollutants leave the facility boundary during operation, whether emissions remain consistent with assumptions relied upon throughout the permit record, whether pollutant transport occurs as assumed under actual site-specific conditions, or whether emissions reaching nearby receptors remain consistent with permit conclusions.

The permit likewise contains no mechanism capable of independently evaluating whether emissions calculations, control-efficiency assumptions, pollutant inventories, source-classification determinations, and applicability determinations remain representative after emissions enter the surrounding

environment. Instead, the permit assumes that emissions behave as predicted without providing a corresponding mechanism for verification.

As demonstrated in Appendix C-2, feasible monitoring approaches exist that are capable of evaluating emissions after they leave the source, including fenceline monitoring, boundary monitoring, near-source verification, periodic compositional sampling, and integration of meteorological information. The issue raised throughout the administrative record was not whether a specific monitoring technology must be required in every circumstance. Rather, the issue raised was whether any facility-specific mechanism exists to evaluate whether emissions leaving the facility remain consistent with assumptions relied upon throughout the permit record.

The permit provides extensive information regarding process operations, emissions calculations, control assumptions, applicability determinations, and compliance demonstrations occurring within the facility. However, it provides little information regarding whether emissions behave as assumed after leaving the source. As a result, the permit contains a significant verification gap between emissions assumptions and real-world emissions behavior.

Because the permit lacks any facility-specific mechanism capable of determining whether pollutants leaving the facility remain consistent with permit assumptions during actual operation, it does not contain monitoring sufficient to assure compliance as required by Clean Air Act §504(c), 42 U.S.C. §7661c(c), and 40 C.F.R. §70.6(a)(3).

Verification Analysis

DNR repeatedly relied upon stack testing, opacity observations, parametric monitoring, Compliance Assurance Monitoring (CAM) plans, inspections, emissions calculations, emissions inventories, annual reporting, and existing permit requirements to support permit issuance. However, these mechanisms primarily evaluate process operations, control-device performance, and emissions assumptions within the facility rather than determining whether pollutants leaving the facility remain consistent with those assumptions after entering the surrounding environment.

The central concern repeatedly raised throughout the administrative record is not whether monitoring requirements exist, but whether any mechanism exists to independently verify emissions behavior after pollutants leave the source. The permit contains extensive monitoring of equipment conditions, operating parameters, and emissions calculations, yet contains no facility-specific mechanism capable of determining whether emissions assumptions remain representative at or near the facility boundary under actual operating conditions.

The administrative record repeatedly raised concerns regarding pollutant transport, fugitive emissions, lead deposition, particulate-bound metal transport, sensitive receptors, atmospheric conditions, and off-site movement of pollutants. Although DNR relied upon existing permit requirements and broader regulatory programs, those responses do not independently verify whether emissions behave as assumed after leaving the source.

Where permit conclusions depend upon emissions calculations, control-efficiency assumptions, applicability determinations, source-classification determinations, and compliance demonstrations, verification becomes increasingly important. Without a mechanism capable of evaluating whether pollutants leaving the facility remain consistent with those assumptions, compliance cannot be independently verified under actual operating conditions.

Accordingly, the permit contains a significant verification gap between emissions assumptions and real-world emissions behavior. Because the permit lacks a facility-specific mechanism capable of evaluating whether pollutants leaving the source remain consistent with permit assumptions, it does not provide verification sufficient to assure compliance throughout the permit term.

Non-Discretionary Duty Analysis

Clean Air Act §504(c), 42 U.S.C. §7661c(c), requires each Title V permit to set forth inspection, entry, monitoring, compliance-certification, and reporting requirements to assure compliance with the permit terms and conditions. Likewise, 40 C.F.R. §70.6(a)(3)(i)(B) requires monitoring sufficient to assure compliance with permit terms and conditions, 40 C.F.R. §70.6(c)(1) requires compliance-certification requirements sufficient to assure compliance with permit terms and conditions, and 40 C.F.R. §70.7(a)(1)(iv) requires the permitting authority to determine that the permit satisfies applicable Title V requirements before issuance.

These obligations are mandatory and do not depend upon whether a particular monitoring approach is expressly identified in an underlying applicable requirement. The permitting authority must determine that the monitoring framework contained in the permit is sufficient to assure compliance with the requirements and determinations upon which permit issuance depends.

Here, the permit relies upon emissions calculations, control-efficiency assumptions, pollutant inventories, applicability determinations, source-classification determinations, and compliance demonstrations while providing no facility-specific mechanism capable of determining whether pollutants leaving the facility remain consistent with those assumptions during actual operation.

Although DNR repeatedly stated that ambient monitoring is not required under Title V and that existing permit requirements are sufficient, the issue raised throughout the administrative record was not whether a specific monitoring technology is mandated. The issue raised was whether any mechanism exists to verify whether emissions assumptions remain valid after pollutants leave the source and enter the surrounding environment.

Because the permit contains no facility-specific mechanism capable of evaluating whether pollutants leaving the facility remain consistent with the permit assumptions relied upon throughout the permit record, Petitioner demonstrates a specific compliance-assurance deficiency in the permit itself: the permit lacks monitoring capable of verifying those assumptions during actual operation. This deficiency supports EPA objection under Clean Air Act §505(b)(2), 42 U.S.C. §7661d(b)(2), because the

permit does not contain monitoring sufficient to assure compliance as required by Clean Air Act §504(c), 42 U.S.C. §7661c(c), and 40 C.F.R. §§70.6(a)(3) and 70.6(c)(1).

Arbitrary and Capricious Analysis

An agency acts arbitrarily and capriciously when it fails to examine relevant evidence, fails to consider important aspects of the problem, offers explanations that run counter to the evidence before the agency, or relies upon assumptions that are not adequately supported by the administrative record. *Motor Vehicle Mfrs. Ass’n v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983).

Here, the commenter repeatedly raised concerns regarding the absence of any facility-specific mechanism capable of determining what pollutants leave the facility during actual operation. The administrative record repeatedly identified concerns regarding fence-line verification, boundary monitoring, pollutant transport, fugitive emissions, lead deposition, particulate-bound metal transport, meteorological conditions, sensitive receptors, and the inability to evaluate emissions behavior after pollutants leave the source.

