July 31, 2020

Department of Natural Resources and Environmental Control
Division of Air Quality
State Street Commons, Suite 6A
100 W. Water Street
Dover, DE 19904
Via e-mail to daqpermittinginfo@delaware.gov, DNRECHearingComments@delaware.gov

Re: Docket #2020-P-A-0017, Supplemental Public Comments on the Draft Title V Renewal Permit for Delaware City Refining Company (Permit No. AQM-003/00016 - Part 1 (Renewal 3), Part 2 (Renewal 2), and Part 3 (Renewal 3))

Dear DNREC Hearing Officer:

Delaware Audubon Society, Sierra Club, Environmental Justice Health Alliance for Chemical Policy Reform, the Widener Environmental and Natural Resources Law Clinic, Environmental Integrity Project, and Earthjustice ("Commenters") submit these supplemental comments regarding all parts of the draft Title V renewal permit for the Delaware City Refinery owned and operated by Delaware City Refining Company.[1] These comments supplement the initial May 22, 2020 comments on the draft permit that many of the Commenters submitted to DNREC, as well as the comments and request for a valid public hearing subsequently submitted on June 25, 2020.[2] By filing these supplemental comments, Commenters are not waiving any of our initial comments; we stand by and continue to rely on those initial May 22 and June 25 comments, incorporate them by reference here, and below discuss additional concerns that DNREC must resolve regarding the draft permit. Below we also rebut DNREC's preliminary response to our comments, given in the July 14 "public hearing" on this Title V permit renewal.

For all of the reasons discussed in our May 22 comments and the additional reasons discussed below, DNREC must revise the draft Title V permit for the refinery because the permit fails to satisfy substantive requirements of the Clean Air Act ("the Act"). Those requirements are important to protect public health and well-being. Among other things, DNREC must remedy and remove the many unlawful provisions covering excess emissions during startup, shutdown, and malfunction periods and add required terms and conditions to assure that applicable requirements apply at all times as the Act requires. In addition, for the reasons discussed in our June 25 comments and below, DNREC must hold a valid public hearing that complies with important public participation requirements before proceeding to the proposed-permit stage. If DNREC does not remedy these problems, the Title V permit for this refinery will not comply with the Clean Air Act and should thus draw an objection from EPA under Title V of the Act.

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[1] Notice of extended comment period, https://dnrec.alpha.delaware.gov/events/virtual-public-hearing-delaware-city-refining-company/ (last visited Jul. 30, 2020).

[2] The May 22 and June 25 comments are available through these links, respectively: May 2020 Comments, http://www.dnrec.delaware.gov/Admin/Documents/dnrec-hearings/2020-P-A-0017/Full%20Public%20Hearing%20Request.pdf; June 2020 Comments, http://www.dnrec.delaware.gov/Admin/Documents/dnrec-hearings/2020-P-A-0017/Emma-Cheuse-comment.pdf.

I. DNREC HAS VIOLATED A CORE PUBLIC PARTICIPATION REQUIREMENT OF TITLE V.

DNREC may not lawfully proceed to the proposed or final permit stage without satisfying the core public participation requirements of the Clean Air Act and federal and state implementing regulations. 42 U.S.C. § 7661a(b)(6); 40 C.F.R. §§ 70.5, 70.6; *see also* 7 Del. Admin. Code 1102 §§ 12.2, 12.2.4; 7 Del. Admin. Code 1130 § 7.10.2 (requiring DNREC to provide an opportunity for *both* "the submission of written comments and hearing requests"); *id.* § 7.10.3 (requiring opportunity for public hearing on Title V permits); *id.* § 7.10.7 (requiring DNREC to consider "all comments received"). The undersigned groups called for a valid public hearing in both the May 22 and June 25 comment submissions to DNREC. Yet on July 14, 2020, DNREC proceeded to hold a meeting that does not qualify as a "public hearing" within the meaning of the Act.[3] During that meeting, all interested parties *except the public* had an opportunity to speak: DNREC and the DCRC each had representatives who spoke, were on video, and who gave presentations.[4] Members of the public, including Commenters' members, joined but were unable to speak or ask questions.

DNREC still has not responded to Commenters' June 25 submission in writing. In that submission, Commenters explained in detail why DNREC's then-proposed "public hearing" did not satisfy Clean Air Act public participation requirements.[5] As the publicly released transcript from the July 14 meeting shows, during that meeting DNREC did not provide any opportunity for the public to speak or to be heard, either to ask questions or to offer contemporaneous, live comments.[6] Instead, the hearing officer stated repeatedly that there would be *no* opportunity for the public to speak:

- "Please note that the Department will not be accepting any comments in realtime during the hearing this evening."
- "Again, there will be no Q and A or live chat sessions permitted during the hearing tonight, nor will there be any realtime comments accepted on this virtual platform during the course of tonight's proceedings."[7]

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[3] Notice of Virtual Public Hearing: Delaware City Refining Company, DNREC, https://dnrec.alpha.delaware.gov/events/703/virtual-public-hearing-delaware-city-refining-company/ (last visited Jun. 17, 2020).

[4] DCRC presentation on July 14, 2020, http://www.dnrec.delaware.gov/Admin/Documents/dnrec-hearings/2020-P-A-0017/DCRC-hearing-presentation.pdf; DNREC presentation on July 14, 2020, http://www.dnrec.delaware.gov/Admin/Documents/dnrec-hearings/2020-P-A-0017/DNREC-hearing-presentation.pdf.

[5] *See* Del. Audubon Soc'y, *et al.*, Request for Valid Public Hearing (June 25, 2020) (citing sources), http://www.dnrec.delaware.gov/Admin/Documents/dnrec-hearings/2020-P-A-0017/Emma-Cheuse-comment.pdf.

[6] Transcript of July 14, 2020 Meeting at 5, 8 ("July 14 Transcript"), http://www.dnrec.delaware.gov/Admin/Documents/dnrec-hearings/2020-P-A-0017/hearing-transcript-20200714-dcrc-docket-2020-P-A-0017.pdf.

[7] *Id.* at 5, 8.

DNREC gave no explanation of any kind for refusing to allow the public to participate. At least three staff of DNREC participated in different locations and were clearly able to see and hear each other through the WebEx technology used – including a court reporter who created the transcript.[8] Even DCRC had a representative who spoke and gave a presentation during the hearing.[9] It is clear from the July 14 meeting that DNREC has the capability to allow the public to speak and ask questions, yet it chose not to do so. DNREC's decision was unlawful, and if the Department proceeds to the next stage without curing this, its failure to satisfy the public participation requirements will have tainted this entire permit proceeding.

DNREC must give the public an opportunity to *speak*, and to be heard, as the Clean Air Act requires and as Governor Carney directed in his 2020 Proclamation.[10] There is no excuse as to why DNREC has not held a valid public hearing, as other states prove it can be done during the pandemic,[11] The Clean Air Act requires both an opportunity for comment *and* an oral hearing.[12]

In addition, as set forth in the public comments submitted by Kenneth Kristl on July 23, 2020, DNREC's own regulations—as well as the Governor's March 12, 2020 Declaration and Proclamation—require a public hearing that allows oral comment at the hearing by the public.[13] Thus, in addition to violating the federal Clean Air Act requirements, the July 14 meeting violated Delaware state law requirements.

Refusing to allow the public a chance to listen to other commenters and offer oral comments has denied the public a fundamental right of participation required by Clean Air Act Title V and implementing federal and state regulations.[14] If DCRC does not cure this violation by holding a valid public hearing in which the public can speak and actually be heard, EPA will be required to object pursuant to 42 U.S.C. § 7661d(b).

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[8] *Id.* at 2-3 (Ms. Vest and Ms. Rennie each spoke for DNREC; court reporter listened).
[9] *Id.* at 10-18 (presentation of Larry Boyd, DCRC).
[10] Proclamation of Governor John C. Carney, No. 173292 at § 2 (Mar. 24, 2020), https://governor.delaware.gov/wp-content/uploads/sites/24/2020/03/Proclamation-173292-03132020.pdf (requiring opportunity for the public to "hear the comments of and speak to such members of the public body contemporaneously").
[11] *See* Del. Audubon Soc'y, *et al.*, Request for Valid Public Hearing (June 25, 2020) (citing sources), http://www.dnrec.delaware.gov/Admin/Documents/dnrec-hearings/2020-P-A-0017/Emma-Cheuse-comment.pdf (citing examples); *see* also *Pub. Hearing for Delaware River Partners*, NJ DEP'T. OF ENVTL. PROT. (May 8, 2020), https://www.youtube.com/watch?v=tc6-h9EZkVo&feature=youtu.be (showing public participation through video and sound); Notice of opportunity for public comment, NJ DEP'T. OF ENVTL. PROT. (Apr. 8, 2020), https://www.state.nj.us/dep/aqpp/downloads/publicnotpost/drppn.pdf (allowing the public to provide oral testimony during the hearing).
[12] *See* 42 U.S.C. § 7661a(b)(6); 40 C.F.R. §§ 70.5, 70.6; *see also* 7 Del. Admin. Code 1102 §§ 12.2, 12.2.4; 7 Del. Admin. Code 1130 §§ 7.10.2, 7.10.3, 7.10.7; *see also* Del. Audubon Soc'y, *et al.*, Request for Valid Public Hearing (June 25, 2020) (citing sources), http://www.dnrec.delaware.gov/Admin/Documents/dnrec-hearings/2020-P-A-0017/Emma-Cheuse-comment.pdf.
[13] *See* Public Comment from Kenneth Kristl, Widener Environmental Law Clinic (July 23, 2020).
[14] *Id.*

II. DNREC MUST REMEDY THE DRAFT PERMIT'S NUMEROUS UNLAWFUL SSM PROVISIONS.

A. Additional Comments Regarding the Draft Permit's Unlawful Affirmative Defense To Liability For Exceedances of "Technology-Based" Limits During Emergencies and Malfunctions

Commenters submit these additional comments regarding the draft permit's unlawful affirmative defense to liability for noncompliance with "technology-based" limits caused by malfunctions and emergencies. *See* Title V Permit Condition 2(b)(5)-(6).[15] DNREC must remove the permit's affirmative defense provisions for the reasons discussed below and in our initial May 2020 comments, which we reiterate and incorporate here by reference.

First, DNREC's preliminary response to our initial comments regarding the affirmative defense, which DNREC offered in the July 14 "public hearing" regarding this Title V renewal, fails to demonstrate that the draft permit's affirmative defense is lawful.[16] There, DNREC conceded that the affirmative defense is based on EPA's prior, 1999 policy regarding excess emissions during SSM periods—and that EPA has "since concluded that the enforcement structure of the CAA precludes any affirmative defense provisions that would operate to limit a court's jurisdiction or discretion to determine the appropriate remedy in an enforcement action." *Id.* Yet DNREC asserts that the draft permit's affirmative defense (also found in Delaware's Title V rules at 7 Del. Admin. Code 1130 § 6.7) "does not seek to limit EPA's or citizens' ability to seek enforcement" because 7 Del. Admin. Code 1130 § 6.2 states that "all terms and conditions in a permit issued under 6.0 of this regulation … are enforceable by the Department, by EPA, and by citizens under section 304 of the Act." That an affected person can bring an enforcement action under 42 U.S.C. § 7604 (or that EPA can bring an enforcement action under § 7413) does not, by itself, erase or eliminate affirmative defenses to that action—especially when those affirmative defenses are built right into the permit being enforced. Because this language is still in the permit, DCRC would still be able under the plain language of the draft permit to attempt to assert an affirmative defense that—if a court in an enforcement proceeding found that all of the affirmative defense factors were met—could tie the court's hands to find that DCRC had not violated "technology-based" or other applicable limits when emissions exceeded those limits during malfunctions and emergencies. Thus, given that DNREC effectively recognizes that the affirmative defense here is unlawful because (among the other reasons laid out in our initial comments and below, which DCRC has not addressed) it "operate[s] to limit a court's jurisdiction or discretion to determine the appropriate remedy in an enforcement action," it must be removed from the permit.[17]

Second, there are additional reasons why DNREC must remove the affirmative defense. To begin with, Title V permits must assure compliance with all applicable requirements and are designed to strengthen enforcement, but the draft permit cannot ensure compliance with—and

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[15] All references in these comments and our May 2020 comments to "Title V Permit Condition…" refer to the draft renewal permit at issue here.

[16] DNREC PowerPoint presented on July 14, 2020 at 10, http://www.dnrec.delaware.gov/Admin/Documents/dnrec-hearings/2020-P-A-0017/DNREC-hearing-presentation.pdf (hereafter "DNREC PowerPoint").

[17] DNREC PowerPoint at 10.

renders unenforceable—applicable "technology-based" PSD/NSR, NESHAP, and NSPS requirements because it alters them by adding an affirmative defense to liability that is not contained in underlying permits and regulations that established the requirements in the first place. Specifically, the Clean Air Act requires Title V permits to include "*enforceable* emission limitations and standards … and such other conditions as are necessary to *assure compliance with applicable requirements of this chapter* …." 42 U.S.C. § 7661c(a) (emphasis added). NESHAP, NSPS, and PSD/NSR requirements are plainly "applicable requirements of this chapter"—the Clean Air Act. To ensure compliance with these applicable requirements, the Act specifically requires that any applicable NESHAP, NSPS, and PSD/NSR limits be "enforceable" in Title V permits.

In addition, 42 U.S.C. § 7661a(f) declares that a state's Title V program cannot be approved by EPA, even partially, unless it "applies, and ensures compliance with … [a]ll requirements established under section 7412 … applicable to 'major sources' … [and] [a]ll requirements of [Title I] (other than section 7412…) applicable to sources required to have a permit under [Title V]." The NESHAP requirements applicable to this refinery are "requirements established under § 7412 applicable to major sources," and NSPS and NSR/PSD requirements appear in Title I— placing all of these requirements squarely within the requirements that a Title V must ensure compliance with.

Consistent with the statute, 40 C.F.R. § 70.1(b) declares that "[a]ll sources subject to these regulations shall have a permit to operate that assures compliance by the source with all applicable requirements." *See also* 40 C.F.R. §§ 70.4(b)(3)(i), (v) (a state must have authority to "[i]ssue permits and assure compliance with each applicable requirement" and "[i]ncorporate into permits all applicable requirements"), 70.6(a)(1) (permit must "assure compliance with all applicable requirements at the time of permit issuance"), 70.7(a)(1)(iv) (a permit can be issued only if it "provide[s] for compliance with all applicable requirements"). EPA's Title V regulations define "applicable requirement" to specifically include NSR/PSD limits and NESHAP and NSPS requirements. *See id.* § 70.2 (parts (2)-(4) of the "applicable requirement" definition). Also consistent with the statute, § 70.6(b)(1) provides that, except for those terms specifically marked as state-only, "[a]ll terms and conditions in a part 70 permit … are *enforceable* by [EPA] and citizens under the Act."[18] 40 C.F.R. § 70.6(b)(1) (emphasis added). Delaware's regulations implement these requirements. *See, e.g.*, 7 Del. Admin. Code 1130 § 2 (applicable requirement definition), § 6 (permit requirements), § 7 (permit renewal requirements).

Here, we have seen no indication that the various PSD/NSR permits that apply to the refinery contain the draft Title V permit's affirmative defense. And the applicable NSPS and NESHAP requirements do not contain the defense. Contrary to the unambiguous mandates from the Act and EPA's regulations, the permit cannot ensure compliance with applicable PSD/NSR, NSPS, and NESHAP requirements because it allows DCRC to avoid having to comply with the requirements during malfunctions and emergencies. And, contrary to the plain language of the

[18] Although 40 C.F.R. § 70.6(g) provides for an affirmative defense for emergencies, that provision is inconsistent with the Act's requirements that Title V permits ensure compliance with all applicable requirements and include enforceable limits to do so. In addition, unlike the draft permit here, § 70.6(g) does not include an affirmative defense for malfunctions, which occur much more frequently than "acts of God," which is the one specific example of an "emergency" listed in § 70.6(g)(1)'s definition of that term.

Act and EPA's regulations, the draft permit renders these applicable PSD/NSR, NSPS, and NESHAP requirements not "enforceable" by EPA and the public in those situations where DCRC proves the elements of the affirmative defense. Unlawfully, the affirmative defense effectively makes these applicable requirements inapplicable during certain emergencies and malfunctions.

In addition to contravening the plain language of the Clean Air Act and EPA's regulations, the permit's affirmative defense also contravenes Title V's core purpose of promoting compliance and strengthening enforcement. This core purpose is made clear by the legislative history and statutory structure. For example, in enacting it, Congress expected Title V to "substantially strengthen enforcement of the Clean Air Act" by "clarify[ing] and mak[ing] more readily enforceable a source's pollution control requirements." S. Rep. No. 101-228, at 347-48 (1990), *as reprinted in* 1990 U.S.C.C.A.N. 3385, 3731. Similarly, the Senate Report explained: "The first benefit of the title V permit program is that … it will clarify and make more readily enforceable a source's pollution control requirements." *Id.* at 347, 1990 U.S.C.C.A.N. 3731. *See also id.* at 346, 1990 U.S.C.C.A.N. 3729 ("Operating permits are needed to … better enforce the requirements of the law by applying them more clearly to individual sources and allowing better tracking of compliance.").

To effectuate this purpose of promoting compliance and strengthening enforcement, Congress designed Title V permits to enable EPA, states, and the public to identify violations and correct them—requiring Title V permits to list all applicable requirements and include monitoring, recordkeeping, reporting, and annual compliance certification requirements and schedules of compliance. 42 U.S.C. § 7661(c)(a), (c). To this end, Congress also provided that any Title V permit condition can be enforced administratively or in court by EPA or by the public through a citizen suit. *Id.* §§ 7413(a)(3), 7604(a)(1), (f). Contrary to Title V's core purpose of promoting compliance and strengthening enforcement, the draft permit's affirmative defense renders applicable NESHAP, NSPS, and PSD/NSR requirements less enforceable: in an enforcement suit, DCRC can raise an affirmative defense that could completely bar enforcement for violations of these requirements.

That affirmative defenses make applicable requirements less enforceable is made clear by the U.S. District Court's holding in *Sierra Club v. Energy Future Holdings Corp. et al.*, No. W-12-CV-108, 2014 WL 2153913 (W.D. Tex. Mar. 28, 2014). In *Energy Future Holdings*, Sierra Club brought a citizen suit against the owners and operators of the Big Brown power plant in Texas for thousands of self-reported violations of emission limitations for opacity. The emissions released during those events constituted 15-20 percent of Big Brown's total annual particulate emissions. *Id*. at *3. Despite the obvious violations, the district court concluded that the state environmental agency's determinations that the plant had satisfied the criteria for the relevant affirmative defense to penalties altered the court's authority to find liability for self-reported exceedances of SIP emission limits, ruling from the bench:

> It does seem to the Court that what the plaintiff seeks is for this Court to overrule the extensive and complete findings of the Texas Commission on Environmental Quality which is designed to and does regulate facilities such as Big Brown the defendant in this case. I don't think that's normally an appropriate function of federal courts and certainly – it's certainly something I decline to do and it's something that should only be done in extraordinary circumstances. It would be

> the finding of the Court that plaintiff has not proved by a preponderance of the evidence that the defendant has violated the Clean Air Act.

Trial Tr. at 574, *Sierra Club v. Energy Future Holdings Corp.*, No. W-12-cv-108 (W.D. Tex. Feb. 26, 2014), attached here as Exhibit 1. In its final written order on the merits, the district court included other reasons for denying the plaintiff's claims on the merits, but continued to rely on the state affirmative defense determination to hold that penalties were not appropriate. *Energy Future Holdings*, 2014 WL 2153913, at *8, 12-13. If DNREC does not remove the affirmative defense provisions here, there is a very real possibility that DCRC, in any enforcement case to remedy violations at the refinery, could make very similar arguments as the defendants in the Energy Future Holdings case—thereby frustrating enforcement for clear violations.

In sum, DNREC must remove the affirmative defense provisions from this Title V permit because they conflict with clear mandates from the Clean Air Act and EPA's implementing regulations that govern this permit. It does not matter that the affirmative defense is contained in Delaware's Title V rules, even if those rules were approved by EPA (which is completely unclear, as discussed below): those state rules cannot supersede the clear intent of Congress in enacting Title V of the Clean Air Act. DNREC must revise the permit to reflect that clear intent.

Third, that the affirmative defense is contained in Delaware's Title V permitting rules provides no reason for retaining the affirmative defense in this permit because there is no indication, that we have seen, that EPA approved the affirmative defense provisions when approving the state's Title V regulations. EPA's Federal Register notices regarding approval of the state's Title V program do not even mention the affirmative defense. 60 Fed. Reg. 48,944 (Sept. 21, 1995) (proposed interim approval); 60 Fed. Reg. 62,032 (Dec. 4, 1995) (final interim approval); 66 Fed. Reg. 50,378 (Oct. 3, 2001) (proposed full approval); 66 Fed. Reg. 50,321 (Oct. 3, 2001) (direct final full approval).

Fourth, Delaware's Title V permitting rules containing the affirmative defense cannot trump Delaware's SIP and EPA's NESHAP and NSPS requirements, which contain no affirmative defense, because those applicable requirements—unlike the state's permitting rules—are specifically designed to achieve and maintain NAAQS compliance (the SIP) and otherwise protect air quality and public health (the NESHAP and NSPS requirements).

Enforcement and preconstruction permitting are vital tools that, under the Clean Air Act, states are required to address in their SIPs to achieve the NAAQS. Subject to EPA approval, states are responsible for developing SIPs and adopting the enforceable source-specific emission limits and air quality rules necessary for compliance with the NAAQS. 42 U.S.C. § 7410(a), (k). Section 110(a)(1) of the Clean Air Act generally requires SIPs to provide for enforcement. *Id.* § 7410(a)(1). To help achieve and maintain the NAAQS, SIPs must, among other things, also include enforceable emission limits and other control measures "as may be necessary or appropriate to meet the applicable requirements of [the Act]." *Id.* § 7410(a)(2)(A). To help achieve and maintain NAAQS compliance, SIPs must also include a program to provide for the enforcement of emission limits and other measures, as well as preconstruction NSR/PSD permitting program "as necessary to assure that national ambient air quality standards are achieved." *Id.* § 7410(a)(2)(C).

Contrary to the requirement that SIPs ensure enforcement (including enforcement of preconstruction requirements) to maintain the NAAQS, a permit affirmative defense to liability

for violations of NSR/PSD limits makes it less likely that enforcement to remedy those violations will be successful—and thus makes less likely that the NAAQS will be achieved. That is especially so when (like here) the source in question is a large source of air pollution. These concerns are also especially relevant here given this refinery's history of serious compliance problems (*see* May 2020 Comments at 4; *infra* at Part X) and the fact that the area in which the refinery is located is nonattainment for ozone and particulate matter, as well as the fact that Delaware is located in the Ozone Transport Region. Unlike many affirmative defenses, which preclude penalties if a defendant proves the relevant affirmative defense factors, the permit's defense here would preclude even injunctive relief and acts as a *de facto* exemption. Rendering the relevant NSR/PSD (as well as NESHAP and NSPS) limits unenforceable and inapplicable when DCRC proves the affirmative defense for violations occurring during malfunctions and emergencies—periods during which emissions can be massive because pollution controls may be inoperable, *see* May 2020 Comments at 4)—could adversely impact ambient air quality and thus attainment and maintenance of the applicable NAAQS. *See* 80 Fed. Reg. 33,840, 33,901 (June 12, 2015) ("'Without an enforceable emission limitation which will be complied with at all times, there can be no assurance that ambient standards will be attained and maintained.'") (quoting H.R. Rep. No. 95-294, at 92 (1977), *as reprinted in* 1977 U.S.C.C.A.N. 1077, 1170).

Like Clean Air Act § 110's SIP requirements, Clean Air Act § 112's NESHAP requirements are also aimed at protecting public health. Congress required EPA to regulate the hazardous air pollutants listed under 42 U.S.C. § 7412(b) of the Act due to their "inherently harmful characteristics," even at low levels of exposure. 80 Fed. Reg. 75,025, 75,031/1 (Dec. 1, 2015); S. Rep. No. 101-228, at 5 (1989), *as reprinted in* 1990 U.S.C.C.A.N. 3385, 3391. Even in small doses, these hazardous air pollutants "cause or contribute to an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness." H.R. Rep. No. 101-490, pt.1, at 315 (1990) (quotation marks omitted). Yet the permit's affirmative defense provision, on its face, would allow DCRC to avoid liability for potentially deadly and otherwise dangerous violations of NESHAP limits. Thus, the affirmative defense makes it less likely that the communities surrounding the refinery will be protected from deadly air toxics, which provides another reason that the defense must be removed from the permit, regardless whether it is contained in the state Title V rules.

In sum, DNREC must remove the affirmative defense provisions from the permit. A Title V permit cannot effectively subtract—and render unenforceable—applicable substantive requirements designed to protect public health when there are violations of those requirements during malfunctions and emergencies.

B. Additional Comments Regarding the Draft Permit's Unlawful Director's Discretion Provisions Applicable During Periods of Unplanned Shutdown of the FCU, FCCU, and Their Controls

Commenters submit these additional comments regarding the draft permit's unlawful director's discretion provisions, which purport to allow DNREC to excuse noncompliance with multiple limits during periods of unplanned shutdown of the FCU or FCCU and during shutdown or bypass of their controls. *See* May 2020 Comments at 9-14. DNREC must remove these provisions for the reasons discussed below and in our initial May 2020 comments, which we reiterate and incorporate here by reference.