DNR repeatedly responded that ambient monitoring is not required under Title V, that ambient monitoring is administered through separate regulatory programs, and that the permit already contains all applicable requirements. However, those responses do not directly address the issue repeatedly raised throughout the administrative record. The issue raised was not whether ambient monitoring is independently required by Title V. The issue raised was whether any facility-specific mechanism

exists to evaluate whether pollutants leaving the facility remain consistent with assumptions relied upon in emissions calculations, control-efficiency determinations, applicability determinations, source-classification conclusions, and compliance demonstrations.

By repeatedly responding to requests for verification with statements regarding the absence of an ambient-monitoring requirement, DNR failed to fully address the underlying concern presented throughout the administrative record. The responses focus primarily on regulatory authority and program scope rather than the unresolved verification issue repeatedly raised by the commenter.

The administrative record further demonstrates that permit conclusions continue beyond the point of emission. Emissions calculations, control-efficiency assumptions, source-classification determinations, applicability conclusions, and compliance demonstrations all rely upon assumptions regarding emissions behavior. Yet the permit contains no facility-specific mechanism capable of determining whether those assumptions remain valid after pollutants leave the source.

Accordingly, DNR failed to adequately address an important aspect of the problem repeatedly raised throughout the administrative record and relied upon assumptions that remain unverified under actual operating conditions. DNR's conclusion that the permit contains monitoring sufficient to assure compliance is therefore arbitrary and capricious under *State Farm*, 463 U.S. at 43.

Conclusion

The administrative record consistently demonstrates that the commenter sought verification of actual emissions behavior after pollutants leave the source. Throughout the permitting process, the commenter repeatedly raised concerns regarding facility-boundary emissions, fenceline verification, pollutant transport, fugitive emissions, lead deposition, particulate-bound metal transport, meteorological influences, sensitive receptors, and the absence of any facility-specific mechanism capable of determining whether emissions remain consistent with permit assumptions during actual operation.

DNR repeatedly relied upon existing permit requirements, ambient-monitoring programs, Title V scope limitations, emissions calculations, compliance demonstrations, and existing regulatory requirements. However, those responses do not resolve the central issue repeatedly raised throughout the administrative record: the permit contains no facility-specific mechanism capable of determining whether pollutants leaving the facility remain consistent with permit assumptions, emissions calculations, control-efficiency assumptions, applicability determinations, source-classification determinations, and compliance demonstrations relied upon throughout the permit record.

As a result, the permit contains a significant verification gap between emissions assumptions and real-world emissions behavior. Because the permit lacks monitoring capable of determining whether pollutants leaving the facility remain consistent with permit assumptions during actual operation, it does not contain monitoring sufficient to assure compliance as

required by Clean Air Act §504(c), 42 U.S.C. §7661c(c), and 40 C.F.R. §70.6(a)(3).

EPA should therefore object to the permit and require facility-specific verification, monitoring, and compliance-assurance provisions sufficient to determine whether pollutants leaving the facility remain consistent with permit assumptions, emissions calculations, applicability determinations, and compliance demonstrations before the permit may be issued.

PART 8 — GROUND VI — Near-Threshold Hazardous Air Pollutant Determinations, Source Classification, and Applicability Determinations Remain Unverified

This Ground is evaluated under the Legal Standard set forth in Part 1.

Petitioner's Demonstration Under Clean Air Act § 505(b)(2)

Petitioner affirmatively demonstrates that the permit's hazardous-air-pollutant inventory, source-classification determination, and related applicability conclusions are not supported by verification sufficient to assure that the assumptions and calculations upon which those determinations depend remain valid during actual operation. This Ground does not merely contend that DNR failed to provide additional explanation or that Petitioner would prefer additional information. Rather, the evidence identified throughout this Ground demonstrates specific deficiencies in the reproducibility, verification, and compliance-assurance mechanisms underlying determinations upon which the permit depends.

Those deficiencies are particularly consequential because the reported HAP determination remains near regulatory thresholds and depends upon pollutant identification, emission factors, engineering estimates, control-efficiency assumptions, facility-wide emissions accounting, operating assumptions, and source configuration. Where those inputs determine source classification and applicable requirements, the permit must contain enforceable mechanisms sufficient to assure that the factual and operational assumptions supporting those determinations remain valid throughout the permit term.

Accordingly, Petitioner has satisfied the burden imposed by Clean Air Act § 505(b)(2) by identifying the specific calculations and assumptions at issue, the deficiencies preventing their adequate verification during actual operation, and the resulting effect upon source-classification, applicability, and compliance determinations. EPA should object unless the permit and supporting record contain enforceable monitoring, recordkeeping, reporting, and verification provisions sufficient to assure that the HAP inventory, source classification, and resulting applicable-requirement determinations remain valid during actual operation.

The comments repeatedly raised concerns regarding HAP inventory development, pollutant identification, emission-factor selection, engineering estimates, control-efficiency assumptions, facility-wide emissions accounting, source-classification determinations, applicability conclusions, permit-shield provisions, permit-reopener provisions, source-configuration changes, and the adequacy of the administrative record supporting permit issuance.

Although DNR repeatedly relied upon permit applications, emissions inventories, existing calculations, administrative-record materials, and area-source determinations, commenter repeatedly argued that critical conclusions remain difficult to independently reproduce, verify, and audit from the administrative record alone.

Because the reported HAP determination remains near thresholds, the transparency, reproducibility, and independent verifiability of the underlying calculations and assumptions are particularly important. The concerns raised throughout the administrative record therefore focus not merely on the final numerical determination itself, but on whether the record contains sufficient information to independently verify the source-classification determinations, applicability conclusions, HAP inventories, emissions accounting methodologies, and permit conclusions that depend upon that determination.

DNR Response

DNR repeatedly relied upon the permit application, emissions inventories, emissions calculations, potential-to-emit (PTE) calculations, the PTE Calculation Spreadsheet (Appendix G-3), existing permit records, permit applications, permit revisions, source-classification determinations, and area-source applicability conclusions to support permit issuance.

DNR further relied upon emissions factors, engineering estimates, accepted calculation methodologies, control-efficiency assumptions, permit application materials, administrative-record documents, and existing permit requirements. DNR maintained that the facility's reported

hazardous air pollutant emissions remain below applicable major-source thresholds and that the permit contains all applicable requirements.

DNR also relied upon existing administrative-record materials, publicly available permit documents, OpenText records, permit-shield provisions, reopener provisions, cupola rescission documentation, permit updates, and removal of inactive equipment from the final permit. DNR maintained that the existing record provides a sufficient basis for permit issuance and that the public comments did not identify deficiencies requiring permit denial, additional applicability determinations, revised source classification, or recalculation of facility-wide hazardous air pollutant emissions.

DNR concluded that the facility satisfies the applicable criteria for issuance of a Title V permit and that the reported hazardous air pollutant emissions, source-classification determinations, applicability conclusions, emissions inventories, and supporting calculations provide an adequate basis for permit issuance.

Petitioner's Claim

The permit relies upon a reported facility-wide hazardous air pollutant determination of 24.83 tons per year to support source-classification determinations, applicability conclusions, permit conditions, and regulatory obligations. However, the administrative record does not provide a sufficiently transparent, reproducible, and independently verifiable basis for the calculations, assumptions, methodologies, inventories, emissions accounting, and permit conclusions supporting that determination. As a result, the permit and supporting

administrative record do not provide a sufficiently transparent and reproducible basis to independently verify the hazardous air pollutant determinations, source-classification determinations, and applicability conclusions upon which permit issuance depends.

Petitioner's Response

Comments #22, #24, #46, #54, #64, #65, #67, #74, #75, #86, #87, #88, #94, #95, #102, #107, and #108 repeatedly challenged whether the reported 24.83 tons-per-year HAP determination can be independently reproduced and verified from the administrative record. These comments did not merely dispute the final numerical value. Rather, they repeatedly questioned whether the record contains sufficient information to independently reconstruct, audit, and verify the calculations, assumptions, methodologies, pollutant inventories, emissions-accounting procedures, and applicability conclusions underlying that determination.

These concerns are particularly significant because the reported determination relies in part upon the PTE Calculation Spreadsheet (Appendix G-3), which serves as a principal record supporting the facility-wide HAP determination, source-classification conclusions, and applicability determinations relied upon throughout the permit record. While DNR repeatedly relied upon permit applications, emissions inventories, Appendix G-3, and existing permit records, commenters repeatedly questioned whether the administrative record provides sufficient information to independently verify the assumptions and methodologies incorporated into those calculations.

Comments #7, #14, #21, #46, #51, #58, #59, #74, #77, #83, #87, #88, #94, #95, #102, #107, and #108 repeatedly questioned whether all relevant hazardous air pollutants were identified, whether pollutant inventories were complete, whether pollutant-selection decisions were adequately documented, whether certain pollutants may have been omitted or underestimated, and whether pollutant-specific calculations were sufficiently transparent to permit independent review. Although DNR repeatedly relied upon emissions inventories and permit applications, those responses generally defend the existence of inventory calculations rather than fully addressing concerns regarding inventory completeness, pollutant-selection methodology, pollutant-exclusion decisions, and pollutant-specific verification.

Comments #6, #8, #22, #24, #29, #46, #54, #64, #65, #67, #71, #74, #75, #76, #78, #79, #81, #85, #86, #87, #88, #94, #95, #102, #105, #106, #107, and #108 repeatedly challenged the use of emission factors, engineering estimates, operating assumptions, feedstock assumptions, production assumptions, and control-efficiency assumptions used throughout the emissions-development process. The issue raised is not whether such methodologies may be used. Rather, the issue is whether the administrative record contains sufficient information to independently evaluate the assumptions underlying those methodologies and determine whether they remain representative of actual operation. Although Appendix G-3 contains facility-wide emissions calculations, commenters repeatedly questioned whether the administrative record provides sufficient information to independently trace, reproduce, and verify the assumptions, emission factors, control

assumptions, pollutant-selection decisions, and emissions-accounting methodologies incorporated into those calculations.

Appendix F-11 provides additional DNR-authored evidence of precisely this reliance upon assumptions and underlying analyses. In evaluating induction-furnace emissions, DNR stated that the 2017 stack test measured PM₁₀ while the facility used the same emissions factor for PM, PM₁₀, and PM_{2.5}. DNR acknowledged that this approach “may be estimating PM_{2.5} twice as high as it should” and further stated that DNR did not know the relative proportion of emissions attributable to pouring/cooling versus shakeout. DNR nevertheless accepted the assumption that PM₁₀ equals PM_{2.5}. Although that assumption may be conservative for the particular inventory calculation, DNR's analysis confirms that pollutant-specific emissions determinations can depend upon assumptions made in the face of acknowledged uncertainty rather than direct pollutant-specific measurement. See Appendix F-11.

Appendix F-11 also identifies an additional underlying DNR analysis concerning metal HAP emissions that is not reproduced in the fee-audit memorandum itself. DNR states that “PM metal HAPs were reviewed at another time” and directs the reader to notes maintained in an internal DNR Air Quality Bureau network location associated with the 2020 AirToxScreen/Faircast review. That reference is directly relevant to this Ground because HAP accounting, source classification, and identification of applicable requirements depend upon an administrative record sufficiently documented to permit the basis for those determinations to be understood, reproduced, and evaluated. To the extent DNR relied upon that

separate metal-HAP analysis in making determinations relevant to the HyCast Title V renewal, the administrative record must disclose the analysis and its underlying assumptions sufficiently to permit meaningful EPA and public review. See Appendix F-11.

Comments #22, #24, #46, #74, #75, #86, #87, #88, #94, #95, #102, #107, and #108 further questioned whether the administrative record contains sufficient information to independently reconstruct facility-wide hazardous-air-pollutant accounting. Numerous comments raised concerns regarding the relationship between individual emission-unit calculations and facility-wide HAP totals, the traceability of emissions calculations from individual units to aggregate facility-wide determinations, and the ability of independent reviewers to reproduce the reported totals from the record alone. While DNR repeatedly relied upon facility-wide calculations and permit application materials, those responses do not fully resolve concerns regarding traceability and reproducibility of facility-wide emissions accounting.