First, Commenters address DNREC's preliminary response to our initial comments regarding the director's discretion provisions, which DNREC offered in the July 14 "public hearing" regarding this Title V renewal. *See* DNREC PowerPoint at 5-6. That response offers no valid reason for retaining those provisions. There, DNREC apparently asserted that these provisions follow EPA's current policy regarding excess emissions during SSM periods,[19] and the Department argued that the provisions do not bar EPA or the public's ability to "seek enforcement through the courts." *Id.*

EPA's current SSM policy as summarized in EPA's 2015 SSM SIP call, however, makes clear that these permit provisions are unlawful. In that policy, EPA explained that, while states may adopt SIP provisions that impose reasonable limits upon the exercise of enforcement discretion by state air agency personnel, "SIP provisions cannot contain enforcement discretion provisions that would bar enforcement by the EPA or citizens for any violations … if the state elects not to enforce."[20] 80 Fed. Reg. at 33,917.

Here, it does not matter that the provisions provide that the draft permit "does not authorize emissions exceeding" the limits in question—or, as DNREC put it in its preliminary response to comments, that the provisions "recognize[] excess emissions as noncompliance." DNREC PowerPoint at 6. Nor does it matter that DCRC supposedly has never "elected to make use of this provision." *Id.*

The provisions are simply unlawful because, on their face, they appear to give DNREC the ability to shield DCRC from enforcement by EPA and the public. In its 2015 SSM guidance, EPA explained:

> [I]f on the face of an approved SIP provision the state appears to have the unilateral authority to decide that a specific event is not a ''violation'' or if it otherwise appears that if the state elects not to pursue enforcement for such violation then no other party may do so, then that SIP provision fails to meet fundamental legal requirements for enforcement under the CAA. *If the SIP provision appears to provide that the decision of the state not to enforce for an exceedance of the SIP emission limit bars the EPA or others from bringing an enforcement action, then that is an impermissible imposition of the state's enforcement discretion decisions on other parties.* The EPA has previously issued a SIP call to resolve just such an ambiguity, and its authority to do so has been upheld.

80 Fed. Reg. at 33,923-24 (citing 76 Fed. Reg. 21,639 (April 18, 2011)) (emphasis added). That is exactly the circumstance here—the permit's director's discretion provisions appear to unlawfully provide that the decision of DNREC not to enforce for violations of certain limits can bar EPA or the public from bringing an enforcement action. DNREC, of course, always has

[19] DNREC does not specify which version of EPA's SSM policy it is referring to. Older versions of that policy were replaced by an updated policy that accompanied EPA's 2015 "SSM SIP call." 80 Fed. Reg. at 33,844.

[20] EPA's SSM policy from the SIP call is specifically applicable to SSM provisions in SIPs, but EPA's reasoning in that policy regarding director's discretion provisions (as well as affirmative defenses and other SSM provisions) is equally applicable here.

discretion regarding whether it wants to bring its own enforcement action, but there is no reason that this discretion needs to be addressed in the permit—especially in a way that a federal court could read to bar enforcement by EPA or the public.

And, if DNREC rarely or never uses the provisions (as DNREC asserts) in a formal enforcement action, then it also makes no sense to have them in the permit, as it is completely unnecessary, even if it were otherwise lawful (which it is not, as discussed above). If DNREC wants to keep the provisions in case they might be used at some time in the future, then the Department's argument about never using them in the past is irrelevant to going forward. Moreover, DNREC has provided no evidence that DCRC has not attempted to rely on the provisions, or that having such provisions has not chilled potential enforcement action or allowed excess emissions to occur that would not have otherwise. Whether or not DNREC has not "elected to make use of this provision" in some formal manner, the permit causes harm by including the provisions and creating a disincentive to comply, by giving DCRC the ability to avoid civil liability for a violation.

Further, it does not matter that the director's discretion provisions are not "automatic" exemptions. See DNREC PowerPoint at 6. The point is that these provisions allow DNREC to exempt violations, in which case there would unlawfully be no continuous emission limits and standards in place. *See* May 2020 Comments at 11-12. EPA's 2015 SSM policy recognized that director's discretion provisions are unlawful for this same reason—that they can result in there not being continuous limits in place. 80 Fed. Reg. at 33,927.

DNREC must remove the director's discretion provisions from the permit. At the very least, DNREC must make crystal clear in the permit that any decision by the Department to forego enforcement is in no way binding on the public or EPA—and that the director's discretion provisions may not used by DCRC as a defense in an enforcement action brought by the public or EPA.

Second, Commenters add this supplemental reason (and the below supplemental reason) for why DNREC must remove the director's discretion provisions from the draft permit. In their initial comments, Commenters explained that these provisions violate (among other requirements) the Clean Air Act requirement that emission limits and standards apply continuously. May 2020 Comments at 11-12. Commenters now note that the Clean Air Act's Title V also makes clear that emission limits and standards must apply continuously, rather than only during some periods of time. Specifically, 42 U.S.C. § 7661(c)(a) provides that each Title V permit "shall include enforceable emission limitations and standards," and (as explained in our initial comments) the Act defines "emission limitation" and "emission standard" as a "requirement … which limits the quantity, rate, or concentration of emissions of air pollutants *on a continuous basis*, including any requirement relating to the operation or maintenance of a source to assure *continuous emission reduction* …." 42 U.S.C. § 7602(k) (emphasis added). Read together, §§ 7661(c)(a) and 7602(k) make doubly clear that limits in Title V permits must apply on a continuous basis. Contrary to this requirement, the draft Title V permit's director's discretion provisions purport to give DNREC sole discretion to allow exemptions to limits and standards in the permit.

Third, the director's discretion provisions are also unlawful for one of the reasons discussed above for why the permit's affirmative defense is unlawful—they violate the requirement that Title V permits must assure compliance with all applicable requirements and

are contrary to the statutory purpose of strengthening enforcement. *See supra* at 4-7. Contrary to these requirements, the draft permit cannot ensure compliance with—and renders unenforceable—applicable requirements because it allows DNREC to exempt DCRC from enforcement for violations of applicable limits.

C. Supplemental Comments Addressing DNREC'S Preliminary Response Regarding The Permit's Provisions Unlawfully Relaxing Federally Enforceable Limits During Planned Startup and Shutdown of the FCU and FCCU and When the FCCU'S CO Boiler Is Combusting Only Refinery Fuel Gas

Commenters here address DNREC's preliminary response to our initial comments regarding the draft permit's provisions that relax federally enforceable limits during planned startups and shutdowns of the FCU and FCCU and when the FCCU's CO boiler is combusting only refinery fuel gas. *See* DNREC PowerPoint at 7-9. First, Commenters appreciate that DNREC has committed to, in the proposed permit, clarifying that the startup and shutdown limits do not affect the annual limits for the FCU and FCCU, *i.e.*, that startup and shutdown emissions must still be included in annual emission totals for purposes of complying with the annual limits. *See id.* at 7. Commenters support this change, which is one step towards correcting the draft permit's myriad of unlawful SSM provisions. DNREC must also make a similar change to clarify that emissions from periods when the FCCU CO boiler is combusting only refinery fuel gas also must be counted for purposes of complying with the annual limits.

Commenters, however, are disappointed with DNREC's other positions regarding these alternate limits. First, as the initial comments explained, DCRC could—based on the face of the permit—argue that no short-term NOx, CO, or HAP limits at all apply for the FCCU during planned startup and shutdown and when the FCCU CO boiler is combusting only refinery fuel gas. May 2020 Comments at 15. DNREC's initial response indicates that short-term limits do in fact apply for these pollutants during these periods. DNREC PowerPoint at 8. DNREC, however, must make this clear in the permit. Otherwise, these planned startup and shutdown (and refinery-fuel-gas-only) provisions are unlawful for the reasons explained in the initial comments, and DCRC could, based on the current permit language, attempt to avoid enforcement for violations of the short-term limits during these periods.

Second, apparently conceding that the alternate limits for the FCU and FCCU apply instead of certain NSPS and NESHAP limits applicable to those units (*see* May 2020 Comments at 10-11, 14-15), DNREC insists that the FCU and FCCU's startup and shutdown limits do not relax these federal requirements because the alternate limits are "the same or lower than federal limits, even if expressed in a different format." DNREC PowerPoint at 7. Even if the alternate limits are effectively equivalent to or lower than federal limits (which we do not concede), that is irrelevant. As explained in Commenters initial comments at pages 12-13 and 15, DNREC cannot lawfully revise NESHAP and NSPS limits. Only EPA can revise those limits. At the very least, DNREC must revise the permit to make clear that the alternate limits do not affect the NSPS and NESHAP limits applicable to the FCU and FCCU.

Third, DNREC asserts that, "[f]or pollutants for which no short-term limit is specified, annual limits serve to ensure there is a continuous emission limit." DNREC PowerPoint at 7. This is wrong. The complete absence of any short-term limit for lead from the FCCU (and other

pollutants as well, if DNREC does not make the change discussed in the second paragraph of this section) and for NOx, lead, and HAPs from the FCU means that these units are subject to *de facto* exemptions to their non-annual limits. As EPA explained in its 2015 SSM policy, "[a]lternative emission limitations applicable during startup and shutdown cannot," as here, "allow an inappropriately high level of emissions or an effectively unlimited or uncontrolled level of emissions, as those would constitute impermissible *de facto* exemptions for emissions during certain modes of operation." 80 Fed. Reg. at 33,980. EPA further explained that alternative startup and shutdown requirements "should be narrowly tailored," only apply when "[u]se of the control strategy for this source category is technically infeasible during startup or shutdown periods," and "require[] that all possible steps are taken to minimize the impact of emissions during startup and shutdown on ambient air quality." *Id.* Having no short-term limit at all for the above-listed pollutants does not meet these requirements from EPA's SSM policy—especially given that planned startups and shutdowns of the FCU are allowed to last almost five full days, and these planned periods from the FCCU are allowed to last more than three full days. *See* May 2020 Comments at 15.

Further, the absence of any non-annual limit for these pollutants means that the permit violates the Clean Air Act requirement that emission limits and standards "limit[] the quantity, rate, or concentration of emissions of air pollutants on a continuous basis." 42 U.S.C. § 7602(k). Put another way, the short-term and annual limits for these units are different "emission limitations," and having zero requirements to limit pollution on a short-term basis means that the short-term limits do not require continuous reductions in pollution during the periods in question, in violation of the statutory definition of "emission limitation" and "emission standard."

Fourth, DNREC's preliminary response does not establish that any exemptions to short-term limits or alternate limits that apply in lieu of any short-term NSR/PSD and SIP limits were established through the required routes for altering and establishing NSR/PSD and SIP limits—or that the alternate limits or exemptions that apply instead of short-term NSR/PSD limits qualify as BACT/LAER. In fact, DNREC effectively concedes that the alternate limit for PM from the FCCU does not reflect BACT or LAER: DNREC stated during the "hearing" that this limit was originally developed to accommodate an "operating scenario" that "no longer exists"—and that the alternate limit "will be reduced." July 14 Transcript at 25. DNREC must follow the required process for altering any SIP or NSR/PSD limits, and any alternate NSR/PSD limits must reflect BACT/LAER, as discussed in detail in our initial comments at pages 12 and 15-16. In particular, a complete absence of any short-term limit (as is the case with at least lead from the FCCU and NOx, lead, and HAPs from the FCU) does not constitute BACT/LAER: if no limit at all were BACT or LAER for these periods, that would mean that the best-performing FCUs and FCCUs cannot meet any short-term limits for these pollutants during these periods, which is not the case.

Fifth, DNREC makes conclusory assertions that some of the alternate limits are "similar" to, "approximately" the same as, or "lower" than the "normal operation limits" for the FCU and FCCU. DNREC PowerPoint at 8-9. DNREC has not established this to be true. In particular, some of the alternate limits for which DNREC has made these (and similar) assertions—for VOCs and SO_2 from the FCCU and VOCs, H_2SO_4, TSP, SO_2, and CO from the FCU—are expressed in different terms than the normal limits for these units. All of these alternate limits are lbs/hour limits, whereas the normal limits for these pollutants are concentration, percent reduction, and/or lb/mmBtu limits. DNREC's conclusory statements do not establish that these lbs/hour limits are equivalent to or lower than the normal limits. As noted above, any alternate

NSR/PSD limits must reflect BACT/LAER, and DNREC has not established that this is the case when the alternate limits are expressed in very different terms than the normal limits. DNREC must provide a technical demonstration that the relevant alternate limits are indeed just as protective as the normal limits for the FCU and FCCU.

Finally, DNREC's preliminary response ignored our initial comment that the exemptions and alternate limits unlawfully attempt to remove the ability of the public and EPA to enforce, and for the court to apply penalties for, the limits applicable to the FCU and FCCU during normal operations. *See* May 2020 Comments at 13-16. Relatedly, the exemptions and alternate limits provisions are also unlawful for one of the reasons discussed above for why the permit's affirmative defense is unlawful— they violate the requirement that Title V permits must assure compliance with all applicable requirements and are contrary to the statutory purpose of strengthening enforcement.

D. The Draft Permit Unlawfully Relaxes Federally Enforceable Requirements for the FCU and FCCU During Other Periods Not Discussed in Commenters' Initial Comments.

Commenters' initial comments (at pages 14-16) discussed how the draft permit unlawfully relaxes limits during planned startup and shutdown of the FCU and FCCU and when the FCCU's CO boiler is combusting only refinery fuel gas. In addition to those problems, the draft permit also unlawfully relaxes limits for these two units in the following ways.

First, the draft Title V permit could be read to provide that the FCU and FCCU are not required to comply with their normal limits during outages of some (the FCCU) or all (the FCU) of their controls, as long as they comply with certain operational requirements. For example, the permit provides that, during an unplanned shutdown or bypass of the FCCU's CO boiler, the FCCU shall comply with certain operational requirements from Attachment G to the permit. Title V Permit Condition 3 – Table 1, Part 2(e)(1)(i)(M). And another provision applicable to the FCCU (one of the permit's director's discretion provisions) states that, "*[e]xcept as provided in Operational Limitation M*" (the provision discussed in the preceding sentence), "*this permit does not authorize emissions exceeding the limits* set forth in Condition 3 Table 1.e.2 through e.9 … during periods of any … unplanned shutdown or bypass" of the FCCU's CO boiler. *Id.* at Part 2(e)(1)(i)(J) (emphasis added). Coupled together, those two provisions very strongly suggest that, whenever its CO boiler is bypassed or unexpectedly shutdown, the FCCU is excused from compliance with at least CO limits[21]—and perhaps all limits—that apply during normal operations, as long as the FCCU satisfies the operational requirements from Attachment G.

Attachment G appears to excuse the FCCU, for 24 hours, from having to comply with a requirement to burn CO at 1300^{o}F—and perhaps other requirements as well—during unplanned shutdowns of the CO boiler (and perhaps unplanned startups as well). The attachment requires "[f]ull CO combustion operation" to minimize CO emissions within 24 hours, as well as opening of the CO boiler's bypass line to allow the FCCU's wet gas scrubber to treat regenerator flue gases. In addition, Attachment G cryptically provides that "[d]uring this period (24 hours maximum), the requirements in Condition 2.1.6 and 7 DE Admin. Code 1111 shall not apply." What the requirements from "Condition 2.1.6" are is completely unclear (there is no Condition

[21] The CO boiler presumably is meant to reduce CO.

2.1.6 in the Title V permit), and the "period" referred to is also unclear (though we presume it means the 24 hours before full CO combustion operation). 7 Del. Admin. Code 1111 requires CO to be burned at 1300°F for 0.3 seconds or greater in a direct-flame afterburner or boiler or to be controlled by an "equivalent technique." The requirement to burn CO at 1300°F is also an applicable requirement under the draft permit. Title V Permit Condition 3 – Table 1, Part 2(e)(5)(i)(B). But whether Attachment G (along with the other provisions discussed above) excuses the FCCU from compliance only with this 1300°F requirement or with other requirements as well is unclear. In addition to excusing the FCCU from compliance during unplanned shutdowns of the CO boiler, Attachment G also suggests that the FCCU is excused from compliance with normal limits during unplanned startups of the CO boiler, stating that it applies "when the CO Boiler experiences an unplanned start-up or shut-down event."

In addition to unplanned startups and shutdowns of the CO boiler, "Operational Limitation M" also suggests that the FCCU is excused from compliance with its normal CO limits during planned shutdown of the CO boiler or planned operation of the boiler at firebox temperatures less than 1300°F. Limitation M states that, during these planned periods, DCRC is to "initiate promoted full burn" in the FCCU and control CO emissions in keeping with the requirements from Condition 3 – Table 1, Part 2(e)(5)(i) (the CO limits that apply during normal operations) prior to bypassing or shutting down the CO boiler or reducing the temperature below 1300°F. This very strongly suggests that the normal CO limits do not apply during planned shutdowns of the CO boiler or planned operation of the boiler at temperatures below 1300°F.

The draft permit also includes similar provisions applicable to the FCU. It provides that the FCU—within 24 hours after commencement of operation of its backup incinerator and outages of its controls (the CO boiler, Belco prescrubber, and wet gas scrubber)—must, "at a minimum," meet certain operational limits. Those operational limits include very high hourly SO_2 limits ranging from 2,961-4,441.5 lbs/hour, depending on the feed weight "% S." Title V Permit Condition 3 – Table 1, Part 2(da)(1)(i)(E). While the effect of this provision is unclear, it could be read to mean that the FCU is not required to comply with its normal limits during these outage periods—including allowing the FCU to comply only with SO_2 limits that are much higher than the SO_2 limits that apply during normal operations, and excusing the FCU from complying with any limits at all for other pollutants.[22] In particular, if the FCU emitted at the lowest of the hourly SO_2 rates listed in this provision (2,961 lbs/hour) for an entire year, it would emit 12,969.18 tons of SO_2—over 70 times its annual limit of 182.3 tons/year from Part 2(da)(3)(i)(A).

There are also CO and PM-related operational limits and an alternate PM limit that apply when the FCU's backup incinerator is operated. *Id.* at Part 2(da)(1)(i)(H)(1). Although the effect of this provision is also unclear, it could also be read to mean that the FCU is not required to comply with its normal CO and PM limits during these periods.

[22] Reading the provision this way (to excuse compliance) would seem to conflict with the draft permit's director's discretion provision applicable to the FCU (from Part 2(da)(1)(i)(H)), which provides that the permit "does not authorize emissions exceeding the limits set forth in Condition 3- Table 1.da.2 through da.10" during periods of unplanned shutdown or bypass of the FCU's controls.

As discussed in our May 22, 2020 comments (at pages 10-11), the limits that apply during normal operations of the FCCU and FCU units are a combination of SIP, PSD/NSR, NESHAP, and NSPS limits. *See id.* at Parts 2(da)(2)-(9), 2(e)(2)-(9). In particular, the FCCU's 500 ppmv CO limit under Part 2(e)(5)(i)(A) is also the limit that applies to FCCUs under the NESHAP and NSPS regulations.[23] And the FCU's 50 ppmvd SO_2 limit (with a rolling averaging period of 7 days) and 25 ppmvd SO_2 limit (with a rolling annual averaging period) under Part 2(da)(3)(i)(A) are NSPS Subpart Ja limits for FCUs from 40 C.F.R. § 60.102a(b).

To the extent the above-discussed provisions from the draft permit, during outages of the FCCU's and FCU's controls or other periods, relax the limits normally applicable to these units and purport to instead allow the units to comply with certain operational requirements (or alternative limits), the provisions are unlawful. They are unlawful first because they could be read to alter at least NESHAP and NSPS limits—and perhaps SIP[24] and NSR/PSD limits as well—through a process that is contrary to the required process for establishing and revising these limits. For more details on why this is unlawful, see our initial comments on the draft permit, which we incorporate here by reference. *See* May 22, 2020 comments at 12-14. As appears to be particularly relevant here, only EPA—not DNREC—can revise NSPS or NESHAP limits.[25]

In addition, these draft permit provisions could be read to—during outages of the FCCU's and FCU's controls—unlawfully remove the ability of the public and EPA to enforce (including through penalty awards) the limits that are applicable to these units during normal operations. For more details on this argument, we again refer DNREC to our initial comments on the draft permit. *See* May 22, 2020 Comments at 13-14. Relatedly, the provisions are also unlawful for one of the reasons discussed above for why the permit's affirmative defense is unlawful—they violate the requirement that Title V permits must assure compliance with all applicable requirements and are contrary to the statutory purpose of strengthening enforcement.

And to the extent these limits alter NSR/PSD limits, they are unlawful because they allow compliance with alternative operational requirements during periods of malfunction and

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[23] *See* 40 C.F.R. §§ 63.1565(a)(1), 60.103(a), 60.105(e)(2).

[24] In addition to requiring CO to be burned at 1300ºF for 0.3 seconds or greater, 7 Del. Admin. Code 1111, which is cited in Attachment G to the draft permit, provides that the 1300ºF requirement "shall not apply to the start-up and shutdown of equipment which operates continuously or in an extended steady state when emissions from such equipment during start-up and shutdown are governed by an operation permit issued pursuant to the provisions of 2.0 of 7 DE Admin. Code 1102." That provision from the SIP (assuming it is SIP-approved), cannot excuse compliance with the 1300ºF requirement because operating permits "issued pursuant to the provisions of 2.0 of 7 DE Admin. Code 1102" are minor-source permits. The FCCU is not a minor source; it is a major source of CO emissions.

[25] *See id.*; 42 U.S.C. §§ 7411(b)(1)(B) (requiring the "Administrator" to establish and, if appropriate every eight years, revise NSPS), 7412(d)(1) (requiring the "Administrator" to promulgate NESHAP), 7412(d)(6) (requiring the "Administrator" to revise as necessary NESHAP at least every 8 years), 7602(a) (defining "Administrator" as "the Administrator of the Environmental Protection Agency"), 7412(l)(1) ("A program submitted by a State under this subsection may provide for partial or complete delegation of the Administrator's authorities and responsibilities to implement and enforce emissions standards and prevention requirements *but shall not include authority to set standards less stringent than those promulgated by the Administrator* …." (emphasis added).

maintenance. Any unplanned outage of controls would presumably constitute or be the result of a malfunction, and any planned outage of controls would presumably be for maintenance. Yet EPA has stated that alternative BACT/LAER limits are not justifiable for periods of malfunctions or scheduled maintenance—and that maintenance activities should be scheduled "during process shutdown." *See, e.g., Order Granting in Part and Denying in Part Petition for Objection to Permit, In the Matter of Southwestern Electric Power Co., H.W. Pirkey Power Plant*, Petition No. VI-2014-01 ("Pirkey Order") (Feb. 3, 2016) at 12, https://www.epa.gov/sites/production/files/2016-02/documents/pirkey_response2014.pdf.

To the extent the above-discussed draft permit provisions provide exemptions to the limits normally applicable to the FCCU and FCU, these exemptions are unlawful for all of the same reasons that the director's discretion provisions for these units are unlawful: (1) they violate the Clean Air Act requirement that emission limits and standards apply continuously; (2) they purport to alter at least SIP, NESHAP, and NSPS limits through a process that is contrary to the required process for establishing and revising these limits;[26] (3) they attempt to remove the ability of the public and EPA to enforce, and for a court to apply penalties, for the limits applicable to these units during normal operations; and (4) they violate the requirement that Title V permits must assure compliance with all applicable requirements and are contrary to the statutory purpose of strengthening enforcement. *See* May 22, 2020 Comments at 11-14; *supra* at 4-7, 10.

In addition, in Part 2(e)(1)(i)(I), the draft permit includes a provision that is identical to the FCCU's "Operational Limitation M"—except it provides that: (1) during an unplanned shutdown or bypass of the FCCU's CO boiler, the FCCU shall comply with "Attachment 'A' of Permit: APC-82/0981-OPERATION (Amendment 9) (NSPS) dated April 30, 2012" instead of Attachment G to the draft Title V permit; and (2) during planned shutdown of the CO boiler or planned operation of the boiler at firebox temperatures less than 1300^{o}F, DCRC is to control CO emissions in keeping with "Condition 3, Table 1.e.5.i of Permit: AGM-003/00016" instead of the requirements from the draft Title V permit's Part 2(e)(5)(i). This provision is even more problematic than "Operational Limitation M" because Attachment A of the referenced April 2012 permit and "Permit: AGM-003/00016" are not attached to the draft Title V permit. Thus, there is no way for the public to know what operational requirements from these other permits apply during periods that the CO boiler is shut down or bypassed—or whether these other permits may excuse the FCCU from compliance with its normal limits in ways that are not specified in the draft Title V permit.

In sum, DNREC must remove the provisions that apply during outages of the FCU's and FCCU's controls. If DNREC maintains that it is appropriate to keep these provisions in the permit, it must explain in detail how these provisions affect the FCU's and FCCU's limits that apply during normal operations, since that is unclear from the face of the permit. At the very

[26] The same argument would apply for the PSD/NSR limits if DNREC did not establish any exemptions through the required process (including the required public participation) for establishing PSD/NSR limits in the first place.

least, DNREC must make clear in the Title V permit that these provisions do not affect NSPS or NESHAP limits that apply to the FCU and FCCU.

Second, relatedly, the permit is written in a way that strongly suggests that many of the limits listed for the FCCU and FCU only apply when particular controls are being operated. For example, the draft permit provides that the following are limits for emissions from the FCCU's "WGS[27] + system" or "FCCU WGS+"—instead of limits for the FCCU: the PM limits of 1 lb/1,000 lb of coke burned and 203 TPY; the SO_2 limits of 25 ppmvd on a rolling 365-day average, 50 ppmvd on a rolling 7-day average, and 352 TPY; the CO limits of 500 ppmvd and 3,085 TPY; the VOC limits of 0.40 lb/mmdcsf and 41.4 TPY; and the sulfuric acid, lead, and hydrogen cyanide limits listed in the permit. Title V Permit Condition 3 – Table 1, Part 2(e)(2a), (3), (5)-(9). Likewise, the permit provides that the following are limits for emissions from the FCU's wet gas scrubber—instead of limits for the FCU: the CO limits of 500 ppm on an hourly average, 200 ppm on a rolling 365-day average, and 694.4 TPY; the VOC limits of 0.14 lb/mmDSCF and 8.2 TPY; and the sulfuric acid limits of 67.5 lb/hr and 295.7 TPY. Id. at Part 2(da)(5)-(7). And the only PM limits listed are for the FCU's CO boiler and wet gas scrubber (along with the FCU's startup heater and superheater). Id. at Part 2(da)(2a). The draft permit lists no PM limits for the FCU itself.