Comments #22, #24, #46, #64, #74, #75, #79, #86, #87, #88, #94, #95, #102, #105, #106, #107, and #108 repeatedly challenged source-classification determinations and applicability conclusions that depend upon emissions calculations, pollutant inventories, control assumptions, and facility-wide accounting methodologies. The issue raised is not whether source-classification conclusions exist. The issue raised is whether the assumptions supporting those conclusions can be independently reproduced, evaluated, and verified from the administrative record.

Comments #24, #54, #65, #67, #71, #75, #85, #87, #88, #94, #95, #97, #102, #107, and #108 repeatedly requested supporting records, calculations, methodologies, source documents, and other materials necessary to independently evaluate the permit's hazardous-air-pollutant determinations, applicability conclusions, emissions inventories, and source-classification determinations. Although DNR repeatedly relied upon the existing administrative record and publicly available permit materials, the comments consistently questioned whether the available record permits meaningful independent review of the determinations upon which permit issuance depends.

The importance of these concerns is heightened because permit-shield protections, permit-reopener provisions, future applicability determinations, and future compliance obligations all depend upon the accuracy of the underlying source-classification and applicability determinations made at the time of permit issuance. Comments #49, #80, #81, #85, #97, #105, and #108 specifically raised concerns regarding the consequences of errors in source-classification determinations and emissions calculations. Permit-shield and reopener provisions may address future circumstances, but they do not independently establish that the underlying determinations are correct when the permit is issued.

Comments #9, #34, #38, #49, #68, #96, #105, and #108 additionally raised concerns regarding cupola rescission, removal of previously permitted equipment, changes in facility operations, changing source configurations, and the effect of those changes on emissions calculations, applicability determinations, and permit conclusions. While DNR relied upon

permit revisions and removal of inactive equipment, commenters repeatedly argued that the administrative record should clearly reconcile those changes with emissions inventories, Appendix G-3 calculations, HAP determinations, source-classification conclusions, applicability determinations, and permit findings relied upon elsewhere in the record.

Accordingly, the central concern raised throughout the administrative record is not simply whether the reported 24.83 tons-per-year determination is correct. Rather, the concern is whether the administrative record provides a sufficiently transparent, reproducible, and independently verifiable basis for hazardous-air-pollutant determinations, emissions inventories, emissions-accounting methodologies, source-classification determinations, applicability conclusions, and permit findings that depend upon that determination. Because those concerns remain unresolved, the permit continues to rely upon conclusions that are difficult to independently reproduce and verify from the administrative record alone.

Verification Analysis

DNR repeatedly relied upon permit applications, emissions inventories, emissions-factor methodologies, engineering estimates, control-efficiency assumptions, facility-wide emissions accounting, potential-to-emit calculations, Appendix G-3 (PTE Calculation Spreadsheet), and area-source applicability determinations to support permit issuance. However, Comments #22, #24, #46, #54, #64, #65, #67, #74, #75, #86, #87, #88, #94, #95, #102, #107, and #108 repeatedly challenged whether the administrative record provides sufficient

information to independently reproduce and verify those determinations.

The central concern raised throughout the administrative record is not whether calculations exist, but whether the calculations and assumptions supporting the reported 24.83 tons-per-year hazardous-air-pollutant determination can be independently audited and reproduced from the record. Numerous comments questioned pollutant-selection methodologies, inventory completeness, emissions-development methodologies, facility-wide accounting procedures, source-classification determinations, applicability conclusions, and permit findings that depend upon those calculations. See Comments #7, #14, #21, #46, #51, #58, #59, #74, #77, #83, #87, #88, #94, #95, #102, #107, and #108.

DNR repeatedly relied upon the existence of permit applications, emissions inventories, permit records, emissions-factor methodologies, engineering estimates, Appendix G-3 calculations, and existing permit documentation. However, the comments repeatedly questioned whether those materials provide sufficient transparency to permit meaningful independent verification of the assumptions and methodologies underlying the final determinations. The reported 24.83 tons-per-year hazardous-air-pollutant determination relies substantially upon calculations reflected in Appendix G-3; however, commenters repeatedly questioned whether the administrative record contains sufficient supporting information to independently reproduce and verify the assumptions, methodologies, and pollutant-accounting procedures

incorporated into those calculations. See Comments #87, #88, #94, #95, #102, #107, and #108.

Comments #22, #24, #46, #74, #75, #86, #87, #88, #94, #95, #102, #107, and #108 further raised concerns regarding traceability between individual emission-unit calculations and facility-wide hazardous-air-pollutant totals. While DNR repeatedly relied upon facility-wide emissions calculations and permit application materials, the responses generally defend the resulting conclusions rather than demonstrating how an independent reviewer can reproduce those conclusions from the administrative record alone.

Comments #6, #8, #22, #24, #29, #46, #54, #64, #65, #67, #71, #74, #75, #76, #78, #79, #81, #85, #86, #87, #88, #94, #95, #102, #105, #106, #107, and #108 repeatedly questioned assumptions regarding operating conditions, feedstock composition, emissions factors, engineering estimates, and pollution-control performance. Although DNR relied upon accepted methodologies and existing permit documentation, commenters repeatedly challenged whether the record provides sufficient information to evaluate whether those assumptions remain representative of actual operation and sufficiently supported for permitting purposes.

The verification issue is particularly significant because source-classification determinations, applicability conclusions, permit-shield protections, permit-reopener provisions, and future compliance obligations depend upon the accuracy and reproducibility of these underlying determinations. Comments #49, #80, #81, #85, #97, #105, and #108 specifically raised concerns regarding the consequences of errors in source-

classification determinations, applicability conclusions, and emissions calculations. Where regulatory obligations depend upon a reported facility-wide hazardous-air-pollutant determination that remains near major-source applicability thresholds, the ability to independently reproduce and verify the underlying calculations becomes especially important.

Comments #9, #34, #38, #49, #68, #96, #105, and #108 also raised concerns regarding source-configuration changes, cupola rescission, and the effect of those changes on emissions inventories, source-classification determinations, applicability conclusions, and facility-wide accounting reflected in Appendix G-3. While DNR relied upon permit revisions and removal of inactive equipment, commenters repeatedly questioned whether the administrative record adequately reconciles those changes with the calculations and determinations relied upon elsewhere in the permit record.

Accordingly, the specific deficiencies identified above demonstrate that the hazardous-air-pollutant determinations, Appendix G-3 calculations, emissions-accounting methodologies, source-classification determinations, and applicability conclusions relied upon by the permit are not sufficiently transparent, reproducible, traceable, and independently verifiable. Petitioner has identified the particular calculations, assumptions, pollutant-accounting issues, source-configuration changes, and operating-condition uncertainties that prevent independent verification of those determinations. These demonstrated deficiencies are material because the resulting determinations affect source classification, applicable

requirements, permit conditions, permit-shield protections, reopener obligations, and continuing compliance obligations.

Non-Discretionary Duty Analysis

Clean Air Act §504(c), 42 U.S.C. §7661c(c), requires each Title V permit to set forth inspection, entry, monitoring, compliance-certification, and reporting requirements to assure compliance with the permit terms and conditions. Likewise, 40 C.F.R. § 70.7(a)(5)(i) requires the permitting authority to provide a statement setting forth the legal and factual basis for the draft permit conditions, including references to the applicable statutory or regulatory provisions.

In addition, Clean Air Act §505(b)(2), 42 U.S.C. §7661d(b)(2), requires EPA review of proposed Title V permits and authorizes EPA objection where a permit is not in compliance with applicable requirements. Meaningful EPA review necessarily depends upon the existence of an administrative record sufficient to permit independent evaluation of the permitting determinations upon which permit issuance depends.

These obligations necessarily require that source-classification determinations, applicability conclusions, emissions inventories, hazardous-air-pollutant determinations, and related permit findings be supported by an administrative record sufficient to permit meaningful review, verification, and reproduction of the underlying calculations and assumptions. Where permit obligations depend upon a reported facility-wide hazardous-air-pollutant determination, the permitting authority must provide a record sufficient to support and explain the basis for that determination.

Here, the permit relies upon a reported facility-wide hazardous-air-pollutant determination of 24.83 tons per year, reflected in part through Appendix G-3 (PTE Calculation Spreadsheet), to support source-classification determinations, applicability conclusions, permit conditions, permit-shield provisions, reopener provisions, and other regulatory obligations.

Comments #22, #24, #46, #54, #64, #65, #67, #74, #75, #86, #87, #88, #94, #95, #102, #107, and #108 repeatedly challenged the transparency, reproducibility, and independent verifiability of the calculations, inventories, emissions-accounting methodologies, pollutant-selection decisions, emissions factors, engineering estimates, and control assumptions supporting those determinations.

Comments #24, #54, #65, #67, #71, #75, #85, #87, #88, #94, #95, #97, #102, #107, and #108 further questioned whether the administrative record contains sufficient information to independently reproduce and audit the calculations reflected in Appendix G-3 and the related applicability and source-classification determinations. The issue raised throughout the administrative record is not whether calculations exist. The issue raised is whether the record contains sufficient information to permit meaningful independent review of the calculations and assumptions supporting the final determinations.

Because source-classification determinations and applicability conclusions depend upon the underlying hazardous-air-pollutant inventories, emissions calculations, emissions-accounting methodologies, and related assumptions, DNR had a non-discretionary duty to ensure that the administrative record provides a sufficiently transparent and reproducible basis for

meaningful review of those determinations before permit issuance.

Where repeated public comments challenge the reproducibility and independent verifiability of the calculations supporting near-threshold hazardous-air-pollutant determinations, the permitting authority must demonstrate that the record adequately supports those determinations. Reliance upon final conclusions, permit applications, or summary calculations alone does not resolve concerns regarding the ability of EPA and the public to independently evaluate the assumptions and methodologies underlying those conclusions.

Accordingly, DNR failed to adequately demonstrate that the administrative record provides a sufficiently transparent, reproducible, and independently verifiable basis for the hazardous-air-pollutant determinations, source-classification determinations, applicability conclusions, and Appendix G-3 calculations upon which permit issuance depends, as required by Clean Air Act §§504(c) and 505(b)(2), 42 U.S.C. §§7661c(c) and 7661d(b)(2), 40 C.F.R. §§70.6(a)(3)(i)(B), 40 C.F.R. §§70.6(a)(3)(i)(B), 70.6(c)(1), 70.7(a)(1)(iv), and 70.7(a)(5)(i).

Arbitrary and Capricious Analysis

An agency acts arbitrarily and capriciously when it fails to examine relevant evidence, fails to consider important aspects of the problem, offers explanations that run counter to the evidence before the agency, or relies upon conclusions that are not adequately supported by the administrative record. *Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983).

Here, commenter repeatedly raised concerns regarding the transparency, reproducibility, traceability, and independent verifiability of the reported 24.83 tons-per-year hazardous-air-pollutant determination, the development of facility-wide hazardous-air-pollutant inventories, emissions-accounting methodologies, emissions-factor selection, engineering estimates, control-efficiency assumptions, source-classification determinations, applicability conclusions, and the adequacy of the administrative record supporting those determinations. See Comments #22, #24, #46, #54, #64, #65, #67, #74, #75, #86, #87, #88, #94, #95, #102, #107, and #108. These concerns repeatedly focused on whether the calculations and assumptions reflected in Appendix G-3 (PTE Calculation Spreadsheet) and related permitting materials could be independently reproduced and verified from the administrative record.

Comments #7, #14, #21, #46, #51, #58, #59, #74, #77, #83, #87, #88, #94, #95, #102, #107, and #108 further questioned inventory completeness, pollutant-identification methodologies, pollutant-selection decisions, and whether all relevant hazardous air pollutants were adequately accounted for. Comments #6, #8, #22, #24, #29, #46, #54, #64, #65, #67, #71, #74, #75, #76, #78, #79, #81, #85, #86, #87, #88, #94, #95, #102, #105, #106, #107, and #108 repeatedly challenged emissions factors, engineering estimates, operating assumptions, feedstock assumptions, and pollution-control assumptions incorporated into the permitting analysis. The comments also repeatedly questioned the relationship between individual emission-unit calculations and facility-wide hazardous-air-pollutant totals, as reflected in Comments #22, #24, #46, #74, #75, #86, #87, #88, #94, #95, #102, #107, and #108.