If these various limits truly only apply when the controls for the FCU and FCCU are being operated, then these provisions of the draft permit are unlawful for all of the reasons the director's discretion provisions are unlawful: (1) they violate the Clean Air Act requirement that emission limits and standards apply continuously; (2) they alter limits through a process that is contrary to the required process for establishing and revising these limits; (3) they unlawfully remove the ability of the public and EPA to enforce (including through penalty awards) these units' limits; and (4) they violate the requirement that Title V permits must assure compliance with all applicable requirements and are contrary to the statutory purpose of strengthening enforcement. *See* May 22, 2020 Comments at 11-14; *supra* at 4-7, 10. Regarding the second of these reasons, since some of the limits in question are also NSPS and NESHAP limits (*see* May 22, 2020 comments at 10-11), the draft permit could be read to mean that these units' NESHAP and NSPS limits only apply when their controls are operable. But that is clearly not the case under EPA's NESHAP and NSPS regulations; except for certain specific periods discussed in those regulations, the NESHAP and NSPS limits apply at all times. For example, the NESHAP PM limit of lb/1,000 lb of coke burned applies to FCCUs—not just to the controls for FCCUs. *See* 40 C.F.R. § 63.1564; 40 C.F.R. Part 63, Subpart UUU, Table 1. And the only periods that limit possibly does not apply are startup, shutdown, and hot standby (when refiners can choose to comply with an alternative limit) or during periods of planned maintenance preapproved by the applicable permitting authority according to the requirements in § 63.1575(j). *See* 40 C.F.R. § 63.1565(a)(4)-(5).

Finally, if these various limits do not apply when the controls for the FCU and FCCU are inoperable, the draft permit is also unlawful for an additional reason with respect to any NSR or PSD limits: limits that only apply when controls are operated do not reflect BACT or LAER.

[27] "WGS" is an acronym for the wet gas scrubber system. *See* Title V Permit Condition 3 – Table 1, Part 2(e).

DNREC should revise the permit to make clear that these various limits apply at all times, even when the units' controls are inoperable. At the very least, DNREC must make clear in the Title V permit that the NSPS or NESHAP limits that apply to the FCU and FCCU also apply when those units' controls are inoperable. DNREC should also remedy any similar problems in the draft permit as they may apply to other units at the refinery.

Third, the draft permit unlawfully provides for alternative NOx limits during malfunctions and maintenance of the FCCU's SNCR. Specifically, the permit provides that the SNCR is to be operated at all times except during periods of malfunctions and planned maintenance, and the permit also provides limits for periods of "proper operation of the SNCR" (108.2 ppmvd on a 7-day rolling average and 79.6 ppmvd on a 365-day rolling average) and separate higher limits (137.0 ppmvd on a 7-day rolling average and 100.7 ppmvd on a 365-day rolling average) for "all times" (*i.e.*, periods of malfunction and maintenance when the SNCR is not operated). Title V Permit Condition 3 – Table 1, Part 2(e)(1)(i)(N), 2(e)(4)(i)(B)-(C).

The limits in question appear to be nonattainment NSR limits.[28] As discussed above, alternative BACT/LAER limits are not justifiable for periods of malfunctions or scheduled maintenance, and maintenance activities should be scheduled "during process shutdown." *See, e.g.*, Pirkey Order at 12.

DNREC should revise the permit to remove the alternate, higher limits that apply when the SNCR is not operated. Instead, the 108.2 ppmvd (7-day rolling average) and 79.6 ppmvd (365-day rolling average) limits should apply at all times.

Fourth, the draft permit could be read to unlawfully provide an alternative NESHAP limit during malfunctions of the FCCU where none exists in the NESHAP regulations. Specifically, the permit suggests that—instead of complying with the NESHAP CO limit of 500 ppm during startup, shutdown, malfunction, and hot standby—the FCCU can comply with an alternative limit of maintaining the O_2 concentration in the exhaust gas from the regenerator overhead at or above 1 volume percent. *See* Title V Permit Condition 3 – Table 1, Part 2(e)(9)(iii)(B)-(C). Under the NESHAP regulations, however, this alternative limits only applies during startup, shutdown, and hot standby—not malfunctions. 40 C.F.R. 63.1565(a)(5). While the draft permit's alternative limit during malfunctions could possibly only apply to the FCCU's HCN limit of 45 lb/hr, the draft permit is unclear whether the alternative limit also applies to the CO limit. DNREC cannot relax EPA's NESHAP requirements, including the applicability of the 500 ppm CO limit; only EPA may revise its regulations. *See* May 22, 2020 comments at 12-14. Thus, DNREC should delete the language that allows compliance with the alternative limit during malfunctions.

E. The Draft Permit Provides Unlawful Startup and Shutdown Exemptions for the Crude Unit Heaters, Boiler 80-2, and Combined Cycle Units.

The draft permit also unlawfully exempts the crude unit atmospheric tower heater (21-H-701) and crude unit vacuum tower heater (21-H-2) from compliance with limits during startup

[28] New Castle County, where the refinery is located, is designated nonattainment for ozone. *See* https://www3.epa.gov/airquality/greenbook/anayo_de.html (last visited July 30, 2020). Thus, nonattainment NSR applies for major modifications at the refinery that cause significant increases of NOx and VOCs.

and shutdown periods. Specifically, the permit provides that the "emission standards in conditions (c)(2) through (c)(6) [] shall not apply for a period of twenty-four (24) hours from the time that fuel gas flow is started to the heater and for a period of twenty-four (24) hours from the time that black oil charge to the crude unit is stopped." Title V Permit Condition 3 – Table 1, Part 2(c)(1)(i)(D). The "emission standards in conditions (c)(2) through (c)(6)" include short-term and annual limits for PM, SO_2, NO_x, CO and VOCs from the crude unit atmospheric tower heater and the vacuum tower heater.

The draft Title V permit also could be read to provide a startup/shutdown exemption for Boiler 80-2, which the permit refers to as Boiler 2. Specifically, the permit provides: "Except during periods of startup and shutdown, the burner steam injection and flue gas recirculation systems in Boiler 2 shall be working in a manner consistent with maintaining 0.04 lb/MMBtu NOx on a 24-hour rolling average." *Id.* at Part 3(a)(2)(i)(E). 0.04 lb/mmBtu is the NOx limit for Boiler 2. *Id.* at Part 3(a)(5)(i)(C)(2).

In addition, the draft permit exempts combined cycle units 84-1 and 84-2 from compliance with their short-term CO concentration limits during startup and shutdown. The permit provides that the units' hourly CO limits of 0.0202 lb/mmBtu (when firing only natural gas) and 0.0261 lb/mmBtu (when firing "NG" in the units and refinery fuel gas in the duct burners) "shall not apply for two hours following startup or for two hours preceding shutdown of the combustion turbines and/or duct burners." *Id.* at Part 3(d)(5)(i)(B)-(C). During these periods, the refinery is only required to comply with a general duty to "follow good air pollution control practices to minimize CO emissions." *Id.*

These startup and shutdown exemptions are unlawful because they violate the Clean Air requirement that emission limits apply continuously, not only during some periods of time. *See, e.g.*, 42 U.S.C. § 7602(k) (defining "emission limitation" and "emission standard" as a "requirement … which limits the quantity, rate, or concentration of emissions of air pollutants *on a continuous basis*, including any requirement relating to the operation or maintenance of a source to assure *continuous emission reduction*, and any design, equipment, work practice or operational standard promulgated under this chapter") (emphasis added); *Sierra Club v. EPA*, 551 F.3d 1019 (D.C. Cir. 2008). *See also* May 22, 2020 Comments at 11, 16 (providing additional explanation and citations regarding the unlawfulness of exemptions). Further, the do-as-you-see-fit general duty provision applicable to the combined cycle units during startup and shutdown is materially indistinguishable from the general duty provision that the D.C. Circuit held to unlawfully constitute an exemption in the *Sierra Club* case. *See* 551 F.3d at 1019, 1026-28.

The exemptions for the crude unit heaters are also unlawful because they apparently revise SIP and NSPS limits[29] through a process that is contrary to the Clean Air Act's process for

[29] It appears that one or more of the PM and NOx limits for the crude unit heaters may have been issued pursuant to the SIP, since the draft permit lists provisions from the Delaware Administrative Code (7 Del. Admin. Code 1104, § 2.1; *id.* at 1142, § 2.3.2) under these limits. The particular PM and NOx limits listed for these heaters in the permit, however, are not found in the cited Code provisions. Instead, the cited provisions list other limits or requirements. Permit condition (c)(3)(i)(a) lists a requirement that any fuel gas burned in a fuel gas combustion device not contain hydrogen sulfide (H_2S) in excess of 0.10 gr/dscf. This is also a NSPS requirement from 40 C.F.R. § 60.104. Further, the permit cites 7 Del. Admin. Code

establishing and revising these limits. The startup and shutdown exemptions are not found in either the relevant SIP or NSPS provisions applicable to these heaters.[30] DNREC has not followed the required SIP revision process to change any SIP limits. *See* 42 U.S.C. § 7410(i); 40 C.F.R. § 51.105. *See also* May 22, 2020 Comments at 12 (providing additional explanation and citation regarding altering SIP and NSPS limits). And only EPA—not DNREC—can revise NSPS requirements. *See* 42 U.S.C. § 7411(b)(1)(B). Further, the same argument applies for any PSD/NSR limits—which appear to include the boiler and combined cycle unit limits discussed above—if DNREC did not establish the exemptions through the required process for establishing PSD/NSR limits in the first place (including the required public participation and establishing that the exemptions reflect BACT or LAER, which they do not), as explained in our May 22, 2020 comments at pages 12 and 16.

In addition, the exemptions are unlawful because they attempt to remove the ability of the public and EPA to enforce, and for a court to apply penalties, for the limits applicable to these units during normal operations. See our May 22, 2020 comments at pages 13-14 for additional explanation and citations. Finally, the exemptions are also unlawful because they violate the requirement that Title V permits must assure compliance with all applicable requirements and are contrary to the statutory purpose of strengthening enforcement. *See supra* at 4-7.

To remedy these problems, DNREC should remove these exemptions from the permit.

F. The Draft Permit Provides Unlawful Alternate Limits That Apply During Maintenance and Malfunctions of Boilers 80-3 and 80-4.

The draft Title V permit also contains unlawful provisions that allow Boilers 80-3 and 80-4, which the permit refers to as Boilers 3 and 4, to comply with alternate, higher NOx limits during maintenance and malfunctions. Specifically, the permit allows these two boilers to comply with a limit of 0.2 lb/mmBtu—instead of their normal 0.13 lb/mmBtu limit (with a 24-hour rolling averaging period)—during malfunctions, planned maintenance, or "steam emergency or other abnormal steam demand scenarios" for up to seven days. Title V Permit Condition 3 – Table 1, Parts 3(a)(2)(i)(L), 3(a)(5)(i)(C)(3), (5). "Steam emergency/abnormal steam demand" is defined as "an upset of the refinery steam header system resulting in the need for operating steam generating sources to significantly or rapidly adjust their loads to attempt to maintain or restore stable operations." *Id.* Put another way, a period of "steam emergency/abnormal steam demand" is a period of malfunction, and these malfunctions can last for up to seven days.

These alternate limits during maintenance and malfunction (including "steam emergency/abnormal steam demand" periods) are unlawful. The 0.13 lb/mmBtu NOx limit that normally applies to these boilers is presumably a nonattainment NSR limit. As discussed above, alternative BACT/LAER limits are not justifiable for periods of malfunctions or scheduled

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1120, § 11 under this H_2S requirement, and § 11 discusses NSPS requirements from 40 C.F.R. Part 60, Subpart J (which includes § 60.104). All of the other PM, SO_2, NO_x, CO and VOC limits listed in the draft permit for these units appear to be NSR or PSD limits.

[30] 7 Del. Admin. Code 1104 (cited in the permit in the heaters' PM requirements) contains a startup and shutdown exemption, but that exemption only applies to a 0.3 lb/mmBtu PM limit. 7 Del. Admin. Code 1104, §§ 1.5, 2.1. The two heaters here must comply with a much lower short-term PM10 limit—0.02 lb/mmBtu. Title V Permit Condition 3 – Table 1, Part 2(c)(2)(i).

maintenance, and maintenance activities should be scheduled "during process shutdown." *See, e.g.*, Pirkey Order at 12.

In addition, the permit allows these two boilers to comply with the 0.2 lb/mmBtu limit for up to six hours during planned startup and shutdown. Title V Permit Condition 3 – Table 1, Parts 3(a)(2)(i)(K), 3(a)(5)(i)(C)(3)-(4). To the extent these alternate startup and shutdown limits were not established through the required process for establishing NSR limits in the first place, they are unlawful, as explained in our May 22, 2020 comments at pages 12 and 16.

To remedy these problems, DNREC should remove the permit provisions allowing these boilers to comply with the alternate 0.2 lb/mmBtu limit \ during maintenance, malfunction, startup, shutdown, and "steam emergency or other abnormal steam demand scenarios."

G. The Draft Permit Provides Unlawful Alternate NOx Limits for Combined Cycle Units 84-1 and 84-2.

The draft Title V permit contains unlawful provisions that allow combined cycle units 84-1 and 84-2 to comply with alternate, higher NOx limits during periods of startup and shutdown. To begin with, the permit allows the units to comply with a limit of 390 ppmvd for up to 24 hours during startups and shutdowns of the combustion turbines or duct burners. *Id.* at Part 3(d)(4)(i)(D).[31] 390 ppmvd is over 108 times greater than even the highest limit that applies to these units on a 24-hour average basis (3.6 ppmvd) and over 21 times greater than the highest limit that applies on an hourly basis (18 ppmvd). *See id.* at Part 3(d)(4)(i)(C).[32]

In addition, although the permit is unclear, it suggests that these units, as long as they comply with their 24-hour average NOx limits, are not required to comply with their hourly NOx limits when the units' SCR system is not operating during periods of startup, shutdown, malfunction, and planned maintenance. The permit provides: "Except as provided in [the conditions listing the 24-hour NOx limits of 3 ppmvd (when firing natural gas without duct firing) and 3.6 ppmvd (when firing natural gas with duct firing) and the condition allowing the units to comply with the alternate 390 ppmvd limit during certain startups and shutdowns], the CCUs shall not be operated unless the … SCR systems (when SCR is available) are operating properly." *Id.* at Part 3(d)(1)(ii)(I). The permit further provides that "[e]ach SCR system shall be operated at all times that it is available, excluding periods of startup, shutdown, or malfunction"—and that the "SCR system is considered available except during periods of planned maintenance or malfunction." *Id.* Relatedly, the permit provides that operation "in accordance with" the 24-hour NOx limits "shall constitute compliance with" the requirements from the condition discussed here in the above two sentences. Since the effect of the permit

[31] Although the permit specifically states that this "exception[]" applies "[d]uring startups and shutdowns of the combustion turbines and/or duct burners," the permit also states that the alternate limit applies "for a period of 24 hours after cold startup of the CCU," *id.*—suggesting that the higher limit only applies after cold startup and not during other startup and shutdown periods.

[32] These 3.6 and 18 ppmvd limits apply when the units fire natural gas with duct firing. Lower limits (3 ppmvd on a 24-hour average basis, and 15 ppmvd on an hourly basis) apply when units fire natural gas without duct firing. *Id.*

provisions discussed in this paragraph of the comments is unclear, DNREC must clarify that effect in the draft permit and the response to comments.

Although the permit is also unclear about the source of the NOx limits that normally apply to the combined cycle units, the limits appear to be nonattainment NSR limits. To the extent the various provisions discussed above provide alternate limits during startup and shutdown (which the provisions discussed in the first paragraph clearly do), and to the extent they were not established through the required process for establishing NSR limits in the first place (including establishing that the alternate limits reflect LAER),[33] they are unlawful, as explained in our May 22, 2020 comments at pages 12 and 16. In particular a NOx limit that is over 100 times greater than the units' normal limit does not reflect LAER and is thus clearly unlawful, regardless what process DNREC used to establish the alternate limits.

And to the extent these provisions provide alternate limits that apply during malfunction and maintenance, they are also unlawful, regardless what process DNREC used for establishing the alternate limits. As discussed above, alternative BACT or LAER limits are not justifiable for periods of malfunctions or scheduled maintenance, and maintenance activities should be scheduled "during process shutdown." *See, e.g.*, Pirkey Order at 12.

To remedy these problems, DNREC should remove the alternate 390 ppmvd NOx limit and make clear that no other alternate limits (or exemptions) apply to the combined cycle units during periods of maintenance, malfunction, startup, or shutdown.

H. The Draft Permit Allows DNREC to Approve Alternate Limits for the Combined Cycle Units Without Following the Required Process for Revising NSR Limits.

The permit also allows DCRC to petition DNREC on an ad hoc basis for a temporary alternative NOx limit that would apply instead of the combined cycle units' 24-hour average NOx limits of 3 ppmvd (when firing natural gas without duct firing) and 3.6 ppmvd (when firing natural gas with duct firing). *See* Title V Permit Condition 3 – Table 1, Part 3(d)(4)(i)(C), (G). DCRC is only required to submit the petition within three business days of the "facility's determination to operate under a temporary alternative limit," and the alternative limit can apply retroactively, for up to three business days before DNREC receives the petition. *Id.* at Part 3(d)(4)(i)(G)(1),(3). The permit specifies no limit on the duration of the alternative limit available through this petition process, and the only numerical requirement is that the units must still comply with their hourly NOx limits of 15 and 18 ppmvd (depending on whether duct firing is occurring). *Id.* at Part 3(d)(4)(i)(G)(2). The permit also includes no public participation requirements for establishing the alternate limits.

Although the permit is unclear about the source of the 24-hour NOx limits that normally apply to the combined cycle units, the limits appear to be nonattainment NSR limits. Assuming the limits are indeed NSR limits, these provisions allow DNREC to approve alternate limits without following the required process for revising the 3 and 3.6 ppmvd 24-hour limits that apply to these units. As discussed above and in more detail in our initial comments, to revise NSR limits, DNREC must follow the same process, including providing the required public

[33] Because the relevant area is nonattainment for ozone, any NSR limits for NOx and VOCs must reflect LAER.

participation and establishing that the alternate limits are LAER, for establishing NSR limits in the first place. For more detail on this argument, see our May 22, 2020 comments at pages 12 and 16.

To remedy these problems, DNREC should remove the permit language allowing DCRC to petition for alternate limits for these units.

I. The Draft Permit's Provisions Covering the Sulfur Recovery Area Contain Incomprehensible Requirements, Fail to Accurately Reflect Applicable NESHAP and NSPS Requirements, and Include Unlawful Startup and Shutdown Provisions.

The draft permit's requirements covering SO_2 emissions from the sulfur recovery area's two Shell Claus Offgas Treatment ("SCOT") units are indecipherable. From the permit, it is impossible to determine what SO_2 requirements apply to these units during differing periods of operation, and the permit language appears to conflict with the NESHAP and NSPS requirements for these units. The permit provides in relevant part:

> SO_2 emissions shall not exceed 0.025 percent by volume (250 ppm) in each SCOT stack at zero percent oxygen on a dry basis on a twelve hour rolling average basis; or operate the thermal oxidizer or incinerator at a minimum hourly average temperature of 1,200 degrees Fahrenheit in the firebox and a minimum hourly average outlet oxygen (O2) concentration of 2 volume percent (dry basis), except during startup or shutdown conditions, 122 lb/hour calculated on a 24 hour rolling average basis and 535 TPY combined from both SCOT stacks.

Title V Permit Condition 3 – Table 1, Part 2(j)(3)(i)(A).

In particular, the above language seems to allow the SCOT units comply with one of two different limits <u>at any point during operation</u>—the SO_2 limit of 0.025 percent by volume (250 ppm), or the combined 1,200 degrees Fahrenheit/2 volume percent oxygen requirement. But under NESHAP requirements applicable to these units, sources are allowed to comply with the alternate 1,200 degrees/2 volume percent oxygen requirement <u>only during startup and shutdown</u>. 40 C.F.R. § 63.1568(a)(1),(4); 40 C.F.R. Part 63, Subpart UUU, Table 29. And based on our review of the NSPS requirements, the 250 ppm limit applies at all times, leaving no option to use the alternate startup and shutdown requirement. 40 C.F.R. §§ 60.104(a)(2), 60.102a(f)(1).

In addition to the above-described ambiguity, the permit language "except during startup or shutdown conditions, 122 lb/hour calculated on a 24 hour rolling average basis and 535 TPY combined from both SCOT stacks" is also ambiguous. To further complicate matters, the permit lists additional requirements that apply during periods of startup and shutdown—namely the startup and shutdown requirements from 40 C.F.R. § 63.1568(a)(4). Title V Permit Condition 3 – Table 1, Part 2(j)(3)(i)(B). Does "except during startup and shutdown" from Part 2(j)(3)(i)(A) provide an exception to the combined 1,200 degrees Fahrenheit/2 volume percent oxygen requirement, the 122 lb/hour limit, the 535 TPY limit, some combination of these requirements, or to something else? How does this language interact with or affect the startup and shutdown requirements from Part 2(j)(3)(i)(B)? As the permit is currently drafted, it is impossible to tell.

To the extent the above-quoted permit language from Part 2(j)(3)(i)(A) purports to revise NSPS and NESHAP requirements, it is unlawful. DNREC cannot revise EPA's NSPS and

NESHAP requirements for the SCOT units—only EPA can. *See* 42 U.S.C. §§ 7411(b)(1)(B), 7412(d)(1), 7412(l)(1). *See also* May 22, 2020 Comments at 12-13 (providing additional explanation and citation).

Even if the permit is not intended to revise these federal requirements (perhaps if it is only intended to reflect NSR/PSD requirements), the permit does not meet Title V requirements because it is impossible to decipher what requirements apply to these units during different periods of operations or the source of these requirements (*i.e.*, NESHAP, NSPS, PSD/NSR, or SIP requirements). The purpose of Title V is to clarify a source's applicable requirements for the public, regulators, and the owner/operator—not obfuscate those requirements. *See Virginia v. Browner*, 80 F.3d 869, 873 (4th Cir. 1996) (intended purpose of Title V permits is to serve as "a source-specific bible for Clean Air Act compliance").

The NESHAP and NSPS requirements for the SCOT units are clearly applicable requirements. *See* 40 C.F.R. § 70.2 (defining "applicable requirement" to include any requirements under sections 111 and 112 of the Clean Air Act). The same holds true if any of the above-quoted permit language is supposed to reflect SIP or NSR/PSD requirements for these units. *See id.* (defining "applicable requirement" to include SIP and NSR/PSD requirements). The Title V permit must reflect the specifics of these applicable requirements as they apply to the Delaware City Refinery. *See* 42 U.S.C. § 7661c(a) (requiring Title V permits to include enforceable emission limitations and standards and "such other conditions as are necessary to assure compliance with applicable requirements of this chapter"); 40 C.F.R. § 70.6(a)(1) (requiring Title V permits to include "[e]missions limitations and standards, including those operational requirements and limitations that assure compliance with all applicable requirements at the time of permit issuance"). The permit must also "specify and reference the origin of and authority for each term or condition" and "identify any difference in form as compared to the applicable requirement upon which the term or condition is based." 40 C.F.R. § 70.6(a)(1)(i).

To remedy the above-discussed problems, DNREC must revise the permit to make very clear both what SO_2 requirements apply to these units under varying operating conditions and the "origin of and authority for" these requirements (*i.e.*, NESHAP, NSPS, PSD/NSR, or SIP). In revising the permit, DNREC must track and reflect all applicable requirements, including the NSPS and NESHAP requirements from EPA's regulations that apply to these units. And DNREC may not alter those NSPS and NESHAP requirements.

The draft Title V permit's provisions covering the sulfur recovery area also contain unlawful alternate limits that apply during—and after—startup and shutdown of the two SCOT units. These provisions are especially problematic to the extent they purport to relax federal NSPS and NESHAP limits applicable to the SCOT units. In particular, the draft permit provides alternate limits that apply during four different "start up and shut down scenarios." Title V Permit Condition 3 – Table 1, Part 2(j)(3)(ii). Under the first scenario (planned shutdown of one of one or both of the SCOT units), the sulfur recovery area must comply with the startup/shutdown requirements from 40 C.F.R. § 63.1568(a)(4)[34] within "2 hours after the

[34] Section 63.1568(a)(4) allows three different options for compliance during startup and shutdown: complying with the normal NESHAP/NSPS SO_2 limit applicable to SCOT units (250 ppm), sending any startup or shutdown purge gases to a flare, or sending any purge gases to a thermal oxidizer or incinerator

operating SCOT unit is shutdown,"[35] and up to 4.2 tons of SO_2 can be emitted during these two hours. Under the third scenario (planned startup of "SRU I and II"), when SRU 1 or SRU II is being returned to service, the startup/shutdown requirements from § 63.1568(a)(4) must be complied with—and the "proper ratio" of H_2S: SO_2 in the acid gas feed must be attained through incineration of the tail gas—within 2 hours. But under the relevant NESHAP requirements, the SCOT units must comply with § 63.1568(a)(4)'s requirements "during periods of startup and shutdown"—not beginning "2 hours after the operating SCOT unit is shutdown" or two hours after startup begins.

Under the draft permit's second scenario (melting and burnout after planned shutdown of SRU I and SRU II), after SRU I or II has been shut down, residual sulfur melting and burnout are allowed to continue for up to seven days (with the resulting off gases incinerated) as long as the startup/shutdown requirements from § 63.1568(a)(4) are complied with. And under the fourth scenario ("burnout of SCOT reactor" after shutdown of either SCOT unit), after the planned shutdown of either SCOT unit, the catalyst can be slowly burned free of sulfur for up to six days as long as the startup/shutdown requirements from § 63.1568(a)(4) are complied with. Under § 63.1568(a)(4), however, sources may only opt to meet alternative startup/shutdown compliance requirements "during periods of … shutdown." Sources are not allowed to opt for those alternative requirements after shutdown, much less for six or seven days after shutdown. Instead, after shutdown, the NESHAP provisions require the sulfur recovery area to meet the 250 ppm SO_2 limit under § 63.1568(a)(1).

To the extent the draft permit's four different startup/shutdown scenarios purport to alter NESHAP or NSPS requirements, they are clearly unlawful. As discussed above and in our previous comments, only EPA—not DNREC—can revise NSPS and NESHAP requirements for the SCOT units. *See* 42 U.S.C. §§ 7411(b)(1)(B), 7412(d)(1), 7412(l)(1). *See also* May 22, 2020 Comments at 12-13 (providing additional explanation and citation).

The draft permit is unclear whether the sulfur recovery area's 122 lb/hr and 535 tons/year limits still apply during these four different startup/shutdown scenarios. To the extent these four scenarios purport to revise these hourly and annual limits, which are presumably PSD/NSR limits, the scenario provisions are unlawful if DNREC did not establish the exemptions through the required process, including the required public participation, for establishing PSD/NSR limits in the first place. See our May 22, 2020 comments at pages 12 and 16 for more explanation on this argument.

The draft permit's third scenario is also unlawful because it creates an exemption—a two-hour period during startup when no numeric limits or operating limits apply. *See* May 22, 2020 Comments at 11, 16 (providing explanation and citations regarding the unlawfulness of exemptions).

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operated in keeping with the combined 1,200 degrees Fahrenheit/2 volume percent oxygen requirement discussed above (the same requirement listed in Part 2(j)(3)(i)(A) of the permit).

[35] The permit is unclear as to what "2 hours after the operating SCOT unit is shutdown" actually means. Does this mean that compliance with the alternative requirements must occur within two hours after shutdown is first initiated—or two hours after shutdown is complete? The latter would obviously be even more problematic than the former.

To remedy these various problems, DNREC should remove the provisions addressing these four scenarios—or make clear that they do not alter the limits that otherwise apply to the sulfur recovery area, especially applicable NESHAP and NSPS requirements. DNREC must also revise the permit to clarify how these four scenarios affect the sulfur recovery units' SO_2requirements under various operating conditions. In particular, for the first scenario, DNREC must clarify what "2 hours after the operating SCOT unit is shutdown" means, *i.e.*, whether it means that compliance with the alternative requirements must occur within two hours after shutdown is first initiated or two hours after shutdown is complete.

In addition to the unlawful startup and shutdown provisions applicable during these four operating scenarios, the draft permit's above-quoted language "except during startup or shutdown conditions" from Part 2(j)(3)(i)(A) is also unlawful to the extent that it purports to create periods during startup and shutdown where any of the specific requirements from that condition (*i.e.*, the 250 ppm, combined 1,200 degrees Fahrenheit/2 volume percent oxygen, 122 lb/hr, and 535 tons/year requirements) do not apply. If that language indeed creates such periods, it is unlawful because it creates an exemption when there are not continuous emissions reductions required, it apparently revises limits through a process that is contrary to the Clean Air Act's process for establishing and revising these limits, it attempts to remove the ability of the public and EPA to enforce (including through penalties) the limits applicable to these units during normal operations, it violates the requirement that Title V permits must assure compliance with all applicable requirements and is contrary to the statutory purpose of strengthening enforcement. The permit language is especially problematic to the extent it purports to alter NSPS or NESHAP requirements. To remedy these problems, DNREC should remove the phrase "except during startup or shutdown conditions" from Part 2(j)(3)(i)(A). If DNREC chooses to retain that phrase (which would apparently be unlawful), DNREC must, at the very least, clarify the effect of that phrase on DCRC's compliance obligations and how that phrase affects the limits otherwise applicable to the sulfur recovery area.

III. THE DRAFT PERMIT FAILS TO CLEARLY "SPECIFY AND REFERENCE THE ORIGIN OF AND AUTHORITY FOR EACH TERM OR CONDITION," AS REQUIRED BY 40 C.F.R. § 70.6(A)(1)(I).

40 C.F.R. § 70.6(a)(1)(i) provides that each Title V permit "shall specify and reference the origin of and authority for each term or condition, and identify any difference in form as compared to the applicable requirement upon which the term or condition is based." The draft permit fails to clearly do this.

In particular, for many of the limits and other requirements listed in the draft permit, it is impossible to tell for certain whether they are requirements from preconstruction (*i.e.*, NSR/PSD) permits or from EPA's NSPS and NESHAP regulations. For example, as discussed in our May 2020 comments (at pages 10-11), although the draft Title V permit seems to indicate that the overwhelming majority of the limits listed for the refinery's FCU and FCCU were established through preconstruction permits, some of these same limits are also NESHAP and NSPS limits. At the same time, as discussed above and in the May 2020 comments, the draft Title V permit adds director's discretion provisions, exemptions, alternate limits, and other loopholes that do not exist in EPA's NESHAP and NSPS regulations—thereby seemingly unlawfully altering those EPA-created requirements. This same problem exists for other units, such as the sulfur recovery area and crude unit heaters, as discussed above.

In these circumstances, when the permit would seem to unlawfully alter these NESHAP and NSPS requirements, DNREC must be extra vigilant to ensure that it complies with § 70.6(a)(1)(i)'s requirement to specify and reference the origin of and authority for each term and condition. As currently drafted, the permit is unclear about the refinery's compliance obligations and fails to ensure compliance with applicable requirements, which also violates the Clean Air Act, 42 U.S.C. § 7661(c)(a), and 40 C.F.R. §§ 70.1(b), 70.6(a)(1), and 70.7(a)(1)(iv). Further, if DNREC is indeed attempting to alter these EPA-created requirements, then DNREC has failed to comply with § 70.6(a)(1)(i)'s directive that the Title V permit "identify any difference in form as compared to" the NESHAP and NSPS requirements—since the draft permit identifies no such differences.

To remedy these problems, DNREC must revise the draft permit to fully comply with § 70.6(a)(1)(i)'s directives, being careful to accurately attribute requirements to their proper source, including preconstruction permits, NESHAP, and NSPS. DNREC must ensure that it does this for every unit at the refinery (not just the specific units identified above)—especially any units that have NESHAP and NSPS obligations.

IV. THE DRAFT PERMIT IS DEFICIENT BECAUSE IT DOES NOT INCLUDE NECESSARY TERMS AND CONDITIONS FOR FENCELINE MONITORING AND OTHERWISE FAILS TO ASSURE COMPLIANCE WITH NESHAP AND NSPS REQUIREMENTS.

DNREC must fully incorporate all of the current National Emission Standards for Hazardous Air Pollutants (NESHAP) for refineries, including fenceline monitoring provisions, as terms and conditions in the permit. While the permit appropriately incorporates the 40 C.F.R. Part 63 Subpart CC fenceline monitoring requirements as terms and conditions, the compliance certification requirement does not include all of these requirements. In particular, pages 314-15 of the draft permit show that the corrective action requirements are not included in the compliance certification term (column three). Thus, the draft permit fails to ensure compliance with these applicable fenceline monitoring requirements, in violation of 42 U.S.C. §§ 7661c(a) and 7661c(c), as well as 40 C.F.R. §§ 70.1(b), 70.6(a)(1), 70.6(c)(1), and 70.7(a)(1)(iv).

Relatedly, in violation of these same requirements and 40 C.F.R. § 70.6(a)(3)(A), the draft permit fails to ensure compliance with other NESHAP requirements, as well as NSPS requirements, for individual units at the refinery. And the draft permit impermissibly fails to provide for practical enforceability of the NESHAP and NSPS. More specifically, for at least several different units at the refinery, the draft permit fails to specifically list the applicable standards, operating limits, and monitoring, testing, and reporting requirements from EPA's NESHAP and NSPS regulations.

For example, with regard to the FCCU's NESHAP obligations, the permit only states that DCRC "shall comply with all the applicable requirements of 40 CFR Part 63, subpart UUU." Title V Permit Condition 3 – Table 1, Part 2(e)(9)(i)(A). The only specific Subpart UUU-related obligations listed in the permit are HCN-related obligations the requirements to monitor CO by CEMS, submit semi-annual compliance reports, and to operate in keeping with an operation, maintenance, and monitoring plan. *Id.* at Part 2(e)(9). Yet Subpart UUU contains many additional requirements applicable to FCCUs, including emission standards, operating limits, and monitoring, testing, and reporting requirements. *See, e.g.*, 40 C.F.R. §§ 63.1564-65; 40 C.F.R.

Part 63, Subpart UUU, Tables 1-14. Even worse, the draft permit lists no specific NSPS requirements for the FCCU—even though the permit shield section of the permit lists NSPS Subpart VV as being applicable to the FCCU (Title V Permit Condition 6), and even though NSPS Subparts J and Ja are applicable to FCCUs that have been constructed or modified after certain dates. Although the permit lists certain requirements for the FCCU—requirements that are attributed to preconstruction permits—that overlap with NESHAP and NSPS requirements applicable to FCCUs, it is completely unclear whether these are actually NESHAP and NSPS requirements. And, importantly, these requirements listed in the draft Title V permit appear to unlawfully alter the EPA-created NESHAP and NSPS requirements applicable to FCCUs, as discussed above and in our May 2020 comments.

These same and similar problems exist in the draft permit for additional units at the refinery—including the FCU, sulfur recovery area, and boilers and heaters. For example, even though the draft permit's permit-shield provision lists NESHAP Subpart CC as being applicable to the FCU (Title V Permit Condition 6), the draft permit identifies no specific Subpart CC requirements at all for this unit. *See id.* at Condition 3 – Table 1, Part 2(da). And the draft permit lists no NSPS Subpart Ja requirements for the FCU, even though that subpart contains requirements for FCUs that were constructed or modified after a certain date. 40 C.F.R. §§ 60.100a, 60.102a, 60.106a. The only NSPS-related requirements listed for the FCU are certification and quality assurance requirements for certain CEMS. As with the FCCU, although the permit lists certain requirements for the FCU—requirements that are attributed to preconstruction permits—that overlap with NSPS requirements applicable to FCUs, it is completely unclear whether these are actually NSPS requirements. And these requirements listed in the draft Title V permit appear to unlawfully alter the EPA-created NSPS requirements applicable to FCUs, as discussed above and in our May 2020 comments.

The same is true for the refinery's sulfur recovery area's NESHAP and NSPS obligations, as discussed above. For that area, the draft permit only lists certain NESHAP startup and shutdown, semi-annual reporting, and CEMS-related requirements (Title V Permit Condition 3 – Table 1, Part 2(j))—even though the draft permit's permit-shield provision lists NESHAP Subpart UUU and NSPS Subpart J as being applicable to the sulfur recovery area (Title V Permit Condition 6), and there are NESHAP Subpart UUU and NSPS Subparts J and Ja requirements applicable to sulfur recovery units. *See* 40 C.F.R. §§ 60.104(a)(2), 60.102a, 63.1568; 40 C.F.R. Part 63, Subpart UUU, Tables 29-35.

In addition, the draft permit appears to list no NSPS or NESHAP requirements for boilers 80-2, 80-3, and 80-4 (Title V Permit Condition 3 – Table 1, Part 3(a))—even though there are NESHAP and NSPS requirements for boilers. *See* 40 C.F.R. Part 63, Subpart DDDDD; 40 C.F.R. Part 60, Subparts J, Ja. Likewise, based on our review, the draft permit lists no NESHAP requirements for the refinery's various heaters, despite the fact that 40 C.F.R. Part 63, Subpart DDDDD contains NESHAP requirements for industrial process heaters.

Per 40 C.F.R. § 63.7485, a unit is subject to Subpart DDDDD if it is an "industrial … boiler or process heater as defined in § 63.7575 that is located at, or is part of, a major source of HAP, except as specified in § 63.7491." The refinery's heaters and boilers appear to meet this test. They are part of a major source of HAP (the DCRC refinery) and do not appear to be subject to any of the exceptions from 40 C.F.R. § 63.7491. And they are "industrial boilers" and/or

"process heaters" as defined in 40 C.F.R. § 63.7575.[36] If for some reason these heaters and boilers are not subject to Subpart DDDDD or to NSPS requirements, DNREC must explain why that is the case.

It is especially important to specify the particular NESHAP requirements applicable to these units so that the public and regulators will know whether they are subject to numeric limits applicable to certain units under Subpart DDDDD, or the tune-up requirements applicable to other units—and, if they are subject to tune-up requirements, the required frequency of the tune-ups. Subpart DDDDD does not appear to require compliance with numeric limits for those heaters and boilers that only burn natural gas or refinery gas. *See* 40 C.F.R. § 63.7500(a),(e), Table 2 to Subpart DDDDD (not listing any numeric limits for the subcategory of units designed to burn "gas 1"), 40 C.F.R. § 63.7575 (defining "unit designed to burn gas 1 subcategory" as including heaters that burn only natural gas or refinery gas). But even those units that do not have to meet numeric limits are still required to conduct tune-ups—on an annual basis, every other year, or every five years, depending on a unit's heat input capacity and whether it has a continuous oxygen trim system. *See* 40 C.F.R. § 63.7540(a)(10)-(12), Table 3 to Subpart DDDDD

The NESHAP and NSPS requirements applicable to the refinery's FCCU, FCU, sulfur recovery area, and boilers and heaters are clearly applicable requirements with which the Title V permit must ensure compliance. *See* 40 C.F.R. § 70.2 (defining "applicable requirement" to include "[a]ny standard or other requirement under" §§ 111 and 112 "of the Act"). EPA has taken the position that NESHAP requirements may be incorporated into Title V permits by reference, but that incorporation must be done in a way clearly identifies a source's NESHAP obligations. *In the Matter of Tesoro Refining and Marketing Co.*, Order on Petition No. IX-2004-6 at 8-9 (March 15, 2005) ("Tesoro Order"), https://www.epa.gov/sites/production/files/2015-08/documents/tesoro_decision2004.pdf. In the Tesoro Order, EPA explained:

> At a minimum, *a permit must explicitly state all emission limitations and operational requirements for all applicable emission units at the facility*. Permitting authorities may reference the details of those limits and other requirements rather than reprinting them in permits provided that (i) *applicability issues and compliance obligations are clear*, and (ii) the permit contains any additional terms and conditions necessary to assure compliance with all applicable requirements. In all cases, *references should be detailed enough that the manner in which the referenced material applies to the facility is clear* and is not reasonably subject to misinterpretation.

[36] As relevant here, 40 C.F.R. § 63.7575 defines: "boiler" as "an enclosed device using controlled flame combustion and having the primary purpose of recovering thermal energy in the form of steam or hot water"; "industrial boiler" as a "boiler used in manufacturing, processing, mining, and refining or any other industry to provide steam, hot water, and/or electricity"; and "process heater" as "an enclosed device using controlled flame, and the unit's primary purpose is to transfer heat indirectly to a process material (liquid, gas, or solid) or to a heat transfer material (e.g., glycol or a mixture of glycol and water) for use in a process unit, instead of generating steam."

Id. at 8 (emphasis added, citations omitted). *See also In the Matter of Citgo Refining and Chemicals, West Plant, Corpus Christi*, Order on Petition No. VI-2007-01 at 11 (May 28, 2009), https://19january2017snapshot.epa.gov/sites/production/files/2015-08/documents/citgo_corpuschristi_west_response2007.pdf (objecting to Title V permit that failed to explicitly identify applicable emission limits). In objecting to the Title V permit for the Tesoro refinery, EPA found that the permit failed two tests—whether it was "specific enough to define how the applicable requirement applies to the facility, i.e., is its application unambiguous," and whether it "provide[d] for practical enforceability of the NESHAP."[37] Tesoro Order at 9.

The draft permit here also fails both of these tests. It does not explicitly and unambiguously identify the NESHAP and NSPS limits and monitoring, testing, recordkeeping, and reporting requirements applicable to multiple units. And it does not provide for practical enforceability of NESHAP and NSPS requirements. Instead, applicability issues and compliance obligations for the refinery are far from clear—especially given that many of the listed limits and other requirements *conflict with* NESHAP and NSPS requirements. Thus, the draft permit fails to ensure compliance with these applicable requirements.

To correct these problems, DNREC must revise the draft permit to clearly identify all of the NESHAP and NSPS requirements—including (but not limited to), emission standards, operating limits, and monitoring, testing, recordkeeping, and reporting requirements—applicable to all of the refinery's various units, including (but not limited to) the FCCU, FCU, boilers, heaters, and sulfur recovery area.

V. THE DRAFT PERMIT INCLUDES AN UNLAWFUL PERMIT SHIELD.

The draft permit purports to include a permit shield in Condition 6. That condition states: "Compliance with the terms and conditions of this permit shall be deemed compliance with the applicable requirements as provided in Condition 6 – Table 1 as of the effective date of this permit."

Condition 6 is contrary to the Title V requirements for permit shields. Under 42 U.S.C. § 7661c(f)(1), a Title V permit "may … provide that compliance with the permit shall be deemed compliance with other applicable provisions of [the Clean Air Act] that relate to the permittee *if []the permit includes the applicable requirements of such provisions*."[38] (Emphasis added). EPA's Part 70 regulations similarly provide that a Title V permit may state that "compliance with the conditions of the permit shall be deemed compliance with any applicable requirements … *provided that* … [*s]uch applicable requirements are included and are specifically identified in the permit*." 40 C.F.R. § 70.6(f)(i) (emphasis added).

Contrary to these permit-shield directives from the Act and Part 70, the draft permit purports to provide a permit shield for certain applicable requirements without specifically

[37] EPA's reasoning from the Tesoro Order applies equally with respect to NSPS requirements.
[38] Section 7661c(f)(2) allows for a different type of permit shield that is not relevant here—when the "permitting authority … makes a determination … that … other provisions … are not applicable and the permit includes the determination or a concise summary thereof." EPA's regulations also allow for that type of permit shield. 40 C.F.R. § 70.6(f)(ii).

identifying those requirements. Instead of specifically identifying applicable requirements, Table 1 of the draft permit's Condition 6 lists requirements only in a very general manner— for federal requirements, by only 40 C.F.R. part and subpart, and for requirements from the state administrative code, usually by only by code section. For example, for the FCU (Unit 22), Table 1 only lists one NESHAP requirement in a very general manner—"40 CFR Part 63, Subpart CC"—without providing any details regarding the specific requirements from Subpart CC that are applicable to the FCU. And for the FCCU (Unit 23), Table 1 only lists two NESHAP requirements—"40 CFR Part 63, Subpart CC" and "40 CFR Part 63, Subpart UUU"—without providing any details regarding the specific requirements from Subparts CC and UUU that are applicable to the FCCU. Simply listing these Part 63 subparts does not constitute "specifically identif[ying]" the applicable requirements from those subparts, as required by 40 C.F.R. § 70.6(f)(i). Nor does the permit elsewhere specifically and clearly identify the NESHAP requirements for these units. This same problem exists for at least NSPS requirements for the FCU and FCCU—and also exists for many additional requirements for many additional units listed in Condition 6's Table 1. Although, as discussed above, some of the requirements in the draft Title V permit attributed to preconstruction permits overlap with NESHAP and NSPS requirements, the permit's vague identification of requirements that may or may not be NESHAP and NSPS requirements does not constitute specifically identifying these requirements.

The draft permit's purported shield is especially concerning given that some of the requirements identified in the draft permit conflict with NESHAP and NSPS requirements. The permit shield is especially unlawful to the extent the draft Title V permit impermissibly alters EPA's NESHAP and NSPS requirements (which only EPA—not DNREC—can do), while at the same time attempting to give DCRC a permit shield for those same altered federal requirements.

To remedy these problems, DNREC should remove the permit-shield condition from the Title V permit.

VI. THE DRAFT PERMIT FAILS TO INCLUDE APPLICABLE REQUIREMENTS FROM RECENT PRECONSTRUCTION PERMITS.

In DNREC's review memorandum for the draft Title V permit, the Department identifies nine different preconstruction permits that have been issued for the refinery in the past two years but that DNREC is not now incorporating into the Title V permit. Review Memo. at 4-5. Instead, these preconstruction permits "will appear in following Significant Permit Modifications." *Id.* at 5.

The requirements from these nine preconstruction permits are applicable requirements. *See* 40 C.F.R. § 70.2 (defining "applicable requirement" to include "[a]ny term or condition of any preconstruction permits issued pursuant to regulations approved or promulgated through rulemaking under title I, including parts C or D, of the Act"). DNREC's failure to incorporate the requirements from these nine permits into the Title V permit now, with this renewal, violates the mandate that Title V permits ensure compliance with all applicable requirements. 42 U.S.C. § 7661c(a); 40 C.F.R. §§ 70.1(b), 70.6(a)(1), 70.6(c)(1), 70.7(a)(1)(iv). In fact, 40 C.F.R. § 70.6(a)(1) specifically provides that Title V permits must "assure compliance with all applicable requirements *at the time of permit issuance*." (Emphasis added). The requirements from these nine preconstruction permits are applicable requirements now—and thus presumably will also be applicable requirements "at the time of permit issuance."

Contrary to Title V's purpose of promoting and ensuring compliance, preconstruction permitting requirements not incorporated into the Title V permit are not enforceable through the Title V permit. Further, deferring the incorporation of these permits is extremely inefficient and makes it less likely that the public will be involved in the process for incorporating those permit requirements into the Title V permit, since the public will have to constantly be on the lookout for public notice that the Title V permit is being modified to incorporate these preconstruction permits. It makes no sense that these preconstruction requirements would not be incorporated into the Title V permit now, since all of the preconstruction permits were issued months ago.

To remedy these problems, DNREC must incorporate the requirements from these preconstruction permits into the Title V permit with this permit renewal.

VII. THE DRAFT PERMIT FAILS TO INCLUDE DCRC'S FLARE MANAGEMENT PLAN.

The draft permit indicates that DCRC operates two flares—the north and south flares. Title V Permit Condition 3 – Table 1, Part 2(n). To ensure compliance with all applicable NSPS and NESHAP requirements for the flares, the draft permit must—but currently does not—incorporate the flare management plan required under EPA's NSPS and NESHAP regulations. 40 C.F.R. § 60.103a, at subsections (a)-(b), requires owners and operators of flares to develop, implement, submit, and comply with a flare management plan that includes several detailed categories of information, including: a listing of units and systems connected to the flares; descriptions of the flares; an assessment of whether discharges to the flares can be minimized; and procedures to minimize or eliminate discharges to the flares during planned startup and shutdown of the units and systems connected to the flares. The compliance deadline for this requirement was November 11, 2015—though, after that, plans are to be updated to account for changes in operation of flares. 40 C.F.R. § 60.103a(b)(1)-(2).

Similarly, 40 C.F.R. § 63.670(o) also requires owners and operators of any flares that have the potential to operate above their smokeless capacity under any circumstance to develop, implement, submit, and comply with a flare management plan to minimize flaring during periods of startup, shutdown, or emergency releases. The compliance deadline for this requirement was January 30, 2019. *Id.* § 63.670(o)(2).

These NESHAP and NSPS requirements regarding flare operation and flare management plans are clearly applicable requirements. *See id.* § 70.2 (defining "applicable requirement" to include any requirements under sections 111 and 112 of the Clean Air Act). To ensure compliance with these applicable requirements (including, but not limited to, the requirements from § 63.670 regarding visible emissions, combustion zone net heating value, flare tip velocity, and pilot flare presence), DNREC must attach and incorporate the most current version of DCRC's NSPS and NESHAP flare management plan(s) into the Title V permit, to allow the public and regulators to access the specifics of these applicable requirements as they apply to DCRC. *See* 42 U.S.C. § 7661c(a) (requiring Title V permits to include enforceable emission limitations and standards and "such other conditions as are necessary to assure compliance with applicable requirements of this chapter").

Although the draft permit lists the NSPS and NESHAP requirements to develop a flare management plan as applicable requirements (Title V Permit Condition 3 – Table 1, Parts 2(n)(1)(i)(H), 2(n)(3)), this is not enough to ensure compliance with the NSPS and NESHAP

requirements for the flares—especially given the flares' history of noncompliance, discussed below. Instead, DNREC must attach the most current version of DCRC's flare management plan(s) to the Title V permit and incorporate the plan(s) into the permit.

VIII. THE DRAFT PERMIT FAILS TO INCLUDE TERMS AND CONDITIONS TO ASSURE COMPLIANCE WITH THE ACCIDENTAL RELEASE PREVENTION, RISK MANAGEMENT PROGRAM REGULATIONS UNDER 40 C.F.R. PART 68.

The draft permit is incomplete and unlawful because it omits terms needed to determine and assure compliance with the Accidental Release Prevention Requirements, also known as the EPA Risk Management Program, 40 C.F.R. Part 68— as evidenced by the draft permit itself and the portion of DCRC's Risk Management Plan that is available online.[39] 40 C.F.R. Part 68 is an "applicable requirement" for DCRC, with which the permit must assure compliance. 42 U.S.C. § 7661c(a); 40 C.F.R. § 70.6(a), (c); 40 C.F.R. § 68.215. However, the draft permit does not include specific terms and conditions needed to assure compliance with 40 C.F.R. Part 68.

The draft permit includes only the following:

> *In the event this stationary source*, as defined in the State of Delaware 7 DE Admin. Code 1201 "Accidental Release Prevention Regulation" Section 4.0, is *subject to or becomes subject to* Section 5.0 of 7 DE Admin. Code 1201 (as amended March 11, 2006), the owner or operator shall submit a risk management plan (RMP) to the Environmental Protection Agency's RMP Reporting Center by the date specified in Section 5.10 and required revisions as specified in Section 5.190. A certification statement shall also be submitted as mandated by Section 5.185.