DNR repeatedly responded by relying upon permit applications, emissions inventories, emissions calculations, Appendix G-3, potential-to-emit calculations, accepted methodologies, existing permit records, administrative-record materials, source-classification determinations, applicability conclusions, permit-shield provisions, reopener provisions, and area-source determinations. However, these responses largely defend the existence of calculations and determinations rather than directly addressing whether the administrative record permits independent reproduction and verification of those determinations.

The issue repeatedly raised throughout the administrative record is not whether hazardous-air-pollutant calculations were performed. Nor is the issue whether DNR ultimately concluded that the facility remains below major-source thresholds. Rather, the issue is whether the administrative record contains sufficient information to allow EPA, the public, and independent reviewers to meaningfully evaluate, reproduce, and verify the calculations, assumptions, methodologies, inventories, emissions-accounting procedures, and source-classification determinations supporting those conclusions.

Comments #24, #54, #65, #67, #71, #75, #85, #87, #88, #94, #95, #97, #102, #107, and #108 specifically requested supporting records, calculation methodologies, source documents, emissions-development procedures, and other materials necessary to independently evaluate the hazardous-air-pollutant determinations and applicability conclusions relied upon for permit issuance. Yet DNR repeatedly relied upon the sufficiency of the existing administrative record without fully

addressing whether the record permits meaningful independent review of the determinations upon which permit issuance depends.

The administrative record further demonstrates that numerous permit conclusions depend upon these underlying determinations, including source-classification determinations, applicability conclusions, permit-shield protections, permit-reopener provisions, and future compliance obligations. Comments #49, #80, #81, #85, #97, #105, and #108 specifically raised concerns regarding the consequences of errors in source-classification determinations and emissions calculations. Yet DNR repeatedly relied upon the resulting conclusions without fully addressing the reproducibility, traceability, and independent-verification concerns raised throughout the public-comment process.

Comments #9, #34, #38, #49, #68, #96, #105, and #108 also raised concerns regarding cupola rescission, source-configuration changes, removal of previously permitted equipment, and the effect of those changes on emissions calculations, applicability determinations, source classification, and facility-wide accounting reflected in Appendix G-3. While DNR relied upon permit revisions and removal of inactive equipment, the responses generally do not fully explain how these issues were reconciled within the broader emissions-accounting and applicability framework relied upon throughout the permit record.

Accordingly, DNR failed to adequately address an important aspect of the problem repeatedly raised throughout the administrative record: whether the hazardous-air-pollutant

determinations, Appendix G-3 calculations, source-classification determinations, applicability conclusions, emissions inventories, and emissions-accounting methodologies relied upon for permit issuance can be independently reproduced and verified from the record itself. Because DNR repeatedly relied upon conclusions without fully resolving the underlying reproducibility, traceability, and verification concerns, its determination that the permit record provides an adequate basis for permit issuance is arbitrary and capricious under *State Farm*, 463 U.S. at 43.

Conclusion

The administrative record consistently demonstrates that commenter sought independent verification of the hazardous-air-pollutant determinations, source-classification determinations, applicability conclusions, emissions inventories, emissions-accounting methodologies, and permit findings relied upon throughout the permit record. Numerous comments challenged the transparency, reproducibility, traceability, and independent verifiability of the reported 24.83 tons-per-year hazardous-air-pollutant determination and the assumptions, calculations, inventories, methodologies, and accounting procedures supporting that conclusion. See Comments #22, #24, #46, #54, #64, #65, #67, #74, #75, #86, #87, #88, #94, #95, #102, #107, and #108.

The comments further raised concerns regarding inventory completeness, pollutant identification, pollutant-selection methodology, emissions-factor assumptions, engineering estimates, control-efficiency assumptions, facility-wide emissions accounting, source-configuration changes, cupola rescission, permit-shield protections, permit-reopener

provisions, and the adequacy of records available for independent review. See Comments #7, #14, #21, #46, #51, #58, #59, #74, #77, #83, #87, #88, #94, #95, #102, #107, and #108; Comments #6, #8, #22, #24, #29, #46, #54, #64, #65, #67, #71, #74, #75, #76, #78, #79, #81, #85, #86, #87, #88, #94, #95, #102, #105, #106, #107, and #108; and Comments #9, #34, #38, #49, #68, #96, #105, and #108.

DNR repeatedly relied upon permit applications, emissions inventories, emissions calculations, potential-to-emit calculations, Appendix G-3 (PTE Calculation Spreadsheet), accepted methodologies, administrative-record materials, source-classification determinations, applicability conclusions, permit-shield provisions, reopener provisions, permit revisions, and area-source determinations. However, those responses do not fully resolve the central issue repeatedly raised throughout the public-comment process: whether the administrative record provides a sufficiently transparent, reproducible, traceable, and independently verifiable basis for the hazardous-air-pollutant determinations, source-classification determinations, applicability conclusions, emissions inventories, facility-wide emissions-accounting methodologies, and permit findings upon which permit issuance depends.

These concerns remain particularly significant because Appendix G-3 serves as a principal record supporting the reported 24.83 tons-per-year hazardous-air-pollutant determination and the resulting source-classification and applicability conclusions relied upon throughout the permit record. Yet commenters repeatedly questioned whether the administrative record contains sufficient information to

independently reproduce and verify the assumptions, emission factors, engineering estimates, pollutant-selection decisions, control assumptions, emissions-accounting methodologies, and facility-wide calculations incorporated into that determination.

Because the reported hazardous-air-pollutant determination remains near major-source applicability thresholds, the accuracy, transparency, reproducibility, and verifiability of the underlying calculations and assumptions are particularly important. Source-classification determinations, applicability conclusions, permit obligations, permit-shield protections, permit-reopener provisions, and future compliance obligations all depend upon the reliability of those underlying determinations.