Draft permit at 18 (emphasis added).

That provision is deficient because it does not plainly state that the federal and state RMP regulations apply to processes at DCRC. It leaves that open by conditioning compliance, as a hypothetical: stating "in the event" that DCRC is or might become subject to the regulations, and without confirming that indeed DCRC *is* subject to—and therefore must meet—the regulatory requirements. Without a clear statement that these regulations apply and are enforceable through this permit, the draft permit does not meet the requirement to include "[a] statement listing [Part 68] as an applicable requirement," pursuant to 40 C.F.R. § 68.215(a)(1) as required by 40 C.F.R. § 70.6, 7 Del. Admin. Code 1130, § 122.142(b)(2)(B), and 42 U.S.C. § 7661c(a).

Further, the draft permit also fails to include the following components as required by these provisions and 40 C.F.R. § 68.215(a)(2): "Conditions that require the source owner or operator to submit: (i) A compliance schedule for meeting the requirements of this part by the dates provided in §§ 68.10(a) through (f) and 68.96(a) and (b)(2)(i), or; (ii) As part of the

[39] Houston Chronicle RTKnet.org, RMP Data of Delaware City Refining Company, LLC, https://rtk.rjifuture.org/rmp/facility/100000072841 (most recent RMP submission available online, Apr. 28, 2014).

compliance certification submitted under 40 CFR 70.6(c)(5), a certification statement that the source is in compliance with all requirements of this part, including the registration and submission of the RMP." From our review, the draft permit does not satisfy this requirement either. The general language in the draft permit on compliance certification does not address this.

In addition, the regulations require the following:

> (e) The air permitting authority or the agency designated by delegation or agreement under paragraph (d) of this section shall, at a minimum:
> (1) Verify that the source owner or operator has registered and submitted an RMP or a revised plan when required by this part;
> (2) Verify that the source owner or operator has submitted a source certification or in its absence has submitted a compliance schedule consistent with paragraph (a)(2) of this section;
> (3) For some or all of the sources subject to this section, use one or more mechanisms such as, but not limited to, a completeness check, source audits, record reviews, or facility inspections to ensure that permitted sources are in compliance with the requirements of this part; and
> (4) Initiate enforcement action based on paragraphs (e)(1) and (e)(2) of this section as appropriate.

40 C.F.R. § 68.215(e). However, as the draft permit shows, there is no evidence that DNREC has indeed verified DCRC's compliance or otherwise satisfied this section.

Notably these requirements do not allow a hypothetical statement, which is vague and does not ensure DCRC actually complies. They require a clear statement *listing* the accidental release prevention requirements as *applicable* requirements. The draft permit fails to satisfy this mandate.

Further, since the last Title V permit was issued to DCRC, EPA updated the RMP regulations in Part 68. These first took effect on September 21, 2018 – and then were weakened, but some improvements were retained in a final rule issued on December 19, 2019.[40] Those regulations added new requirements, going beyond the RMP, such as coordination with emergency responders, for which the compliance date has now passed, additional emergency response planning requirements, and public meeting requirements.[41] Because these are new, it is particularly important to ensure that the Title V Permit includes sufficient specificity to assure compliance with them.

Fully applying the Part 68 requirements and, as discussed next, assuring compliance with the general duty requirement in Clean Air Act § 112(r) is especially important because DCRC

[40] EPA, Accidental Release Prevention Requirements: Risk Management Programs Under the Clean Air Act, Final Rule, 84 Fed. Reg. 69.834 (Dec. 19, 2019); EPA, Accidental Release Prevention Requirements: Risk Management Programs Under the Clean Air Act, Final Rule, 82 Fed. Reg. 4594 (Jan. 13, 2017).
[41] 84 Fed. Reg. 69,834.

has had recent safety incidents and release problems that show the need for strong enforcement of the RMP as well as a compliance schedule (as discussed later in these comments).

DNREC's own "Violation List" includes a large number of these incidents. *See* Ex. 2 to May 22, 2020 Comment: DNREC Violation List as of June 2019. A review of DNREC's compliance reports demonstrates hundreds of deviations of air requirements that threaten health and safety. *See* Part X, *infra*. In addition, news reports have highlighted other serious incidents. For example, on April 18, 2018, a leak resulted in the release of more than 100 pounds of hydrogen sulfide and sulfur dioxide.[42] And, on March 11, 2020 a fire at the refinery critically injured two workers and created a "huge column of thick, black smoke . . . visible for miles."[43] The Technical Memo accompanying the draft permit does not address any of these incidents, does not satisfy the regulatory requirements for Part 68, *i.e.*, 40 C.F.R. § 68.215, and thus does not meet Clean Air Act Title V requirements.

IX. THE DRAFT PERMIT FAILS TO INCLUDE PROVISIONS TO ENSURE COMPLIANCE WITH THE GENERAL DUTY REQUIREMENT UNDER CLEAN AIR ACT § 112(R).

In addition to specific regulatory requirements, there are also requirements for certain types of a "general duty" that apply to DCRC. Section 112(r)(1) of the Clean Air Act directs the facility to operate pursuant to a "general duty" to prevent and reduce harm from "accidental releases." 42 U.S.C. § 7412(r)(1). In particular, the statute provides as follows:

> The owners and operators of stationary sources producing, processing, handling or storing such substances have a general duty in the same manner and to the same extent as section 654 of title 29 to identify hazards which may result from such releases using appropriate hazard assessment techniques, to design and maintain a safe facility taking such steps as are necessary to prevent releases, and to minimize the consequences of accidental releases which do occur.

Id. These regulations and statutory provision are "applicable requirements" within the meaning of Title V. 40 C.F.R. § 70.2; *see also* 7 Del. Admin. Code 1130 at § 2.

The draft permit is deficient because it includes no term or condition or any monitoring requirements to assure compliance with this "general duty" provision. To do so, DNREC must add language specifying that the general duty is an applicable requirement and ensuring that the facility provides monitoring, reporting, and recordkeeping that can be used to assure compliance with it.

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[42] Delaware Business Now, Hydrogen sulfide, sulfur dioxide leak reported at refinery (Apr. 19, 2018), https://delawarebusinessnow.com/2018/04/hydrogen-sulfide-sulfur-dioxide-leak-reported-at-refinery/.
[43] Mike Phillips, Update | 2 critically injured in fire at the Delaware City Refinery, WDEL RADIO (Mar. 11, 2020), https://www.wdel.com/news/update-2-critically-injured-in-fire-at-the-delaware-city-refinery/article_5d076dea-63c1-11ea-a60c-0fdaa04bc550.html.

Regarding the 112(r)(1) general duty, EPA has emphasized that this provision applies independently and apart from the Part 68 regulations. In denying a petition to object in regard to Part 68, EPA stated as follows:

> Compliance with the requirements of part 68 does not, however, relieve Masada of its legal obligation to meet the general duty requirements of section 112(r)(1) of the Act to identify hazards that may result in an accidental release, to design and maintain a safe facility taking such steps as are necessary to prevent releases, and to minimize the consequences of an actual accidental release. As the Administrator stated in the Shintech Inc. Title V Order, Permit No. 2466-VO (Sept. 10, 1997), at 12, n.9, "section 112(r)(1) remains a self-implementing requirement of the Act, and EPA expects and requires all covered sources to comply with the general duty provisions of 112(r)(1)."[44]

Adding specific terms and conditions to ensure compliance with the general duty is especially important because of the deviations and emission exceedances shown in DCRC's permit file, the incidents documented in recent news reports such as the fire in March 2020, the fact that refineries have a higher frequency of the most serious accidents among regulated industries,[45] and the substantial quantities of hazardous chemicals that DCRC uses, stores, or manages.[46].

The draft permit is deficient because it does not mention—much less ensure compliance with—the general duty requirements. DNREC must include specific terms acknowledging each of these requirements and otherwise assuring DCRC's compliance with them.

X. DNREC MUST REVISE THE PERMIT SO THAT IT SATISFIES THE REQUIREMENT TO INCLUDE A COMPLIANCE SCHEDULE TO ASSURE DCRC'S COMPLIANCE.

Title V requires a compliance schedule for any current non-compliance. 40 C.F.R. § 70.6(c)(3). In addition, § 70.5(c)(8)(iii)(C) requires permit applications to include:

> A schedule of compliance for sources that are not in compliance with all applicable requirements at the time of permit issuance. Such a schedule shall include a schedule of remedial measures, including an enforceable sequence of actions with milestones, leading to compliance with any applicable requirements for which the source will be in noncompliance at the time of permit issuance. This compliance schedule shall resemble and be at least as stringent as that contained in any judicial consent decree or administrative order to which the source is

[44] *EPA Order, In the Matter of Orange Recycling and Ethanol Production Facility, Pencor-Masada Oxynol, LLC* at 28 n.38 (May 2, 2001), 2001 WL 36294221.
[45] 82 Fed. Reg. 4594,4600 (Jan. 13, 2017).
[46] *See, e.g.*, Houston Chronicle RTKnet.org, RMP Data of Delaware City Refining Company, LLC, https://rtk.rjifuture.org/rmp/facility/100000072841 (most recent RMP submission available online, Apr. 28, 2014).

subject. Any such schedule of compliance shall be supplemental to, and shall not sanction noncompliance with, the applicable requirements on which it is based.

Id.; *see also* 7 Del. Admin. Code 1130 §§ 5.4.8.3; 6.3.3 (Del. compliance schedule requirement).

DNREC must require a compliance schedule in the permit because publicly available evidence demonstrates that DCRC is "not in compliance" with applicable requirements. In fact, EPA has found that DCRC is in "significant noncompliance," and has been for the last twelve quarters.[47] EPA's Enforcement and Compliance History Detailed Facility Report for DCRC is attached as Exhibit 2. As that document shows, EPA has determined that DCRC's current "compliance status" is: "High Priority Violation."[48] That document relies on some enforcement actions undertaken by DNREC as well as EPA.[49] In EPA's ECHO database, "HPV (this term is used in the Clean Air Act program) . . . is the most serious level of violation noted in EPA databases. This designation provides an indication of violations or noncompliance events at a given facility posing a more severe level of concern for the environment or program integrity."[50] Thus, EPA's determination provides evidence that DCRC is "not in compliance," and that it is critical to include a compliance schedule into the permit.

DCRC has entered into consent decrees, settlements and administrative orders, due to violations of clean air requirements, including the following. Some are EPA actions and in some DNREC has completed administrative enforcement orders with DCRC during the term of the prior Title V permit.[51]

Formal enforcement actions:

- January 27, 2020 - Settlement agreement includes an administrative penalty of $67,968.29 and $2,031.71 in recovery costs.[52]

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[47] U.S. EPA, Enforcement & Compliance History Online, Detailed Facility Report for DCRC (last visited July 23, 2020), https://echo.epa.gov/detailed-facility-report?fid=110001148598.
[48] *Id.*
[49] ECHO cites the following three recent state enforcement actions: 7-11-19 Settlement, https://echo.epa.gov/enforcement-case-report?id=DE000A0000100030001601366; 11-5-19 Administrative Order, https://echo.epa.gov/enforcement-case-report?id=DE000A0000100030001601436; and 1-27-20 Administrative Order, https://echo.epa.gov/enforcement-case-report?id=DE000A0000100030001601437. An action (Case No. DE-12408) is also listed but information is not available at the link provided: https://echo.epa.gov/enforcement-case-report?id=DE-12408.
[50] U.S. EPA, Enforcement & Compliance History Online, FAQs, https://echo.epa.gov/resources/general-info/echo-faq#in_violation (last visited July 30, 2020).
[51] *See* actions cited *supra* note 29.
[52] *See* Settlement agreement, DNREC (Jan. 2020), http://www.dnrec.delaware.gov/Info/Documents/20200127-DNREC-DCRC-settlement-agreement-AQ-permit-violations.pdf; Maddy Lauria, *Delaware City refinery to pay $70,000 for releasing thousands of pounds of chemicals into the air*, DEL. ONLINE (Jan. 27, 2020), https://www.delawareonline.com/story/news/local/2020/01/27/delaware-city-refinery-agrees-pay-70-000-settle-air-pollution-problems/4591487002/.

- July 11, 2019 - Settlement agreement reached between DNREC and DCRC for non-compliance with air permits issued by DNREC. An administrative penalty of $950,000 issued to DCRC for violations resulting from the past eight years following the restart of the refinery in 2010.[53]
- March 5, 2018 - Administrative Penalty order from DNREC to DCRC requiring $37,888 in State/Local Penalties.[54]
- November 18, 2015 - EPA steps in with formal enforcement actions for the refinery resulting in DCRC paying over $112,000 in compliance costs as a result of using invalid Renewable Identification Numbers (RINs) to meet its Renewable Volume Obligation (RVO).[55]
- 2001 Consent Decree entered as a result of *United States v. Motiva Enterprises LLC*, No. H-01-0978.[56]

Informal enforcement actions:

- Notice of violation from DNREC to the refinery, with the latest one dated July 9, 2020.[57]
- Notice of Administrative Penalty Assessment and Secretary's Order Issued on November 4, 2019 addresses violations relevant to Part 2 of the Title V permit.[58] Specifically, the order focuses on unpermitted emissions from the Fluid Coking Unit on January 14,

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[53] Settlement Agreement, DNREC (Jul. 11, 2019) at 1-2, http://www.dnrec.delaware.gov/Info/Documents/20190711-dcrc-air-quality-settlement-agreement.pdf (naming Secretary order No. 2014-A-0014 as the basis of the settlement); Sophia Schmidt, *Delaware City Refinery Violated Flaring Permits Twice Last Year, Officials Say*, DEL. PUB. MEDIA (Mar. 3, 2002) https://www.delawarepublic.org/post/delaware-city-refinery-violated-flaring-permits-twice-last-year-officials-say; Notice for Public Hearing: DCRC, DNREC, Applicant Exhibit 1 at 10, http://www.dnrec.delaware.gov/Admin/Documents/dnrec-hearings/2020-P-A-0017/DCRC-hearing-presentation.pdf; Maddy Lauria, *Delaware City refinery to pay $70,000 for releasing thousands of pounds of chemicals into the air*, DEL. ONLINE (Jan. 27, 2020), https://www.delawareonline.com/story/news/local/2020/01/27/delaware-city-refinery-agrees-pay-70-000-settle-air-pollution-problems/4591487002/.

[54] U.S. EPA, Enforcement & Compliance History Online, https://echo.epa.gov/enforcement-case-report?id=DE-12408.

[55] *Id*.

[56] Consent Decree, *United States, et al. v. Motiva Enterprises LLC*, No. H-01-0978, https://www.epa.gov/sites/production/files/documents/condec-motiva-rpt_0.pdf.

[57] Detailed Facility Report, ECHO, *supra* note 45. In 2020 alone, DCRC has been subject to four Enforcement Actions dated February 10 and 21, April 7, and May 18, 2020. The latest, dated May 18, 2020 states DCRC exceeded seven-day rolling average for SO_2 emissions for Unit 23, the Fluid Catalytic Cracking Unit (FCCU), among others. DNREC Environmental Violations (last visited July 30, 2020), http://apps.dnrec.state.de.us/violations/violationssearch.aspx; Sophia Schmidt, *Delaware City Refinery Violated Flaring Permits Twice Last Year, Officials Say*, DEL. PUB. MEDIA (Mar. 3, 2002) https://www.delawarepublic.org/post/delaware-city-refinery-violated-flaring-permits-twice-last-year-officials-say (listing Feb. 6 notice for exceeding permitted emissions of SO_2 during stack test, Feb. 14 notice for release of 550 lbs of SO_2 from two flaring events.).

[58] Secretary Order No. 2019-A-0043 (Nov. 4, 2019) http://www.dnrec.delaware.gov/Info/Documents/Secretarys-Order-No-2019-A-0043.pdf.

2019.[59] The notice also addressed unpermitted emissions from the Crude Unit Area fire on February 3, 2019 lasting until the next day.[60] The fire resulted from a 3-inch gas line pipe leak due to inadequate winterization techniques.[61] Further, the fire released 842 lbs of HC, 592 lbs of SO_2, 438 lbs of CO, 80 lbs of NO_x, 2 lbs of H_2S and an additional 4,300 lbs of SO_2 from flaring.[62] Lastly, the notice addressed multiple flaring-related violations dating from January 1, 2019 through June 30, 2019.[63]

- Notice of Administrative Penalty issued to DCRC by the secretary on July 24, 2013 for non-compliance with air permit.[64]

Others listed in ECHO database:[65]

Statute	System	Source ID	Type of Action	Lead Agency	Date
CAA	ICIS-Air	DE0000001000300016	Notice of Violation	State	05/18/2020
CAA	ICIS-Air	DE0000001000300016	Notice of Violation	State	04/07/2020
CAA	ICIS-Air	DE0000001000300016	Notice of Violation	State	02/21/2020
CAA	ICIS-Air	DE0000001000300016	Notice of Violation	State	02/10/2020
CAA	ICIS-Air	DE0000001000300016	Notice of Violation	State	09/12/2019
CAA	ICIS-Air	DE0000001000300016	Notice of Violation	State	05/17/2019
CAA	ICIS-Air	DE0000001000300016	Notice of Violation	State	05/09/2019
CAA	ICIS-Air	DE0000001000300016	Notice of Violation	State	03/16/2019
CAA	ICIS-Air	DE0000001000300016	Notice of Violation	State	12/08/2018
CAA	ICIS-Air	DE0000001000300016	Notice of Violation	State	12/06/2018
CAA	ICIS-Air	DE0000001000300016	Notice of Violation	State	10/13/2018
CAA	ICIS-Air	DE0000001000300016	Notice of Violation	State	07/21/2018
CAA	ICIS-Air	DE0000001000300016	Notice of Violation	State	06/21/2018
CAA	ICIS-Air	DE0000001000300016	Notice of Violation	State	03/01/2018
CAA	ICIS-Air	DE0000001000300016	Notice of Violation	State	11/25/2017

[59] *Id.* at 2-3. (stating damper failure that led to the release of 60,000 lbs of pollutants).
[60] *Id.* at 3.
[61] *Id.* at 3-4.
[62] *Id.*.
[63] *Id.* at 5.
[64] Settlement Agreement (Jul. 11, 2019) at 1-2, http://www.dnrec.delaware.gov/Info/Documents/20190711-dcrc-air-quality-settlement-agreement.pdf (naming Secretary order No. 2014-A-0014 as the basis of the settlement).
[65] Chart of informal enforcement actions for the past five years, ECHO, *supra* note 55.

Statute	System	Source ID	Type of Action	Lead Agency	Date
CAA	ICIS-Air	DE0000001000300016	Notice of Violation	State	09/29/2017
CAA	ICIS-Air	DE0000001000300016	Notice of Violation	State	07/21/2017
CAA	ICIS-Air	DE0000001000300016	Notice of Violation	State	04/10/2017
CAA	ICIS-Air	DE0000001000300016	Notice of Violation	State	04/03/2017
CAA	ICIS-Air	DE0000001000300016	Notice of Violation	State	12/15/2016
CAA	ICIS-Air	DE0000001000300016	Notice of Violation	State	09/15/2016
CAA	ICIS-Air	DE0000001000300016	Notice of Violation	State	08/18/2016
CAA	ICIS-Air	DE0000001000300016	Notice of Violation	State	08/08/2016
CAA	ICIS-Air	DE0000001000300016	Notice of Violation	State	07/21/2016
CAA	ICIS-Air	DE0000001000300016	Notice of Violation	State	05/18/2016
CAA	ICIS-Air	DE0000001000300016	Notice of Violation	State	03/03/2016
CAA	ICIS-Air	DE0000001000300016	Notice of Violation	State	11/07/2015

Thus, a review of the information provided in the ECHO database revealed several enforcement actions that have been taken by both EPA and the state against DCRC including 27 informal enforcement actions within the past five years.[66]

Additionally, the draft permit includes conditions from a 2001 consent decree that did not appear in previous versions of DCRC's Title V permit– without explanation for why DNREC waited so long to incorporate these requirements into the permit. Draft Permit: AQM-003/00016 – Part 1 (Ren 3), Part 2 (Ren 2), Part 3 (Ren 3) Delaware City Refining Company at 18 (citing Motiva CD at 30, 34 & 43 (2001)).[67] During the meeting held on July 14, 2020, the refinery representative gave a PowerPoint presentation stating that the 2001 consent decree was still active and contained "mostly various leak detection and repair requirements" and that those requirements "were transitioned into the permit [as well as] three conditions previously omitted."[68] Therefore, it appears that now the draft permit is incorporating requirements such as conditions 76, 93 and 117 for the first time, when they should have been included since the signing of the consent agreement in 2001—without any explanation for years of delay. Although waiting so long to incorporate these applicable requirements is obviously problematic, Commenters support incorporation of these requirements now. Additionally, to ensure compliance with the consent decree, DNREC must include requirements necessary as part of a compliance schedule, as the decree states "any units described in paragraph 206 shall be on a

[66] U.S. EPA, Enforcement & Compliance History Online, Detailed Facility Report for DCRC (last visited July 23, 2020), https://echo.epa.gov/detailed-facility-report?fid=110001148598.
[67] Consent Decree, *United States, et al. v. Motiva Enterprises LLC*, No. H-01-0978, https://www.epa.gov/sites/production/files/documents/condec-motiva-rpt_0.pdf.
[68] July 14 Transcript at 16.

compliance schedule in order to be released from liability under paragraphs 204 through 206."[69] Therefore, the DCRC permit must include a compliance schedule for these covered units: FCCUs and FCUs.

As these various actions described above show, both EPA and DNREC have determined (and at times, it appears DNREC has reported) that emissions or other actions were "not in compliance" with applicable Clean Air Act requirements. DNREC has further recognized DCRC's non-compliance through the "Violation List" that the Department has complied for the refinery, a version of which Commenters attached as Exhibit 2 to their May 22 comments (and which we incorporate here by reference). Yet there is no discussion of any non-compliance in the DNREC "Technical Memo" or draft permit, nor indication of how any term or condition in the draft permit assures that the non-compliance will be remedied.

Further, a number of DCRC's own compliance reports similarly show significant exceedances and deviations, as compiled in the attached Exhibit 3– over 200 compliance reports or other documents show non-compliance or issues of compliance concern that the permit should address.[70] An analysis of these documents shows recurring or consistent compliance issues mostly associated with the refinery's FCU, FCCU, flares, and continuous catalytic reforming system.[71] Some of these compliance issues have caused large releases of air pollution. For example, a February 13, 2019 coke boiler trip released 600,000 pounds (lbs) of SO_2, 4,500 lbs of NH_3, 11,500 lbs of H_2S, 550 lbs of HCN, and 335,000 lbs of CO.[72] This incident is not alone;

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[69] Consent Decree, *United States, et al. v. Motiva Enterprises LLC*, No. H-01-0978, at 6, https://www.epa.gov/sites/production/files/documents/condec-motiva-rpt_0.pdf.

[70] Exhibit 3 is a spreadsheet created by Earthjustice for these comments, detailing DCRC compliance issues and information. It is based on DCRC compliance documents produced by DNREC in response to public record requests and listed by date and title. Documents are available by request to Earthjustice.

[71] Examples include: (1) January 14, 2014 Notice of Violation addressing 9/28/13 incident: tripped offline, operators diverted to FCU bypass stack, which is not authorized emissions under permit; 137,000 lbs of CO, 4,580 lbs of H_2S, 1,850 lbs of NH_3, 217 lbs of HCN and 31,000 lbs of SO_2 released; 11/23/13 boiler feed water pump malfunctioned brought spare pump online but COB safety system already activated leading to converting to FCU bypass and unauthorized emissions of 57,900 lbs of CO, 1,930 lbs of H_2S, 779 lbs of NH_3, 92 lbs of HCN and 15,000 lbs of SO_2; refinery did not demonstrate it should not be subject to enforcement; (2) May 23, 2014 penalty assessment for Secretary's order 2013-A-0022 letter stating the Secretary issued penalty of $ 460,200 and cost recovery of $69,030 for violations on FCCU related to permit inspection, flaring incidents, and FCU and COB outages; (3) September 7, 2017 notice of violation stating incident on 2/18/16: power outage trains lost power diverted to flare -582 lbs of SO_2 released; 4/11/16- 3 events (a) valve left open at tail gate system and lifted to high pressure (b) strainer plugged loss of cooling water to stratco unit refrigerant accumulator drum lifting relief valve (c) monitor at deisobutanizer not reading correctly leading to relief valve lifting leading to flare header line - total released: 693.9 lbs of SO_2; 4/20- leak from cracked weld outlet line in hydrocracker unit released 9,832.8 lbs of SO_2; 6/28- upset at coker main fractionator b/c liquid carryover and tripping of wet gas compressors, releasing 27, 326.5 lbs of SO_2; (4) Nov. 16, 2017 Notice of Violation stating incident on 8/21/16: leak in FCU scrubber section near feed injection nozzles, feed pulled and FCU shut down DCRC did not provide required notification; concerning because FCU unit #22 is one of the largest units at the refinery, with potential to emit extremely large quantities of pollution.