Accordingly, significant unresolved verification concerns remain regarding hazardous-air-pollutant inventory development, emissions-accounting methodologies, Appendix G-3 calculations, source-classification determinations, applicability conclusions, and the evidentiary basis supporting permit issuance. Because the administrative record does not provide a sufficiently transparent, reproducible, traceable, and independently verifiable basis for those determinations, EPA should object to the permit pursuant to Clean Air Act §505(b)(2), 42 U.S.C. §7661d(b)(2), and require DNR to provide sufficient documentation, reconciliation, and supporting analysis to permit meaningful independent review of the hazardous-air-pollutant determinations, Appendix G-3 calculations, source-classification determinations, and applicability conclusions upon which permit issuance depends.

GRAND SYNTHESIS OF GROUNDS I–VI AND THE ADMINISTRATIVE RECORD

This Petition presents six Grounds addressing distinct deficiencies in the HyCast Title V permitting action, but the Grounds converge upon a common question: whether the permit and supporting administrative record provide an adequate and enforceable basis for determining compliance with applicable requirements during the operations the permit authorizes. The extensive administrative record demonstrates that this question arises repeatedly across emission units, pollutants, operating conditions, pollution-control systems, monitoring methods, emissions calculations, and applicability determinations.

During the public-comment period, Petitioner repeatedly raised concerns regarding the representativeness of compliance demonstrations; the ability of periodic testing and indirect monitoring to determine compliance during routine operation; operational and feedstock variability; assumed pollution-control efficiencies; baghouse performance and integrity; pollutant-specific emissions; gas-phase pollutants not necessarily controlled by particulate-control devices; boundary-level emissions verification; and the factual basis supporting source-classification and applicability determinations. These issues were not isolated objections to individual permit provisions. Collectively, they questioned whether the permitting record adequately verified the assumptions upon which DNR relied in determining that the permit would assure compliance.

DNR responded to many of these concerns by relying upon existing permit limits, stack testing, Compliance Assurance Monitoring, parametric monitoring, recordkeeping, reporting,

compliance certifications, emissions inventories, construction-permit requirements, and established regulatory programs. As demonstrated throughout Grounds I through VI and Appendices J and L, however, the existence of those mechanisms does not itself resolve the central question whether they provide reliable, representative, and enforceable information sufficient to determine compliance under actual operating conditions. Title V requires more than the presence of monitoring provisions in a permit; those provisions must satisfy the compliance-assurance requirements imposed by the Clean Air Act and 40 C.F.R. Part 70.

Events occurring after the public-comment period gave concrete significance to concerns that had already been preserved. The April 7, 2026 EP240 compliance performance test demonstrated substantial particulate-matter noncompliance. DNR subsequently issued a Notice of Violation, classified violations as ongoing High Priority Violations, required a compliance plan, delayed further Title V permitting activity, and consulted with EPA concerning the compliance and permitting situation. HyCast's subsequent compliance plan identified a tube-sheet/bag-sealing problem as the primary root cause of the particulate-matter exceedance and an isolation-damper problem as a potential contributing factor and contemplated additional compliance testing under normal and representative operating conditions. These subsequent events did not create Petitioner's monitoring, representativeness, control-performance, or compliance-assurance objections. Those objections had already been raised during public comment. The subsequent evidence instead demonstrates why those previously preserved concerns cannot be dismissed as merely hypothetical.

The unresolved EP240 CAM issue further illustrates the relationship between the preserved objections and subsequent evidence. DNR confirmed that, as of August 27, 2026, it did not possess the additional underlying CAM records requested by Petitioner. On September 2, 2026, DNR Field Office 6 investigator Ryan Stouder further advised that HyCast was gathering approximately eight weeks of CAM Plan data covering the period before and after the stack testing, that he had requested the data again, and that several items would likely constitute CAM Plan violations based on statements made by HyCast's Dean Jensen. That statement reflects a preliminary investigative assessment, not a final DNR violation determination. Petitioner does not contend that the underlying CAM records were required to be routinely submitted to DNR. Rather, once direct compliance testing demonstrated substantial noncompliance, the underlying monitoring information became material to determining whether the approved monitoring detected the condition associated with that failure, whether CAM requirements were followed, and whether monitoring changes were necessary under 40 C.F.R. § 64.7(e). As of September 2, those records were still being assembled, and the available record therefore did not establish that DNR had completed its evaluation of the underlying CAM information before this Petition was required to be filed.

EPA's earlier decision not to object during its 45-day review does not resolve these questions. The citizen-petition procedure established by Clean Air Act § 505(b)(2) exists specifically to permit a person to seek EPA objection after EPA does not object during its initial review period. As demonstrated by the records discussed in Part 2A and Appendices F-9, F-10, and F-19, the

available record does not contain a documented issue-by-issue factual or legal analysis demonstrating that EPA previously resolved the particular monitoring, verification, operational-variability, control-performance, applicability, and compliance-assurance deficiencies presented in this Petition. EPA's August 31, 2026 supplemental FOIA response reported no additional responsive records beyond the document previously produced.

The timing of the state permitting and compliance processes likewise should not operate against Petitioner. Petitioner was required to exercise his rights within the statutory § 505(b)(2) petition period even though DNR had not yet issued the final Title V permit and material compliance matters arising from the April 7 failure remained unresolved. Petitioner could not safely postpone filing while awaiting completion of those matters because the federal petition deadline continued to run. The Petition therefore presents the administrative record and subsequently available evidence as completely as practicable while identifying unresolved matters rather than speculating about their eventual outcome. Petitioner should not be prejudiced because agency actions, determinations, testing, monitoring records, or compliance resolutions necessary to provide a more complete picture had not yet occurred or become available when federal law required him to file.

Viewed as a whole, this Petition therefore presents a single recurring problem manifested across multiple pollutants, emission units, control devices, operating conditions, and regulatory determinations: critical conclusions necessary to support issuance of the Title V permit depend upon assumptions concerning emissions, operating conditions, pollution-control

performance, monitoring, and compliance that the permit and administrative record do not adequately verify during actual operation. The April 7, 2026 EP240 compliance failure did not create that problem; the public comments had already identified it. The subsequent compliance failure, enforcement response, identified control-device deficiencies, and unresolved monitoring questions instead demonstrate why those previously preserved concerns warrant careful examination under Title V.