[72] *See* DCRC Compliance Spreadsheet created by Earthjustice, 305 (2020); DCRC "2019-02-13 Coker CO Boiler Trip Event Incident Report (P# AQM-003-00016)."

there are numerous others that have occurred at several of the refinery's units.[73] For example, large releases tended to occur when the refinery used pollution control bypasses to get problems with the Coker units or flaring incidents under control.[74]

The refinery reports show a significant number of flaring incidents occurring from 2014 to the present, including the following:

- September 13, 2019: the NESHAP Subpart CC periodic report lists block periods of flaring that do not meet the combustion zone operating limit in the south flare.
- Oct 16, 2019: lists a partial compliance evaluation report mentioning that the SCR, SWS, crude unit and crude unit heaters exceeded their SO_2, visible emission, and NOx limits for the 12-month rolling basis due to a fire and flaring event.
- January 30, 2017 RATA test showed flaring event on July 14 releasing 5,050 lbs of sulfur dioxide, with an additional flare releasing 580 lbs of sulfur oxide
- In a March 30, 2017 Notice of Violation for the Coker main fractionator and wet gas compressor, DNREC noted the refinery's high rate of flaring and therefore recommended that enforcement for such incidents be processed periodically instead of individually.
    - Within that notice the following flaring events were mentioned:
        - 7/14/16 -released 5,050 lbs of SO_2
        - 10/21/16 - released 191 lbs of SO_2
        - 11/9/16 - released 581 lbs of SO_2
- July 28, 2017 RATA test showed incident report for March 10 flaring with 230 lbs of SO_2 released and 6,100 lbs of CO released from knockout drum being over-pressured; along with another incident report for March 28 flaring releasing over 18 lbs of SO2; and on April 29 a flaring incident report was filed due to accumulation of liquid in the depropanizer resulting in 643 lbs of SO_2 being released.
- December 9, 2016: FCCU wet gas compressor loss led to a flaring incident that released 580 lbs of SO_2.
- November 3, 2015 NOV states flaring in unit 45 which resulted in increased H_2S content in RFG and subsequent combustion in various heaters and boilers leading to several exceedances with a total of 3,070 lbs of SO_2 being released and a violation of permit and CFR limits; 8/21/15 unpermitted release of 9,400 lbs of SO_2 from flare stack and additional 4,200 lbs of SO_2 from 24-K-1 machine mechanical failure and fire; 8/28/15 sour LPG mixture from FCCU gas plant leaked leading to emissions release from open vent valve on fractionator; federally reportable violations include DGA upset causing all affected fuel gas combustion devices to combust non-compliant fuel gas from 8/2/15 to 8/6/15; 8/21/15 FCCU fire caused unpermitted release of 13,600 lbs SO_2 from flare; unpermitted release of 260 lbs H_2S, 5,200 lbs of C3H8 and 3,900 lbs of C3H6 from the FCCU fractionator on 8/28/15.
- January 30, 2014 flaring incident occurred with the FCCU wet gas compressor. The incident report stated that the motherboard shorted and the UPS system for compressors failed, releasing 1,001 lbs of SO_2.
- February 6, 2014 incident report states that a four-hour flaring event caused release of 891 lbs of SO_2 from the north flare stack.

[73] *See, e.g., id.* at 207, 209, 215-16, 371, 373, 376, 389 & 390.
[74] *See, e.g., id.*

- April 11, 2014 loss of power incident report states a power interruption resulting from meteorological conditions led to gas flaring and bypass of the gas Coker CO Boiler and WGS; releasing 187,000 lbs of SO_2, 1,230 lbs of H_2S, 16,500 lbs of CO, 36 lbs HCN, and 221 lbs of NH3, within a duration of 3 hours.
- April 14, 2014 incident report noted the release of 929 lbs of SO_2 in just over an hour of flaring, resulting from pressure rising in the flare recovery heater.
- April 25, 2014 flaring event released 567 lbs of SO_2 in 43 minutes, as a result of the flare recovery unit header rising after an electrical short in the motor.
- May 16, 2014 flaring incident report noted 196 lbs of SO_2 released in 13 mins; flare recovery header rose flaring north and south stacks; caused by recent change in crude blend used to try to stabilize desalters.
- May 22, 2014: a total of 407 lbs of SO_2 was released in 25 minutes from the compressor starting inadvertently when it was partially loaded.[75]

The compliance document spreadsheet lists many other flaring incidents on the following dates: September 15 and December 18, 2014; January 9 and 30, March 13, April 13, May 7, August 21, and October 14 and 29, 2015; January 6, March 18 and 23, July 28, and November 18, 2016; March 9, April 13, and May 12 and 26, 2017; February 7 and March 20, 2018; March 4 and 11, April 12, May 14, June 3, August 28, and November 22, 2019.[76]

As noted above, DNREC recognized the seriousness of the flaring problems at the refinery and therefore has asked DCRC to report flaring events periodically rather than individually–given the substantial number of events. This is further evidence demonstrating the need for a compliance schedule to assure compliance with both the flaring requirements in the draft permit and the consent decree.[77]

The incidences of non-compliance and compliance issues in these documents demonstrate that additional terms and conditions are required to assure compliance with applicable requirements from which DCRC has deviated. They also show that there are terms that could and should be easily added to address these problems. For example, a number of releases of pollutants were attributed to power losses or electrical shortages – such that back-up power or other power planning arrangements could correct and prevent this problem.[78] As EPA stated in a prior objection to a Title V permit, "a facility that is operating in violation of an applicable requirement must be made subject to a compliance schedule even if a related enforcement action remains unresolved as of the date of permit issuance."[79]

The compliance spreadsheet is based on DCRC's compliance reports and documents provided by DNREC from the time period of 2014 to 2020. This is information DNREC has at

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[75] *See* DCRC Compliance Spreadsheet created by Earthjustice (attached).
[76] *Id.*
[77] *See* DCRC Compliance Document, *2017-03-30 AQM Notice of Violation Memo (P# AQM-003-00016);* Consent Decree, *United States, et al. v. Motiva Enterprises LLC*, No. H-01-0978, at 2, 6, 50, https://www.epa.gov/sites/production/files/documents/condec-motiva-rpt_0.pdf.
[78] *See, e.g.*, DCRC Compliance Spreadsheet created by Earthjustice t at 45-6, 67, 209-10, 229, 242, 245, 248, 259, 281, 379, 391, 486 & 500 (2020).
[79] *In the Matter of the Proposed Operating Permit for Dunkirk Power LLC* (Jan. 11, 2002), 2002 WL 34594852 (E.P.A.).

hand, yet appears to have ignored so far in this permit proceeding. There is no evidence in the Technical Memo showing that DNREC has reviewed or considered any of this information. There is simply a statement that there is "no compliance schedule." Tech. Memo at 19. Based on the information available regarding DNREC's compliance history, DNREC cannot justify refusing to include a compliance schedule, much less in such a cursory fashion.

DNREC must review the available information, including the evidence of non-compliance or compliance issues discussed in these comments and our May 22 comments (at pages 4-5), and ensure that each of the terms and conditions or commitments necessary to come into compliance is incorporated into the final Title V permit for this facility as part of an enforceable compliance schedule, or adequately explain why that is not required.

DNREC should also evaluate and address the extent that ongoing violations could be addressed through adding additional monitoring, recordkeeping, and reporting requirements not currently contained in the draft permit. Based on Commenters' review, additional monitoring, recordkeeping, and reporting requirements targeted at the specific violations and problems identified above, as well as in DNREC's own files, could help remedy these problems. DNREC should ask its own enforcement division and EPA's enforcement division for guidance on what additional terms and conditions are needed to prevent the kinds of problems that DNREC has had in the past. Furthermore, DNREC should consider and discuss with affected members of the public what additional remedies they believe should be evaluated to strengthen protection for public health, including (though it is not directly relevant to this Title V proceeding) working with the legislature to modernize fines from 1970's price levels adjusted for inflation.

Some of the terms and conditions that DNREC should evaluate and consider adding to the permit or otherwise implementing, with public input, include:

- Requirement for back-up power or other steps needed to avoid releases related to power outages.
- Requirements for enhanced monitoring and reporting for flaring incidents and requirements to prevent excessive flaring.
- Additional monitoring for the FCU and FCCU.
- Additional terms or conditions to assure compliance with the Risk Management Program and to satisfy the Department's oversight and enforcement authority pursuant to 40 C.F.R. § 68.215(e).
- Enhanced fenceline monitoring as discussed below.

The permit record ignores DCRC's compliance problems and shows DNREC has not done the minimum needed to evaluate or attempt to address any actual or potential ongoing noncompliance in this draft permit. DNREC's failure to fulfill its responsibility to address the need for a compliance schedule and to include additional requirements in this permit contravenes Congress' clear intent for a Title V permit to serve as a vehicle for bringing sources into full Clean Air Act compliance. To properly implement Title V requirements, DNREC needs to review available compliance information and determine whether DCRC is currently in full compliance with Clean Air Act requirements. If DCRC is not in full compliance (as available evidence suggests), then the Department must incorporate a compliance schedule into the permit for each applicable requirement for which it finds DCRC is in violation. Even if DNREC determines that a compliance schedule is not required, DNREC must provide a reasoned basis

for refusing to add such permit terms. If DNREC maintains that a compliance schedule is not required, Commenters urge DNREC to seek public input regarding enforcement and compliance issues in a valid public hearing and in follow-up discussion with Commenters and other affected community residents. DNREC should not allow incidents like those discussed above to keep occurring without adequate corrective action, information, and emergency response to protect the community.

XI. DNREC SHOULD REQUIRE DCRC TO IMPLEMENT REAL-TIME, OPTICAL REMOTE SENSING AT THE FENCELINE TO ASSURE COMPLIANCE WITH APPLICABLE REQUIREMENTS.

Commenters have highlighted many deficiencies in the draft permit – including a number of illegal exemptions and loopholes, and a failure to include a schedule to assure full compliance with all applicable Clean Air Act requirements (as discussed above).

EPA has recognized the need to use and implement fenceline monitoring at all U.S. petroleum refineries to assure compliance with the National Emission Standards for Hazardous Air Pollutants.[80] Since the time EPA issued that rule, fenceline monitoring has made a great leap forward at some refineries around the nation, particularly those in the Los Angeles area due to implementation of Rule 1180 by the South Coast Air Quality Management District.[81] The Bay Area Air Quality Management District also requires real-time fenceline monitoring for local refineries.[82]

More than just the passive samplers in the NESHAP are required here "to assure compliance" with applicable Clean Air Act requirements, as evidenced by the serious compliance issues as identified in EPA's ECHO database, DNREC's "List of Violations" as of 2019, and DCRC's compliance reports, *see* Part X, *supra*, all of which are due presumably in part to the past authorization of excess emissions during SSM periods through the various unlawful permit loopholes discussed above, *see* Part II, supra. 42 U.S.C. § 7661c(c) (each Title V permit "shall set forth inspection, entry, monitoring, compliance certification, and reporting requirements to assure compliance with the permit terms and conditions").

Here, to satisfy the Act's requirement to include in the permit monitoring and other requirements necessary to assure compliance, and, or alternatively, to address the need for a compliance schedule regarding any continuing compliance concerns, DNREC should do more than just fully implement the NESHAP benzene fenceline monitoring requirements. The South

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[80] 80 Fed. Reg. 75,178 (Dec. 1, 2015); 40 C.F.R. Part 63, subparts CC, UUU (as amended).
[81] S. Coast Air Qual. Mmgt. Dist., Rule 1180 (adopted Dec. 11, 2017), http://www.aqmd.gov/docs/default-source/rule-book/reg-xi/r1180.pdf; S. Coast Air Qual. Mmgt. Dist., Rule 1180 Refinery Fenceline Air Monitoring Plan Guidelines (Dec. 2017), http://www.aqmd.gov/docs/default-source/rule-book/support-documents/1180/rule-1180-guidelines.pdf (attached).
[82] Bay Area Air Qual. Mgmt. Dist., Reg. 12-15-500, https://www.baaqmd.gov/~/media/dotgov/files/rules/regulation-12-rule-15--petroleum-refining-emissions-tracking/documents/rg1215-pdf.pdf?la=en; Bay Area Air Qual. Mgmt. Dist., Fenceline Monitoring Plans, https://www.baaqmd.gov/plans-and-climate/emission-tracking-and-monitoring/fenceline-monitoring-plans.

Coast Air Quality Management District has promulgated an even stronger rule that requires real-time fenceline monitoring at petroleum refineries that assesses additional pollutants – including sulfur dioxide, nitrogen oxides, total volatile organic compounds (non-methane hydrocarbons), and specific VOCs: formaldehyde, acetaldehyde, acrolein, 1,3-butadiene, styrene, BTEX compounds (benzene, toluene, ethylbenzene, xylenes), as well as hydrogen sulfide, carbonyl sulfide, ammonia, black carbon, hydrogen cyanide (and hydrogen fluoride, if used).[83] This rule recognizes the need for and availability of real-time air monitoring equipment, including FTIR (Fourier-transform infrared spectroscopy) and open-path UV-DOAS (ultraviolet differential optical absorption spectroscopy).[84] It requires a refinery to propose a fenceline monitoring plan, and provides for public notice-and-comment on that plan.[85] The Bay Area Air Quality Management District rule also provides a valuable model for DNREC that it must consider implementing in this permit.

Under each of those regulatory frameworks, many refineries have submitted and are implementing real-time fenceline monitoring plans. These comments cite links with plans implemented at some refineries showing DNREC must consider and require similar monitoring in this draft permit.[86]

DNREC should add, at least, the following to the permit:

- Real-time monitoring for all major pollutants emitted, in addition to benzene, similar to the SCAQMD and BAAQMD monitoring plans.[87] For example, the SCAQMD requires, and DNREC should similarly require, fenceline monitoring for at least each of the following pollutants:
    - Criteria air pollutants: Sulfur Dioxide, Nitrogen Oxides
    - Volatile Organic Compounds: e.g., total VOCs (Non-Methane Hydrocarbons), 1,3-Butadiene, Styrene
    - BTEX Compounds (Benzene, Toluene, Ethylbenzene, Xylenes)
    - Other Pollutants: Hydrogen Sulfide, Carbonyl Sulfide, Ammonia, Black Carbon, Hydrogen Cyanide.[88]
- Back-up monitoring if power fails
- Contemporaneous reporting online (so that the public can access the data), with quality assurance weekly; and

[83] S. Coast Air Qual. Mmgt. Dist. Rule 1180, http://www.aqmd.gov/docs/default-source/rule-book/reg-xi/r1180.pdf.
[84] *Id.*; *see also* S. Coast Air Qual. Mmgt. Dist. Rule 1180 Guidelines, http://www.aqmd.gov/docs/default-source/rule-book/support-documents/1180/rule-1180-guidelines.pdf.
[85] *Id.*
[86] *See* S. Coast Air Qual. Mmgt. Dist. Plans, https://www.aqmd.gov/home/rules-compliance/rules/support-documents/rule-1180-refinery-fenceline-monitoring-plans; Bay Area Air Qual. Mgmt. Dist. Fenceline Monitoring Plans, https://www.baaqmd.gov/plans-and-climate/emission-tracking-and-monitoring/fenceline-monitoring-plans.
[87] *Id.*
[88] S. Coast Air Qual. Mmgt. Dist. Rule 1180 Guidelines at 7 tbl. 1, http://www.aqmd.gov/docs/default-source/rule-book/support-documents/1180/rule-1180-guidelines.pdf; *see also* U.S. EPA, Enforcement & Compliance History Online, Detailed Facility Report for DCRC (last visited July 23, 2020), https://echo.epa.gov/detailed-facility-report?fid=110001148598.

- Community alert notification options.
- Publicly accessible online monitoring data reporting.

These are components in the South Coast or Bay Area Air Quality Management District examples discussed above, and there are other components from these examples that DNREC should also consider implementing to assure DCRC's compliance, and avoid upsets and safety concerns similar to those this refinery has experienced in the past. Commenters would be glad to work with DNREC to assist in implementing similar requirements here if DNREC wishes to seek community input.

Thank you for your time and consideration of these comments.

Sincerely,

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IN THE UNITED STATES DISTRICT COURT

FOR THE WESTERN DISTRICT OF TEXAS

WACO DIVISION

SIERRA CLUB	*	
	*	
VS.	*	CIVIL ACTION NO. W-12-CV-108
	*	
ENERGY FUTURE HOLDINGS CORPORATION, LUMINANT GENERATION COMPANY, LLC	*	February 26, 2014

BEFORE THE HONORABLE WALTER S. SMITH, JR., JUDGE PRESIDING
NON JURY TRIAL PROCEEDINGS
VOLUME 3 OF 3

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took it up with the Court on three state law issues. The main issue was that there was no public notice given for that planned maintenance start-up/shutdown amendment that the defendants rely so heavily on. That permit when it was issued in December 2011, no public notice, and that was the issue that we went to court on under state law. We're here under federal law asking this Court to exercise its judgment that Congress gave to this Court. Not to -- we're not asking the Court to substitute -- we're not asking to substitute the judgment of the TCEQ but this Court is amply capable of applying the federal statute and applying those criteria of the affirmative defense if they -- if it applies to the issue of penalties.

Thank you, Your Honor.

THE COURT: It does seem to the Court that what the plaintiff seeks is for this Court to overrule the extensive and complete findings of the Texas Commission on Environmental Quality which is designed to and does regulate facilities such as Big Brown the defendant in this case. I don't think that's normally an appropriate function of federal courts and certainly -- it's certainly something I decline to do and it's something that should only be done in extraordinary circumstances. It would be the finding of the Court that plaintiff has not proved by a preponderance of the evidence that the defendant has violated the Clean Air Act. No injunction will issue. Additionally if necessary the defendant

has established by a preponderance of the evidence all of the ten elements of the affirmative defenses regarding penalties. The judgment will be entered that plaintiff be denied all relief requested.

I assume there is no way plaintiff can be required to pay defendants' attorneys fees in this case. If I'm wrong about that, I would like to be advised.

MR. DAWSON: Yes. There is a procedure for that and I understand it's a post judgment procedure and we intend to follow it.

THE COURT: Then we'll take that up at the proper time.

MR. DAWSON: Thank you, Your Honor.

THE COURT: Court will stand in recess.

(Hearing adjourned at 12:11.)

Detailed Facility Report

Facility Summary

DELAWARE CITY REFINERY
4550 WRANGLE HILL RD, DELAWARE CITY,
DE 19706

FRS (Facility Registry Service) ID: 110001148598
EPA Region: 03
Latitude: 39.591
Longitude: -75.634
Locational Data Source: EIS
Industry:
Indian Country: N

Enforcement and Compliance Summary

Statute	CAA
Insp (5 Years)	3
Date of Last Inspection	07/10/2018
Current Compliance Status	**High Priority Violation**
Qtrs with NC (of 12)	12
Qtrs with Significant Violation	10
Informal Enforcement Actions (5 years)	28
Formal Enforcement Actions (5 years)	3
Penalties from Formal Enforcement Actions (5 years)	$1,017,968
EPA Cases (5 years)	1
Penalties from EPA Cases (5 years)	$20,000
Statute	CWA
Insp (5 Years)	7
Date of Last Inspection	11/08/2019
Current Compliance Status	**Violation Identified**
Qtrs with NC (of 12)	1
Qtrs with Significant Violation	0
Informal Enforcement Actions (5 years)	--
Formal Enforcement Actions (5 years)	1
Penalties from Formal Enforcement Actions (5 years)	$37,888
EPA Cases (5 years)	--
Penalties from EPA Cases (5 years)	--

Statute	EPCRA
Insp (5 Years)	1
Date of Last Inspection	09/10/2015
Current Compliance Status	--
Qtrs with NC (of 12)	--
Qtrs with Significant Violation	--
Informal Enforcement Actions (5 years)	--
Formal Enforcement Actions (5 years)	--
Penalties from Formal Enforcement Actions (5 years)	--
EPA Cases (5 years)	--
Penalties from EPA Cases (5 years)	--
Statute	RCRA
Insp (5 Years)	8
Date of Last Inspection	05/16/2019
Current Compliance Status	**No Violation Identified**
Qtrs with NC (of 12)	1
Qtrs with Significant Violation	0
Informal Enforcement Actions (5 years)	--
Formal Enforcement Actions (5 years)	--
Penalties from Formal Enforcement Actions (5 years)	--
EPA Cases (5 years)	--
Penalties from EPA Cases (5 years)	--

Regulatory Information

Clean Air Act (CAA): Operating Major (DE0000001000300016), Permanently Closed (DE0000001000322216), Operating Major (DE0000001000300404)
Clean Water Act (CWA): Major, Permit Effective (DE0000256)
Resource Conservation and Recovery Act (RCRA): Active (DED002329738), Inactive (DER000501932), Inactive (DED981045412), Active (DEN201000006), Inactive (DED000621409)
Safe Drinking Water Act (SDWA): No Information

Other Regulatory Reports

Air Emissions Inventory (EIS): 588311
Greenhouse Gas Emissions (eGGRT): 1007322
Toxic Releases (TRI): 19706TXCDL2000W
Compliance and Emissions Data Reporting Interface (CEDRI): CEDRI99026

Known Data Problems

Facility/System Characteristics

Facility/System Characteristics

System	Statute	Identifier	Universe	Status	Areas	Permit Expiration Date	Indian Country	Latitude	Longitude
FRS		110001148598					N	39.591	-75.634
RMP	CAA	100000169293		INACTIVE			N		

System	Statute	Identifier	Universe	Status	Areas	Permit Expiration Date	Indian Country	Latitude	Longitude
GHGRP	CAA	1007322	Supplier, Direct Emitter	Subject	General Stationary Fuel Combustion, Electricity Generation, Hydrogen Production, Petroleum Refining, Petroleum Product Supply, Carbon Dioxide (CO_2) Supply		N	39.586667	-75.629722
ICIS-Air	CAA	DE0000001000300016	Major Emissions	Operating	CAAAR, CAAMACT, CAANESH, CAANFRP, CAANSPS, CAANSR, CAAPSD, CAASIP, CAATVP		N	39.581744	-75.5125
RMP	CAA	100000072841		ACTIVE			N		
ICIS-Air	CAA	DE0000001000322216		Permanently Closed			N	39.588611	-75.635555
EIS	CAA	588311		OPERATING			N	39.591	-75.634
CEDRI	CAA	CEDRI99026					N		
CAMDBS	CAA	52193		INACTIVE			N		
ICIS-Air	CAA	DE0000001000300404	Major Emissions	Operating	CAAMACT, CAANSPS, CAASIP, CAATVP		N	39.586682	-75.395833
CAMDBS	CAA	592		ACTIVE			N		
ICIS-NPDES	CWA	DE0000256	Major: NPDES Individual Permit	Effective		07/31/2023	N	39.584999	-75.129167
TRI	EP313	19706TXCDL2000W	Toxics Release Inventory	Last Reported for 2018			N	39.588611	-75.635555
RCRAInfo	RCRA	DED002329738	TSDF	Active (PA)			N	39.586845	-75.631839
RCRAInfo	RCRA	DER000501932	Other	Inactive ( )			N		
RCRAInfo	RCRA	DED981045412	Other	Inactive ( )			N	39.570278	-75.636667
RCRAInfo	RCRA	DEN201000006	LQG	Active (H)			N		
RCRAInfo	RCRA	DED000621409	Other	Inactive ( )			N	39.568889	-75.606944
TSCA	TSCA	TSCA4288					N		
TSCA	TSCA	100605502					N		

Facility Address

System	Statute	Identifier	Facility Name	Facility Address
FRS		110001148598	DELAWARE CITY REFINERY	4550 WRANGLE HILL RD, DELAWARE CITY, DE 19706
RMP	CAA	100000169293	DELAWARE CITY POWER PLANT/VALERO REFINERY	RIVER ROAD ROUTE 9, DELAWARE CITY, DE 19707
GHGRP	CAA	1007322	Delaware City Refinery	4550 WRANGLE HILL ROAD, DELAWARE CITY, DE 19706
ICIS-Air	CAA	DE0000001000300016	DELAWARE CITY REFINING CO-DELAWARE CITY	4550 WRANGLE HILL ROAD, DELAWARE CITY, DE 19706
RMP	CAA	100000072841	DELAWARE CITY REFINING COMPANY, LLC	4550 WRANGLE HILL ROAD, DELAWARE CITY, DE 19706
ICIS-Air	CAA	DE0000001000322216	DELAWARE CITY REFINERY - OLD DATA	2000/4550 WRANGLE HILL ROAD, DELAWARE CITY, DE 19706
EIS	CAA	588311	DELAWARE CITY REFINERY	4550 WRANGLE HILL RD, DELAWARE CITY, DE 19706
CEDRI	CAA	CEDRI99026	DELAWARE CITY REFINERY	4550 WRANGLE HILL RD, DELAWARE CITY, DE 19706
CAMDBS	CAA	52193	DELAWARE CITY REFINERY	DE
ICIS-Air	CAA	DE0000001000300404	DELAWARE CITY REFINING CO-MARKETING TERMINAL	RIVER ROAD & J STREET, DELAWARE CITY, DE 19706
CAMDBS	CAA	592	DELAWARE CITY	DE
ICIS-NPDES	CWA	DE0000256	DELAWARE CITY REFINING CO.	4550 WRANGLE HILL ROAD, DELAWARE CITY, DE 19706
TRI	EP313	19706TXCDL2000W	DELAWARE CITY REFINERY	4550 WRANGLE HILL RD, DELAWARE CITY, DE 19706
RCRAInfo	RCRA	DED002329738	DELAWARE CITY REFINERY	4550 WRANGLE HILL ROAD, DELAWARE CITY, DE 19706
RCRAInfo	RCRA	DER000501932	DELAWARE CITY REFINERY (PREMCOR/VALERO)	2000 WRANGLE ROAD, DELAWARE CITY, DE 19706
RCRAInfo	RCRA	DED981045412	TEXACO REFINING & MARKETING INC	WRANGLE HILL RD, DELAWARE CITY, DE 19706
RCRAInfo	RCRA	DEN201000006	DELAWARE CITY REFINING COMPANY	4550 WRANGLE HILL ROAD, DELAWARE CITY, DE 19706
RCRAInfo	RCRA	DED000621409	DELMARVA POWER & LIGHT CO	DELAWARE CITY POWER PLANT, DELAWARE CITY, DE 19706
TSCA	TSCA	TSCA4288	DELAWARE CITY REFINERY	4550 WRANGLE HILL ROAD, DELAWARE CITY, DE 19706
TSCA	TSCA	100605502	DELAWARE CITY REFINING COMPANY LLC	4550 WRANGLE HILL ROAD, DELAWARE CITY, DE 19706

Facility SIC (Standard Industrial Classification) Codes

System	Identifier	SIC Code	SIC Description
TRI	19706TXCDL2000W	2911	Petroleum Refining
CAMDBS	52193	2911	Petroleum Refining
CAMDBS	592	4911	Electric Services
ICIS-Air	DE0000001000300016	2911	Petroleum Refining

Facility NAICS (North American Industry Classification System) Codes

System	Identifier	NAICS Code	NAICS Description
RMP	100000072841	32411	Petroleum Refineries
RMP	100000169293	32512	Industrial Gas Manufacturing

System	Identifier	SIC Code	SIC Description
ICIS-Air	DE0000001000300404	5171	Petroleum Bulk Stations & Terminals
ICIS-Air	DE0000001000322216	2911	Petroleum Refining
ICIS-NPDES	DE0000256	2911	Petroleum Refining
NPDES	DE0000256	2911	Petroleum Refining

Facility Industrial Effluent Guidelines

Identifier	Effluent Guideline (40 CFR Part)	Effluent Guideline Description
No data records returned		

System	Identifier	NAICS Code	NAICS Description
GHGRP	1007322	324110	Petroleum Refineries
TRI	19706TXCDL2000W	324110	Petroleum Refineries
CAMDBS	52193	324110	Petroleum Refineries
EIS	588311	32411	Petroleum Refineries
CAMDBS	592	221112	Fossil Fuel Electric Power Generation
ICIS-Air	DE0000001000300016	324110	Petroleum Refineries
ICIS-Air	DE0000001000300404	324110	Petroleum Refineries
ICIS-Air	DE0000001000322216	324110	Petroleum Refineries
RCRAInfo	DED000621409	2211	Electric Power Generation, Transmission and Distribution
RCRAInfo	DED002329738	32411	Petroleum Refineries
RCRAInfo	DEN201000006	32411	Petroleum Refineries
RCRAInfo	DER000501932	32411	Petroleum Refineries

Facility Tribe Information

Reservation Name	Tribe Name	EPA Tribal ID	Distance to Tribe (miles)
No data records returned			

Enforcement and Compliance

Compliance Monitoring History (5 years)

Statute	Source ID	System	Activity Type	Compliance Monitoring Type	Lead Agency	Date	Finding (if applicable)
CAA	*DE0000001000300016*	*ICIS-Air*	*Inspection/Evaluation*	*PCE Off-Site*	*State*	*07/07/2020*	
CAA	*DE0000001000300016*	*ICIS-Air*	*Inspection/Evaluation*	*PCE Off-Site*	*State*	*06/18/2020*	
CAA	*DE0000001000300016*	*ICIS-Air*	*Inspection/Evaluation*	*PCE Off-Site*	*State*	*04/20/2020*	
CAA	*DE0000001000300016*	*ICIS-Air*	*Inspection/Evaluation*	*PCE Off-Site*	*State*	*04/20/2020*	
CAA	*DE0000001000300016*	*ICIS-Air*	*Inspection/Evaluation*	*PCE Off-Site*	*State*	*04/14/2020*	
CAA	*DE0000001000300016*	*ICIS-Air*	*Inspection/Evaluation*	*PCE Off-Site*	*State*	*04/09/2020*	
CAA	*DE0000001000300016*	*ICIS-Air*	*Inspection/Evaluation*	*Stack Test*	*State*	*04/08/2020*	*Findings: Pass Pollutants: Methanol*
CAA	*DE0000001000300016*	*ICIS-Air*	*Inspection/Evaluation*	*Stack Test*	*State*	*04/08/2020*	*Findings: Pass Pollutants: Methane*
CAA	*DE0000001000300016*	*ICIS-Air*	*Inspection/Evaluation*	*Stack Test*	*State*	*04/08/2020*	*Findings: Pass Pollutants: Hydrogen*
CAA	*DE0000001000300016*	*ICIS-Air*	*Inspection/Evaluation*	*TV ACC Receipt/Review*	*State*	*02/03/2020*	*Reviewed: 04/14/2020 Facility Reported Deviations*
CAA	*DE0000001000300016*	*ICIS-Air*	*Inspection/Evaluation*	*PCE Off-Site*	*State*	*12/24/2019*	
CAA	*DE0000001000300016*	*ICIS-Air*	*Inspection/Evaluation*	*PCE Off-Site*	*State*	*12/23/2019*	
CAA	*DE0000001000300016*	*ICIS-Air*	*Inspection/Evaluation*	*PCE Off-Site*	*State*	*11/22/2019*	
CAA	*DE0000001000300016*	*ICIS-Air*	*Inspection/Evaluation*	*PCE On-Site Record/Report Review*	*State*	*11/05/2019*	
CAA	*DE0000001000300016*	*ICIS-Air*	*Inspection/Evaluation*	*Stack Test*	*State*	*10/29/2019*	*Findings: Pass Pollutants: NITROGEN OXIDES NO2*
CAA	*DE0000001000300016*	*ICIS-Air*	*Inspection/Evaluation*	*Stack Test*	*State*	*10/29/2019*	*Findings: Pass Pollutants: Sulfuric acid*
CAA	*DE0000001000300016*	*ICIS-Air*	*Inspection/Evaluation*	*Stack Test*	*State*	*10/29/2019*	*Findings: Pass Pollutants: Carbon monoxide*
CAA	*DE0000001000300016*	*ICIS-Air*	*Inspection/Evaluation*	*PCE On-Site Record/Report Review*	*State*	*10/15/2019*	
CAA	*DE0000001000300016*	*ICIS-Air*	*Inspection/Evaluation*	*PCE Off-Site*	*State*	*09/27/2019*	
CAA	*DE0000001000300016*	*ICIS-Air*	*Inspection/Evaluation*	*PCE Off-Site*	*State*	*09/26/2019*	
CAA	*DE0000001000300016*	*ICIS-Air*	*Inspection/Evaluation*	*PCE Off-Site*	*State*	*09/26/2019*	
CAA	*DE0000001000300016*	*ICIS-Air*	*Inspection/Evaluation*	*PCE Off-Site*	*State*	*09/11/2019*	
CAA	*DE0000001000300016*	*ICIS-Air*	*Inspection/Evaluation*	*Stack Test*	*State*	*09/11/2019*	*Findings: Pass Pollutants: TOTAL PARTICULATE MATTER*
CAA	*DE0000001000300016*	*ICIS-Air*	*Inspection/Evaluation*	*PCE Off-Site*	*State*	*09/11/2019*	
CAA	*DE0000001000300016*	*ICIS-Air*	*Inspection/Evaluation*	*PCE Off-Site*	*State*	*09/05/2019*	
CAA	*DE0000001000300016*	*ICIS-Air*	*Inspection/Evaluation*	*PCE Off-Site*	*State*	*09/05/2019*	

Statute	Source ID	System	Activity Type	Compliance Monitoring Type	Lead Agency	Date	Finding (if applicable)
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	PCE Off-Site	State	09/05/2019	
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	08/29/2019	Findings: Pass Pollutants: NITROGEN OXIDES NO2
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	08/28/2019	Findings: Pass Pollutants: NITROGEN OXIDES NO2
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	PCE Off-Site	State	08/28/2019	
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	08/26/2019	Findings: Pass Pollutants: PARTICULATE MATTER < 10 UM
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	08/26/2019	Findings: Pass Pollutants: Sulfuric acid
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	08/26/2019	Findings: Pass Pollutants: TOTAL SUSPENDED PARTICULATE (PHYSICAL PROPERTY)
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	08/22/2019	Findings: Pass Pollutants: Carbon monoxide
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	08/22/2019	Findings: Pass Pollutants: VOLATILE ORGANIC COMPOUNDS (VOCS)
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	08/22/2019	Findings: Pass Pollutants: PARTICULATE MATTER < 10 UM
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	08/22/2019	Findings: Pass Pollutants: TOTAL PARTICULATE MATTER
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	08/21/2019	Findings: Pass Pollutants: TOTAL PARTICULATE MATTER
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	08/20/2019	Findings: Pass Pollutants: TOTAL PARTICULATE MATTER
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	08/15/2019	Findings: Fail Pollutants: Sulfuric acid
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	08/15/2019	Findings: Pass Pollutants: NITROGEN OXIDES NO2
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	08/15/2019	Findings: Pass Pollutants: Carbon monoxide
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	PCE Off-Site	State	08/13/2019	
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	08/08/2019	Findings: Pass Pollutants: Carbon monoxide
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	08/08/2019	Findings: Pass Pollutants: Sulfuric acid
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	08/08/2019	Findings: Pass Pollutants: NITROGEN OXIDES NO2
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	PCE On-Site Record/Report Review	State	08/06/2019	
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	07/25/2019	Findings: Pass Pollutants: NITROGEN OXIDES NO2
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	07/23/2019	Findings: Pass Pollutants: Sulfuric acid
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	07/23/2019	Findings: Pass Pollutants: TOTAL SUSPENDED PARTICULATE (PHYSICAL PROPERTY)
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	07/23/2019	Findings: Pass Pollutants: PARTICULATE MATTER < 10 UM
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	07/18/2019	Findings: Pass Pollutants: VOLATILE ORGANIC COMPOUNDS (VOCS)
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	07/18/2019	Findings: Pass Pollutants: PARTICULATE MATTER < 10 UM
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	07/18/2019	Findings: Pass Pollutants: TOTAL SUSPENDED PARTICULATE (PHYSICAL PROPERTY)
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	07/16/2019	Findings: Pass Pollutants: PARTICULATE MATTER < 10 UM
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	07/16/2019	Findings: Pass Pollutants: VOLATILE ORGANIC COMPOUNDS (VOCS)
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	07/16/2019	Findings: Pass Pollutants: TOTAL SUSPENDED PARTICULATE (PHYSICAL PROPERTY)
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	07/10/2019	Findings: Pass Pollutants: TOTAL SUSPENDED PARTICULATE (PHYSICAL PROPERTY)
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	07/10/2019	Findings: Pass Pollutants: PARTICULATE MATTER < 10 UM
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	07/10/2019	Findings: Pass Pollutants: VOLATILE ORGANIC COMPOUNDS (VOCS)
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	07/10/2019	Findings: Pass Pollutants: Sulfuric acid
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	07/10/2019	Findings: Pass Pollutants: Carbon monoxide
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	PCE On-Site Record/Report Review	State	06/12/2019	
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	PCE Off-Site	State	06/03/2019	
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	05/23/2019	Findings: Pass Pollutants: VOLATILE ORGANIC COMPOUNDS (VOCS)
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	05/23/2019	Findings: Pass Pollutants: Sulfuric acid
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	05/23/2019	Findings: Pass Pollutants: PARTICULATE MATTER < 10 UM
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	05/23/2019	Findings: Pass Pollutants: TOTAL SUSPENDED PARTICULATE (PHYSICAL PROPERTY)
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	05/15/2019	Findings: Pass Pollutants: Methanol
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	05/15/2019	Findings: Pass Pollutants: Hydrogen
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	05/15/2019	Findings: Pass Pollutants: Methane
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	PCE Off-Site	State	05/14/2019	
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	PCE Off-Site	State	05/03/2019	
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	PCE Off-Site	State	04/29/2019	
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	PCE Off-Site	State	04/12/2019	
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	PCE On-Site Record/Report Review	State	04/02/2019	
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	PCE Off-Site	State	03/28/2019	

Statute	Source ID	System	Activity Type	Compliance Monitoring Type	Lead Agency	Date	Finding (if applicable)
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	PCE Off-Site	State	03/25/2019	
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	PCE Off-Site	State	03/15/2019	
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	PCE Off-Site	State	03/11/2019	
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	PCE Off-Site	State	03/01/2019	
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	PCE Off-Site	State	02/20/2019	
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	PCE Off-Site	State	02/04/2019	
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	PCE Off-Site	State	02/04/2019	
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	TV ACC Receipt/Review	State	02/01/2019	Reviewed: 03/28/2019 Facility Reported Deviations
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	PCE Off-Site	State	02/01/2019	
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	PCE Off-Site	State	02/01/2019	
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	PCE Off-Site	State	01/24/2019	
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	11/29/2018	Findings: Pass Pollutants: Ammonia
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	PCE Off-Site	State	11/28/2018	
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	PCE Off-Site	State	11/28/2018	
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	10/25/2018	Findings: Pass Pollutants: Sulfuric acid
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	10/25/2018	Findings: Fail Pollutants: VOLATILE ORGANIC COMPOUNDS (VOCS)
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	10/25/2018	Findings: Fail Pollutants: Carbon monoxide
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	10/25/2018	Findings: Pass Pollutants: Hydrogen sulfide
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	10/25/2018	Findings: Pass Pollutants: NITROGEN OXIDES NO2
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	10/02/2018	Findings: Pass Pollutants: NITROGEN OXIDES NO2
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	PCE Off-Site	State	09/26/2018	
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	PCE Off-Site	State	09/11/2018	
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	08/30/2018	Findings: Pass Pollutants: Methanol
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	08/30/2018	Findings: Pass Pollutants: Hydrogen
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	08/30/2018	Findings: Pass Pollutants: Methane
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	08/03/2018	Findings: Pass Pollutants: Carbon monoxide
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	08/03/2018	Findings: Pass Pollutants: NITROGEN OXIDES NO2
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	08/03/2018	Findings: Pass Pollutants: Sulfuric acid
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	07/30/2018	Findings: Pass Pollutants: Sulfuric acid
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	07/30/2018	Findings: Pass Pollutants: Carbon monoxide
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	07/30/2018	Findings: Pass Pollutants: NITROGEN OXIDES NO2
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	07/20/2018	Findings: Pass Pollutants: VOLATILE ORGANIC COMPOUNDS (VOCS)
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	07/20/2018	Findings: Pass Pollutants: PARTICULATE MATTER < 10 UM
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	07/20/2018	Findings: Pass Pollutants: TOTAL SUSPENDED PARTICULATE (PHYSICAL PROPERTY)
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	07/19/2018	Findings: Pass Pollutants: TOTAL SUSPENDED PARTICULATE (PHYSICAL PROPERTY)
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	07/19/2018	Findings: Pass Pollutants: VOLATILE ORGANIC COMPOUNDS (VOCS)
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	07/19/2018	Findings: Pass Pollutants: PARTICULATE MATTER < 10 UM
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	07/18/2018	Findings: Pass Pollutants: Sulfuric acid
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	07/18/2018	Findings: Pass Pollutants: Carbon monoxide
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	07/18/2018	Findings: Pass Pollutants: VOLATILE ORGANIC COMPOUNDS (VOCS)
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	07/18/2018	Findings: Pass Pollutants: PARTICULATE MATTER < 10 UM
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	07/18/2018	Findings: Pass Pollutants: TOTAL SUSPENDED PARTICULATE (PHYSICAL PROPERTY)
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	06/27/2018	Findings: Pass Pollutants: PARTICULATE MATTER < 10 UM
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	06/27/2018	Findings: Pass Pollutants: VOLATILE ORGANIC COMPOUNDS (VOCS)
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	06/27/2018	Findings: Pass Pollutants: Sulfuric acid
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	PCE Off-Site	State	06/19/2018	
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	PCE Off-Site	State	06/19/2018	
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	06/06/2018	Findings: Pass Pollutants: Sulfuric acid
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	06/06/2018	Findings: Pass Pollutants: TOTAL SUSPENDED PARTICULATE (PHYSICAL PROPERTY)
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	05/31/2018	Findings: Pass Pollutants: Sulfuric acid
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	05/31/2018	Findings: Pass Pollutants: TOTAL PARTICULATE MATTER

Statute	Source ID	System	Activity Type	Compliance Monitoring Type	Lead Agency	Date	Finding (if applicable)
CAA	DE00000010000300016	ICIS-Air	Inspection/Evaluation	PCE On-Site Record/Report Review	State	05/23/2018	
CAA	DE00000010000300016	ICIS-Air	Inspection/Evaluation	PCE Off-Site	State	03/22/2018	
CAA	DE00000010000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	03/05/2018	Findings: Fail Pollutants: TOTAL PARTICULATE MATTER
CAA	DE00000010000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	02/27/2018	Findings: Fail Pollutants: TOTAL PARTICULATE MATTER
CAA	DE00000010000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	02/26/2018	Findings: Fail Pollutants: TOTAL PARTICULATE MATTER
CAA	DE00000010000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	02/22/2018	Findings: Fail Pollutants: TOTAL PARTICULATE MATTER
CAA	DE00000010000300016	ICIS-Air	Inspection/Evaluation	PCE Off-Site	State	02/22/2018	
CAA	DE00000010000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	02/21/2018	Findings: Fail Pollutants: TOTAL PARTICULATE MATTER
CAA	DE00000010000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	02/08/2018	Findings: Pass Pollutants: VOLATILE ORGANIC COMPOUNDS (VOCS)
CAA	DE00000010000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	02/08/2018	Findings: Pass Pollutants: PARTICULATE MATTER < 10 UM
CAA	DE00000010000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	02/08/2018	Findings: Pass Pollutants: Carbon monoxide
CAA	DE00000010000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	02/08/2018	Findings: Pass Pollutants: NITROGEN OXIDES NO2
CAA	DE00000010000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	02/07/2018	Findings: Pass Pollutants: PARTICULATE MATTER < 10 UM
CAA	DE00000010000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	02/07/2018	Findings: Pass Pollutants: Carbon monoxide
CAA	DE00000010000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	02/07/2018	Findings: Pass Pollutants: NITROGEN OXIDES NO2
CAA	DE00000010000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	02/07/2018	Findings: Pass Pollutants: VOLATILE ORGANIC COMPOUNDS (VOCS)
CAA	DE00000010000300016	ICIS-Air	Inspection/Evaluation	TV ACC Receipt/Review	State	02/02/2018	Reviewed: 03/22/2018 Facility Reported Deviations
CAA	DE00000010000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	12/21/2017	Findings: Fail Pollutants: PARTICULATE MATTER < 10 UM
CAA	DE00000010000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	12/14/2017	Findings: Pass Pollutants: Carbon monoxide
CAA	DE00000010000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	12/14/2017	Findings: Pass Pollutants: Sulfuric acid
CAA	DE00000010000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	12/14/2017	Findings: Pass Pollutants: NITROGEN OXIDES NO2
CAA	DE00000010000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	11/29/2017	Findings: Pass Pollutants: Lead
CAA	DE00000010000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	11/29/2017	Findings: Pass Pollutants: TOTAL SUSPENDED PARTICULATE (PHYSICAL PROPERTY)
CAA	DE00000010000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	11/29/2017	Findings: Pass Pollutants: Sulfuric acid
CAA	DE00000010000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	11/29/2017	Findings: Pass Pollutants: VOLATILE ORGANIC COMPOUNDS (VOCS)
CAA	DE00000010000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	11/29/2017	Findings: Pass Pollutants: Nickel
CAA	DE00000010000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	11/29/2017	Findings: Pass Pollutants: TOTAL PARTICULATE MATTER
CAA	DE00000010000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	11/22/2017	Findings: Fail Pollutants: TOTAL PARTICULATE MATTER
CAA	DE00000010000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	11/22/2017	Findings: Pass Pollutants: NITROGEN OXIDES NO2
CAA	DE00000010000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	11/22/2017	Findings: Pass Pollutants: VOLATILE ORGANIC COMPOUNDS (VOCS)
CAA	DE00000010000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	11/22/2017	Findings: Pass Pollutants: Carbon monoxide
CAA	DE00000010000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	11/21/2017	Findings: Pass Pollutants: Carbon monoxide
CAA	DE00000010000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	11/21/2017	Findings: Pass Pollutants: VOLATILE ORGANIC COMPOUNDS (VOCS)
CAA	DE00000010000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	11/21/2017	Findings: Fail Pollutants: TOTAL PARTICULATE MATTER
CAA	DE00000010000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	11/21/2017	Findings: Pass Pollutants: NITROGEN OXIDES NO2
CAA	DE00000010000300016	ICIS-Air	Inspection/Evaluation	PCE Off-Site	State	11/16/2017	
CAA	DE00000010000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	11/15/2017	Findings: Pass Pollutants: Sulfuric acid
CAA	DE00000010000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	11/15/2017	Findings: Pass Pollutants: Carbon monoxide
CAA	DE00000010000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	11/15/2017	Findings: Pass Pollutants: NITROGEN OXIDES NO2
CAA	DE00000010000300016	ICIS-Air	Inspection/Evaluation	PCE Off-Site	State	09/26/2017	
CAA	DE00000010000300016	ICIS-Air	Inspection/Evaluation	FCE On-Site	State	09/13/2017	
CAA	DE00000010000300016	ICIS-Air	Inspection/Evaluation	PCE On-Site Record/Report Review	State	09/06/2017	
CAA	DE00000010000300016	ICIS-Air	Inspection/Evaluation	PCE On-Site Record/Report Review	State	08/29/2017	
CAA	DE00000010000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	08/24/2017	Findings: Pass Pollutants: Carbon monoxide
CAA	DE00000010000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	08/24/2017	Findings: Pass Pollutants: VOLATILE ORGANIC COMPOUNDS (VOCS)
CAA	DE00000010000300016	ICIS-Air	Inspection/Evaluation	PCE Off-Site	State	08/24/2017	
CAA	DE00000010000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	08/24/2017	Findings: Pass Pollutants: TOTAL SUSPENDED PARTICULATE (PHYSICAL PROPERTY)
CAA	DE00000010000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	08/24/2017	Findings: Pass Pollutants: Sulfuric acid
CAA	DE00000010000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	08/24/2017	Findings: Pass Pollutants: PARTICULATE MATTER < 10 UM
CAA	DE00000010000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	08/23/2017	Findings: Pass Pollutants: VOLATILE ORGANIC COMPOUNDS (VOCS)
CAA	DE00000010000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	08/23/2017	Findings: Pass Pollutants: Sulfuric acid

Statute	Source ID	System	Activity Type	Compliance Monitoring Type	Lead Agency	Date	Finding (if applicable)
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	08/23/2017	Findings: Pass Pollutants: TOTAL SUSPENDED PARTICULATE (PHYSICAL PROPERTY)
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	08/23/2017	Findings: Pass Pollutants: PARTICULATE MATTER < 10 UM
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	PCE On-Site Record/Report Review	State	08/18/2017	
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	08/17/2017	Findings: Pass Pollutants: TOTAL SUSPENDED PARTICULATE (PHYSICAL PROPERTY)
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	08/17/2017	Findings: Pass Pollutants: Sulfuric acid
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	08/17/2017	Findings: Pass Pollutants: PARTICULATE MATTER < 10 UM
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	08/17/2017	Findings: Pass Pollutants: VOLATILE ORGANIC COMPOUNDS (VOCS)
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	08/15/2017	Findings: Pass Pollutants: PARTICULATE MATTER < 10 UM
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	08/15/2017	Findings: Pass Pollutants: TOTAL SUSPENDED PARTICULATE (PHYSICAL PROPERTY)
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	08/15/2017	Findings: Pass Pollutants: VOLATILE ORGANIC COMPOUNDS (VOCS)
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	08/15/2017	Findings: Pass Pollutants: Sulfuric acid
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	PCE On-Site Record/Report Review	State	08/09/2017	
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	PCE On-Site Record/Report Review	State	07/31/2017	
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	07/26/2017	Findings: Pass Pollutants: Lead
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	07/26/2017	Findings: Pass Pollutants: VOLATILE ORGANIC COMPOUNDS (VOCS)
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	PCE On-Site Record/Report Review	State	07/26/2017	
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	07/26/2017	Findings: Pass Pollutants: Hydrogen cyanide
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	07/26/2017	Findings: Pass Pollutants: TOTAL SUSPENDED PARTICULATE (PHYSICAL PROPERTY)
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	07/26/2017	Findings: Pass Pollutants: Sulfuric acid
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	PCE Off-Site	State	07/17/2017	
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	07/11/2017	Findings: Pass Pollutants: NITROGEN OXIDES NO2
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	PCE On-Site Record/Report Review	State	06/28/2017	
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	PCE Off-Site	State	04/04/2017	
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	PCE Off-Site	State	03/30/2017	
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	PCE Off-Site	State	03/07/2017	
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	TV ACC Receipt/Review	State	01/31/2017	Reviewed: 03/07/2017 Facility Reported Deviations
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	12/22/2016	Findings: Pass Pollutants: Methanol
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	12/22/2016	Findings: Pass Pollutants: Methane
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	12/22/2016	Findings: Pass Pollutants: Hydrogen
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	12/15/2016	Findings: Pass Pollutants: VOLATILE ORGANIC COMPOUNDS (VOCS)
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	12/15/2016	Findings: N/A Pollutants: TOTAL HYDROCARBONS
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	12/15/2016	Findings: Pass Pollutants: NITROGEN OXIDES NO2
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	12/15/2016	Findings: Pass Pollutants: Carbon monoxide
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	PCE On-Site Record/Report Review	State	12/13/2016	
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	PCE Off-Site	State	12/09/2016	
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	12/01/2016	Findings: Pass Pollutants: PARTICULATE MATTER < 10 UM
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	12/01/2016	Findings: Pass Pollutants: PARTICULATE MATTER < 10 UM
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	12/01/2016	Findings: Pass Pollutants: Sulfuric acid
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	11/11/2016	Findings: Pass Pollutants: Sulfuric acid
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	11/11/2016	Findings: Pass Pollutants: PARTICULATE MATTER < 10 UM
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	11/11/2016	Findings: Pass Pollutants: PARTICULATE MATTER < 10 UM
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	09/23/2016	Findings: Pass Pollutants: VOLATILE ORGANIC COMPOUNDS (VOCS)
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	09/23/2016	Findings: Pass Pollutants: Sulfuric acid
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	09/23/2016	Findings: Pass Pollutants: TOTAL SUSPENDED PARTICULATE (PHYSICAL PROPERTY)
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	09/23/2016	Findings: Pass Pollutants: Carbon monoxide
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	09/23/2016	Findings: Pass Pollutants: PARTICULATE MATTER < 10 UM
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	09/21/2016	Findings: Pass Pollutants: VOLATILE ORGANIC COMPOUNDS (VOCS)
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	09/21/2016	Findings: Pass Pollutants: Sulfuric acid
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	09/21/2016	Findings: Pass Pollutants: TOTAL SUSPENDED PARTICULATE (PHYSICAL PROPERTY)
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	09/21/2016	Findings: Pass Pollutants: PARTICULATE MATTER < 10 UM
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	PCE Off-Site	State	09/07/2016	