Petitioner does not ask EPA to substitute the Title V petition process for an enforcement proceeding, to impose additional requirements merely because they might provide greater environmental protection, or to object simply because HyCast experienced a compliance violation. Nor does Petitioner ask EPA to accept subsequent evidence as a substitute for objections preserved during the public-comment process. Petitioner asks EPA to perform the function assigned to it under Clean Air Act § 505(b)(2): determine whether Petitioner has demonstrated that the permit is not in compliance with applicable requirements of the Clean Air Act and Title V.

Where the permit and administrative record do not demonstrate that monitoring, testing, recordkeeping, reporting, and other enforceable permit conditions are sufficient to assure compliance with applicable requirements under the operating conditions the permit authorizes, EPA should object and require the demonstrated deficiencies to be corrected. The six Grounds should therefore be considered both individually and collectively. Each identifies a particular deficiency; together they demonstrate why the record does not provide the

compliance assurance necessary to sustain issuance of the permit as presently supported.

PART 9 — CONCLUSION AND REQUEST FOR RELIEF

For the reasons set forth above, the proposed Title V permit for the HyCast foundry fails to satisfy the requirements of Title V and the Clean Air Act. As demonstrated throughout Grounds I through VI, the permit relies upon assumptions, indirect indicators, infrequent testing, unverified emissions determinations, and administrative-record conclusions that do not provide sufficient assurance that applicable requirements are being met during actual operation. The permit fails to provide monitoring sufficient to assure compliance, fails to provide pollutant-specific verification necessary to support critical permitting assumptions, and fails to provide a sufficiently transparent, reproducible, and independently verifiable basis for the hazardous-air-pollutant determinations, source-classification determinations, applicability conclusions, and emissions-accounting methodologies upon which permit issuance depends.

The permit's failure to include enforceable conditions defining or constraining feedstock, or to require monitoring sufficient to verify feedstock composition during operation, further demonstrates that the permit does not assure compliance. Where emissions depend on input materials, compliance cannot be determined without conditions ensuring that actual operations reflect the assumptions used in emissions calculations and testing. Where feedstock characteristics materially affect compliance with an applicable requirement, the absence of enforceable conditions or monitoring sufficient to account for that variability supports objection if the permit record does not

otherwise demonstrate that its compliance-assurance provisions are sufficient under Clean Air Act § 505(b)(2) and 40 C.F.R. § 70.6(a)(3).

Where a permit relies on emissions calculations, indirect monitoring, or intermittent testing, the permitting record must provide a reasoned basis for determining that the resulting monitoring, testing, recordkeeping, and reporting requirements are sufficient to assure compliance with applicable requirements. Where the record does not provide that demonstration, EPA should object to the extent the Petition establishes noncompliance with applicable Title V requirements.

The monitoring deficiencies identified throughout this petition are particularly significant because the permit relies upon federally enforceable limits to maintain emissions below major-source hazardous air pollutant thresholds. Without monitoring sufficient to verify compliance during actual operation, neither regulators nor the public can determine whether emissions remain below the levels necessary to support synthetic minor status on a continuing basis. This provides an additional reason why the permit fails to assure compliance as required by Clean Air Act §504(c), 42 U.S.C. §7661c(c), and 40 C.F.R. §70.6(a)(3).

This petition requests that the U.S. Environmental Protection Agency object to the proposed Title V operating permit for the HyCast foundry because the permit fails to satisfy the requirements of Title V and the Clean Air Act. As demonstrated throughout Grounds I through VI, the permit does not include monitoring sufficient to assure compliance, does not provide adequate verification of critical permitting assumptions, and

does not provide a sufficiently supported and independently verifiable basis for the hazardous-air-pollutant determinations, source-classification determinations, and applicability conclusions upon which permit issuance depends. Accordingly, Petitioner has satisfied the burden imposed by Clean Air Act §505(b)(2), 42 U.S.C. §7661d(b)(2), by demonstrating through the preserved objections, administrative record, permit terms, Responsiveness Summary, and corroborating post-comment evidence addressed in this Petition that the proposed permit does not comply with applicable Title V requirements. Grounds I through VI identify specific deficiencies in monitoring, representative-operation verification, control-performance assurance, pollutant-specific verification, facility-boundary emissions verification, hazardous-air-pollutant determinations, source classification, and applicability determinations. These claims do not ask EPA merely to investigate whether deficiencies might exist; Grounds I through VI identify the specific permit provisions, record deficiencies, and compliance-assurance issues that Petitioner contends demonstrate noncompliance with applicable Title V requirements.

The Administrator must therefore object pursuant to Clean Air Act §505(b)(2), 42 U.S.C. §7661d(b)(2), and require revision of the permit to include monitoring, testing, recordkeeping, reporting, verification, enforceable operating conditions, and supporting documentation sufficient to assure compliance and support the permitting determinations relied upon for permit issuance.

PART 10 – RESPONSE TO THE RESPONSIVENESS SUMMARY

Incorporation of Appendix J

The Iowa Department of Natural Resources' Responsiveness Summary, the Department's responses to individual public comments, and Petitioner's analysis of those responses are addressed in detail in Appendix J.

Appendix J contains a comprehensive comment-by-comment evaluation of all preserved comments, including summaries of the comments submitted, summaries of DNR's responses, identification of issues addressed and not addressed, evaluation of the legal and factual sufficiency of DNR's responses, identification of recurring boilerplate rationales, verification deficiencies, non-discretionary duties, and the relationship between individual comments and the Grounds presented in this Petition.

Appendix J further demonstrates that numerous comments involving monitoring sufficiency, compliance assurance, permit enforceability, operational variability, hazardous air pollutants, applicability determinations, and verification concerns were either not fully addressed or were addressed through recurring generalized responses that did not resolve the specific issues presented.

Accordingly, Appendix J should be considered together with Grounds I through VI and forms an integral part of the factual and legal basis supporting Petitioner's request that EPA object to the permit pursuant to Clean Air Act §505(b)(2), 42 U.S.C. §7661d(b)(2).