Statute	Source ID	System	Activity Type	Compliance Monitoring Type	Lead Agency	Date	Finding (if applicable)
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	09/02/2016	Findings: Pass Pollutants: NITROGEN OXIDES NO2
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	09/02/2016	Findings: Pass Pollutants: Carbon monoxide
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	09/02/2016	Findings: Pass Pollutants: VOLATILE ORGANIC COMPOUNDS (VOCS)
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	09/02/2016	Findings: Pass Pollutants: Sulfuric acid
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	09/02/2016	Findings: Pass Pollutants: PARTICULATE MATTER < 10 UM
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	08/31/2016	Findings: Pass Pollutants: NITROGEN OXIDES NO2
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	08/31/2016	Findings: Pass Pollutants: Sulfuric acid
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	08/31/2016	Findings: Pass Pollutants: Carbon monoxide
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	08/31/2016	Findings: Pass Pollutants: VOLATILE ORGANIC COMPOUNDS (VOCS)
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	08/31/2016	Findings: Pass Pollutants: PARTICULATE MATTER < 10 UM
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	08/19/2016	Findings: Pass Pollutants: VOLATILE ORGANIC COMPOUNDS (VOCS)
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	08/19/2016	Findings: Pass Pollutants: TOTAL SUSPENDED PARTICULATE (PHYSICAL PROPERTY)
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	08/19/2016	Findings: Pass Pollutants: PARTICULATE MATTER < 10 UM
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	08/17/2016	Findings: Pass Pollutants: TOTAL SUSPENDED PARTICULATE (PHYSICAL PROPERTY)
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	08/17/2016	Findings: Pass Pollutants: PARTICULATE MATTER < 10 UM
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	08/17/2016	Findings: Pass Pollutants: VOLATILE ORGANIC COMPOUNDS (VOCS)
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	PCE Off-Site	State	08/15/2016	
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	PCE Off-Site	State	08/01/2016	
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	PCE Off-Site	State	07/18/2016	
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	PCE On-Site Record/Report Review	State	06/14/2016	
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	05/17/2016	Findings: Pass Pollutants: Carbon monoxide
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	05/17/2016	Findings: Pass Pollutants: NITROGEN OXIDES NO2
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	05/16/2016	Findings: Pass Pollutants: NITROGEN OXIDES NO2
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	05/16/2016	Findings: Pass Pollutants: Carbon monoxide
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	PCE Off-Site	State	05/16/2016	
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	04/21/2016	Findings: Pass Pollutants: NITROGEN OXIDES NO2
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	04/20/2016	Findings: Pass Pollutants: NITROGEN OXIDES NO2
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	04/20/2016	Findings: Pass Pollutants: NITROGEN OXIDES NO2
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	03/17/2016	Findings: Pass Pollutants: Sulfuric acid
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	PCE Off-Site	State	03/15/2016	
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	TV ACC Receipt/Review	State	03/15/2016	
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	PCE Off-Site	State	02/29/2016	
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	TV ACC Receipt/Review	State	02/01/2016	
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	11/17/2015	Findings: Pass Pollutants: Sulfuric acid
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	11/17/2015	Findings: Pass Pollutants: PARTICULATE MATTER < 10 UM
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	11/17/2015	Findings: Pass Pollutants: TOTAL PARTICULATE MATTER
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	11/10/2015	Findings: Pass Pollutants: VOLATILE ORGANIC COMPOUNDS (VOCS)
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	11/10/2015	Findings: Pass Pollutants: TOTAL PARTICULATE MATTER
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	11/10/2015	Findings: Pass Pollutants: Sulfuric acid
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	PCE On-Site Record/Report Review	State	11/10/2015	
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	11/05/2015	Findings: Pass Pollutants: Carbon monoxide
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	11/05/2015	Findings: Pass Pollutants: Sulfuric acid
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	11/05/2015	Findings: Pass Pollutants: VOLATILE ORGANIC COMPOUNDS (VOCS)
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	11/05/2015	Findings: Pass Pollutants: TOTAL PARTICULATE MATTER
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	11/04/2015	Findings: Pass Pollutants: VOLATILE ORGANIC COMPOUNDS (VOCS)
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	11/04/2015	Findings: Pass Pollutants: TOTAL PARTICULATE MATTER
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	11/04/2015	Findings: Pass Pollutants: Sulfuric acid
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	PCE Off-Site	State	11/03/2015	
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	PCE Off-Site	State	09/02/2015	
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	PCE Off-Site	State	08/26/2015	
CAA	DE0000001000300016	ICIS-Air	Inspection/Evaluation	Stack Test	State	08/20/2015	Findings: Pass Pollutants: Sodium cyanide

Statute	Source ID	System	Activity Type	Compliance Monitoring Type	Lead Agency	Date	Finding (if applicable)
CAA	*DE0000001000300016*	*ICIS-Air*	*Inspection/Evaluation*	*PCE Off-Site*	*State*	*07/31/2015*	
CAA	*DE0000001000300404*	*ICIS-Air*	*Inspection/Evaluation*	*PCE Off-Site*	*State*	*02/10/2020*	
CAA	*DE0000001000300404*	*ICIS-Air*	*Inspection/Evaluation*	*TV ACC Receipt/Review*	*State*	*01/31/2020*	*Reviewed: 02/10/2020 Facility Reported No Deviations*
CAA	*DE0000001000300404*	*ICIS-Air*	*Inspection/Evaluation*	*PCE Off-Site*	*State*	*09/05/2019*	
CAA	*DE0000001000300404*	*ICIS-Air*	*Inspection/Evaluation*	*PCE Off-Site*	*State*	*03/28/2019*	
CAA	*DE0000001000300404*	*ICIS-Air*	*Inspection/Evaluation*	*PCE Off-Site*	*State*	*03/25/2019*	
CAA	*DE0000001000300404*	*ICIS-Air*	*Inspection/Evaluation*	*TV ACC Receipt/Review*	*State*	*02/01/2019*	*Reviewed: 03/28/2019 Facility Reported No Deviations*
CAA	*DE0000001000300404*	*ICIS-Air*	*Inspection/Evaluation*	*PCE Off-Site*	*State*	*08/22/2018*	
CAA	DE0000001000300404	ICIS-Air	Inspection/Evaluation	FCE On-Site	State	07/10/2018	
CAA	*DE0000001000300404*	*ICIS-Air*	*Inspection/Evaluation*	*PCE Off-Site*	*State*	*03/22/2018*	
CAA	*DE0000001000300404*	*ICIS-Air*	*Inspection/Evaluation*	*TV ACC Receipt/Review*	*State*	*01/31/2018*	*Reviewed: 03/22/2018 Facility Reported No Deviations*
CAA	*DE0000001000300404*	*ICIS-Air*	*Inspection/Evaluation*	*TV ACC Receipt/Review*	*State*	*01/30/2017*	*Reviewed: 03/06/2017 Facility Reported No Deviations*
CAA	*DE0000001000300404*	*ICIS-Air*	*Inspection/Evaluation*	*PCE Off-Site*	*State*	*08/30/2016*	
CAA	DE0000001000300404	ICIS-Air	Inspection/Evaluation	FCE On-Site	State	04/26/2016	
CAA	*DE0000001000300404*	*ICIS-Air*	*Inspection/Evaluation*	*TV ACC Receipt/Review*	*State*	*01/29/2016*	*Reviewed: 03/09/2016 Facility Reported No Deviations*
CAA	*DE0000001000300404*	*ICIS-Air*	*Inspection/Evaluation*	*PCE Off-Site*	*State*	*07/29/2015*	
CWA	3600888446	ICIS	Inspection/Evaluation	Evaluation	EPA	05/22/2018	
CWA	3600888446	ICIS	Inspection/Evaluation	Evaluation	EPA	05/22/2018	
CWA	DE0000256	ICIS-NPDES	Inspection/Evaluation	Base Program - Sampling	State	11/08/2019	
CWA	*DE0000256*	*ICIS-NPDES*	*Inspection/Evaluation*	*Base Program - Reconnaissance without Sampling*	*State*	*12/19/2018*	
CWA	DE0000256	ICIS-NPDES	Inspection/Evaluation	Base Program - Sampling	State	11/20/2018	
CWA	DE0000256	ICIS-NPDES	Inspection/Evaluation	Base Program - Sampling	State	11/14/2017	
CWA	*DE0000256*	*ICIS-NPDES*	*Inspection/Evaluation*	*Base Program - Reconnaissance without Sampling*	*State*	*11/08/2017*	
CWA	*DE0000256*	*ICIS-NPDES*	*Inspection/Evaluation*	*Base Program - Reconnaissance without Sampling*	*State*	*12/14/2016*	
CWA	DE0000256	ICIS-NPDES	Inspection/Evaluation	Base Program - Sampling	State	12/09/2016	
CWA	*DE0000256*	*ICIS-NPDES*	*Inspection/Evaluation*	*Base Program - Reconnaissance without Sampling*	*State*	*12/16/2015*	
CWA	DE0000256	ICIS-NPDES	Inspection/Evaluation	Base Program - Sampling	State	12/15/2015	
EPCRA	1800041744	ICIS	Inspection/Evaluation	Data Quality	EPA	09/10/2015	
RCRA	*DED002329738*	*RCRAInfo*		*FINANCIAL RECORD REVIEW*	*State*	*05/20/2020*	*No Violations Or Compliance Issues Were Found*
RCRA	*DED002329738*	*RCRAInfo*		*FINANCIAL RECORD REVIEW*	*State*	*09/20/2019*	*No Violations Or Compliance Issues Were Found*
RCRA	DED002329738	RCRAInfo		GROUNDWATER MONITORING EVALUATION	State	05/16/2019	No Violations Or Compliance Issues Were Found
RCRA	DED002329738	RCRAInfo		GROUNDWATER MONITORING EVALUATION	State	10/08/2018	No Violations Or Compliance Issues Were Found
RCRA	*DED002329738*	*RCRAInfo*		*FINANCIAL RECORD REVIEW*	*State*	*06/27/2018*	*No Violations Or Compliance Issues Were Found*
RCRA	DED002329738	RCRAInfo		GROUNDWATER MONITORING EVALUATION	State	05/22/2018	No Violations Or Compliance Issues Were Found
RCRA	*DED002329738*	*RCRAInfo*		*FINANCIAL RECORD REVIEW*	*State*	*05/18/2017*	*No Violations Or Compliance Issues Were Found*
RCRA	DED002329738	RCRAInfo		GROUNDWATER MONITORING EVALUATION	State	05/09/2017	No Violations Or Compliance Issues Were Found
RCRA	*DED002329738*	*RCRAInfo*		*FINANCIAL RECORD REVIEW*	*State*	*08/08/2016*	*No Violations Or Compliance Issues Were Found*
RCRA	DED002329738	RCRAInfo		GROUNDWATER MONITORING EVALUATION	State	06/15/2016	No Violations Or Compliance Issues Were Found
RCRA	DED002329738	RCRAInfo		GROUNDWATER MONITORING EVALUATION	State	05/26/2016	No Violations Or Compliance Issues Were Found
RCRA	DED002329738	RCRAInfo		COMPLIANCE EVALUATION INSPECTION ON-SITE	State	08/04/2015	No Violations Or Compliance Issues Were Found
RCRA	*DEN201000006*	*RCRAInfo*		*NON-FINANCIAL RECORD REVIEW*	*State*	*11/01/2019*	*Violations Or Compliance Issues Were Found*
RCRA	DEN201000006	RCRAInfo		COMPLIANCE EVALUATION INSPECTION ON-SITE	State	04/04/2017	Violations Or Compliance Issues Were Found

Entries in italics are not counted in EPA compliance monitoring strategies or annual results.

Compliance Summary Data

Statute	Source ID	Current SNC (Significant Noncompliance)/HPV (High Priority Violation)	Current As Of	Qtrs with NC (Noncompliance) (of 12)	Data Last Refreshed
CAA	DE0000001000300016	Yes	07/25/2020	12	07/24/2020
CAA	DE0000001000322216	No	07/25/2020	0	07/24/2020
CAA	DE0000001000300404	No	07/25/2020	0	07/24/2020
CWA	DE0000256	No	03/31/2020	1	07/24/2020

Statute	Source ID	Current SNC (Significant Noncompliance)/HPV (High Priority Violation)	Current As Of	Qtrs with NC (Noncompliance) (of 12)	Data Last Refreshed
RCRA	DED002329738	No	07/25/2020	0	07/24/2020
RCRA	DER000501932	No	07/25/2020	0	07/24/2020
RCRA	DED981045412	No	07/25/2020	0	07/24/2020
RCRA	DEN201000006	No	07/25/2020	1	07/24/2020
RCRA	DED000621409	No	07/25/2020	0	07/24/2020

Three-Year Compliance History by Quarter

Statute	Program/Pollutant/Violation Type				QTR 1	QTR 2	QTR 3	QTR 4	QTR 5	QTR 6	QTR 7	QTR 8	QTR 9	QTR 10	QTR 11	QTR 12+
CAA (Source ID: DE0000001000300016)					10/01-12/31/17	01/01-03/31/18	04/01-06/30/18	07/01-09/30/18	10/01-12/31/18	01/01-03/31/19	04/01-06/30/19	07/01-09/30/19	10/01-12/31/19	01/01-03/31/20	04/01-06/30/20	07/01-09/30/20
	Facility-Level Status				**Violation Identified**	**Violation Identified**	**High Priority Violation**	**High Priority Violation**	**High Priority Violation**	**High Priority Violation**	**High Priority Violation**	**High Priority Violation**	**High Priority Violation**	**High Priority Violation**	**High Priority Violation**	**High Priority Violation**
	HPV History						Unaddressed-State	Unaddressed-State	Unaddressed-State	Unaddressed-State	Unaddressed-State	Addressed-State	Unaddressed-State	Unaddressed-State	Unaddressed-State	Unaddressed-State
	Violation Type	**Agency**	**Programs**	**Pollutants**												
CAA	HPV	DE	CAANSPS, CAASIP, CAATVP	PARTICULATE MATTER < 10 UM			06/19/2018	→	→	→	→	→	→	→	→	→
CAA	HPV	DE	CAANSPS, CAASIP, CAATVP	Sulfuric acid									10/04/2019	→	→	→
CAA	FRV	DE	CAANSPS, CAASIP, CAATVP	Carbon monoxide	11/16/2017											
CAA	FRV	DE	CAANSPS, CAASIP, CAATVP	Carbon monoxide					11/28/2018							
CAA	FRV	DE	CAANSPS, CAASIP, CAATVP	Carbon monoxide, Ammonia, Hydrogen sulfide, Hydrogen cyanide, Sulfur dioxide					11/28/2018							
CAA	FRV	DE	CAANSPS, CAASIP, CAATVP	Carbon monoxide, Ammonia, Hydrogen sulfide, Hydrogen cyanide, Sulfur dioxide							05/03/2019					
CAA	FRV	DE	CAANSPS, CAASIP, CAATVP	Sulfur dioxide									12/24/2019			
CAA	FRV	DE	CAANSPS, CAASIP, CAATVP	Sulfur dioxide							04/12/2019					
CAA	FRV	DE	CAANSPS, CAASIP, CAATVP	Sulfur dioxide		02/22/2018										
CAA	FRV	DE	CAANSPS, CAASIP, CAATVP	Sulfur dioxide				09/26/2018								
CAA	FRV	DE	CAANSPS, CAASIP, CAATVP	Sulfur dioxide						03/11/2019						
CAA	FRV	DE	CAANSPS, CAASIP, CAATVP	TOTAL HYDROCARBONS, Carbon monoxide, Hydrogen sulfide, NITROGEN OXIDES NO2, Sulfur dioxide							05/14/2019					
CAA	FRV	DE	CAASIP, CAATVP	Carbon monoxide, VISIBLE EMISSIONS, TOTAL PARTICULATE MATTER, NITROGEN OXIDES NO2, Sulfur dioxide											04/09/2020	
CAA	FRV	DE	CAASIP, CAATVP	Propylene, 2-Methylpropane (Isobutane), Propane									12/23/2019			
CAA	FRV	DE	CAASIP, CAATVP	TOTAL PARTICULATE MATTER			06/19/2018									
CAA	FRV	DE	CAATVP	Carbon monoxide, VOLATILE ORGANIC COMPOUNDS (VOCS)								07/17/2019				
CAA	FRV	DE	CAATVP	Sulfur dioxide							06/03/2019					
CAA (Source ID: DE0000001000322216)					10/01-12/31/17	01/01-03/31/18	04/01-06/30/18	07/01-09/30/18	10/01-12/31/18	01/01-03/31/19	04/01-06/30/19	07/01-09/30/19	10/01-12/31/19	01/01-03/31/20	04/01-06/30/20	07/01-09/30/20
	Facility-Level Status				**No Violation Identified**	**No Violation Identified**	**No Violation Identified**	**No Violation Identified**	**No Violation Identified**	**No Violation Identified**	**No Violation Identified**	**No Violation Identified**	**No Violation Identified**	**No Violation Identified**	**No Violation Identified**	**No Violation Identified**
	HPV History															
	Violation Type	**Agency**	**Programs**	**Pollutants**												
CAA (Source ID: DE0000001000300404)					10/01-12/31/17	01/01-03/31/18	04/01-06/30/18	07/01-09/30/18	10/01-12/31/18	01/01-03/31/19	04/01-06/30/19	07/01-09/30/19	10/01-12/31/19	01/01-03/31/20	04/01-06/30/20	07/01-09/30/20
	Facility-Level Status				**No Violation Identified**	**No Violation Identified**	**No Violation Identified**	**No Violation Identified**	**No Violation Identified**	**No Violation Identified**	**No Violation Identified**	**No Violation Identified**	**No Violation Identified**	**No Violation Identified**	**No Violation Identified**	**No Violation Identified**
	HPV History															
	Violation Type	**Agency**	**Programs**	**Pollutants**												

Statute	Program/Pollutant/Violation Type				QTR 1	QTR 2	QTR 3	QTR 4	QTR 5	QTR 6	QTR 7	QTR 8	QTR 9	QTR 10	QTR 11	QTR 12	QTR 13+
	CWA (Source ID: DE0000256)				04/01-06/30/17	07/01-09/30/17	10/01-12/31/17	01/01-03/31/18	04/01-06/30/18	07/01-09/30/18	10/01-12/31/18	01/01-03/31/19	04/01-06/30/19	07/01-09/30/19	10/01-12/31/19	01/01-03/31/20	04/01-07/24/20
	Facility-Level Status				**No Violation Identified**	**No Violation Identified**	**No Violation Identified**	**No Violation Identified**	**No Violation Identified**	**No Violation Identified**	**No Violation Identified**	**No Violation Identified**	**No Violation Identified**	**No Violation Identified**	**No Violation Identified**	**Violation Identified**	**Undetermined**
	Quarterly Noncompliance Report History									Resolved						Other Violation	
	Pollutant	**Disch Point**	**Mon Loc**	**Freq**													
CWA	Nitrogen, ammonia total [as N] E	601 - A	Effluent Gross	NMth						**52%**							
	Late or Missing Discharge Monitoring Report (DMR) Measurements																
	Counts of Missing DMR Measurements																169

Statute	Program/Pollutant/Violation Type		QTR 1	QTR 2	QTR 3	QTR 4	QTR 5	QTR 6	QTR 7	QTR 8	QTR 9	QTR 10	QTR 11	QTR 12+
RCRA (Source ID: DED000621409)			10/01-12/31/17	01/01-03/31/18	04/01-06/30/18	07/01-09/30/18	10/01-12/31/18	01/01-03/31/19	04/01-06/30/19	07/01-09/30/19	10/01-12/31/19	01/01-03/31/20	04/01-06/30/20	07/01-09/30/20
	Facility-Level Status		**No Violation Identified**	**No Violation Identified**	**No Violation Identified**	**No Violation Identified**	**No Violation Identified**	**No Violation Identified**	**No Violation Identified**	**No Violation Identified**	**No Violation Identified**	**No Violation Identified**	**No Violation Identified**	**No Violation Identified**
RCRA (Source ID: DED002329738)			10/01-12/31/17	01/01-03/31/18	04/01-06/30/18	07/01-09/30/18	10/01-12/31/18	01/01-03/31/19	04/01-06/30/19	07/01-09/30/19	10/01-12/31/19	01/01-03/31/20	04/01-06/30/20	07/01-09/30/20
	Facility-Level Status		**No Violation Identified**	**No Violation Identified**	**No Violation Identified**	**No Violation Identified**	**No Violation Identified**	**No Violation Identified**	**No Violation Identified**	**No Violation Identified**	**No Violation Identified**	**No Violation Identified**	**No Violation Identified**	**No Violation Identified**
RCRA (Source ID: DED981045412)			10/01-12/31/17	01/01-03/31/18	04/01-06/30/18	07/01-09/30/18	10/01-12/31/18	01/01-03/31/19	04/01-06/30/19	07/01-09/30/19	10/01-12/31/19	01/01-03/31/20	04/01-06/30/20	07/01-09/30/20
	Facility-Level Status		**No Violation Identified**	**No Violation Identified**	**No Violation Identified**	**No Violation Identified**	**No Violation Identified**	**No Violation Identified**	**No Violation Identified**	**No Violation Identified**	**No Violation Identified**	**No Violation Identified**	**No Violation Identified**	**No Violation Identified**
RCRA (Source ID: DEN201000006)			10/01-12/31/17	01/01-03/31/18	04/01-06/30/18	07/01-09/30/18	10/01-12/31/18	01/01-03/31/19	04/01-06/30/19	07/01-09/30/19	10/01-12/31/19	01/01-03/31/20	04/01-06/30/20	07/01-09/30/20
	Facility-Level Status		**No Violation Identified**	**No Violation Identified**	**No Violation Identified**	**No Violation Identified**	**No Violation Identified**	**No Violation Identified**	**No Violation Identified**	**No Violation Identified**	**Violation Identified**	**No Violation Identified**	**No Violation Identified**	**No Violation Identified**
	Violation	**Agency**												
RCRA	262.A: Generators - General	DE									11/01/2019-12/19/2019			
RCRA (Source ID: DER000501932)			10/01-12/31/17	01/01-03/31/18	04/01-06/30/18	07/01-09/30/18	10/01-12/31/18	01/01-03/31/19	04/01-06/30/19	07/01-09/30/19	10/01-12/31/19	01/01-03/31/20	04/01-06/30/20	07/01-09/30/20
	Facility-Level Status		**No Violation Identified**	**No Violation Identified**	**No Violation Identified**	**No Violation Identified**	**No Violation Identified**	**No Violation Identified**	**No Violation Identified**	**No Violation Identified**	**No Violation Identified**	**No Violation Identified**	**No Violation Identified**	**No Violation Identified**

Informal Enforcement Actions (5 Years)

Statute	System	Source ID	Type of Action	Lead Agency	Date
CAA	ICIS-Air	DE0000001000300016	Notice of Violation	State	07/09/2020
CAA	ICIS-Air	DE0000001000300016	Notice of Violation	State	05/18/2020
CAA	ICIS-Air	DE0000001000300016	Notice of Violation	State	04/07/2020
CAA	ICIS-Air	DE0000001000300016	Notice of Violation	State	02/21/2020
CAA	ICIS-Air	DE0000001000300016	Notice of Violation	State	02/10/2020
CAA	ICIS-Air	DE0000001000300016	Notice of Violation	State	09/12/2019
CAA	ICIS-Air	DE0000001000300016	Notice of Violation	State	05/17/2019
CAA	ICIS-Air	DE0000001000300016	Notice of Violation	State	05/09/2019
CAA	ICIS-Air	DE0000001000300016	Notice of Violation	State	03/16/2019
CAA	ICIS-Air	DE0000001000300016	Notice of Violation	State	12/08/2018
CAA	ICIS-Air	DE0000001000300016	Notice of Violation	State	12/06/2018
CAA	ICIS-Air	DE0000001000300016	Notice of Violation	State	10/13/2018
CAA	ICIS-Air	DE0000001000300016	Notice of Violation	State	07/21/2018
CAA	ICIS-Air	DE0000001000300016	Notice of Violation	State	06/21/2018
CAA	ICIS-Air	DE0000001000300016	Notice of Violation	State	03/01/2018
CAA	ICIS-Air	DE0000001000300016	Notice of Violation	State	11/25/2017
CAA	ICIS-Air	DE0000001000300016	Notice of Violation	State	09/29/2017
CAA	ICIS-Air	DE0000001000300016	Notice of Violation	State	07/21/2017
CAA	ICIS-Air	DE0000001000300016	Notice of Violation	State	04/10/2017
CAA	ICIS-Air	DE0000001000300016	Notice of Violation	State	04/03/2017
CAA	ICIS-Air	DE0000001000300016	Notice of Violation	State	12/15/2016
CAA	ICIS-Air	DE0000001000300016	Notice of Violation	State	09/15/2016
CAA	ICIS-Air	DE0000001000300016	Notice of Violation	State	08/18/2016
CAA	ICIS-Air	DE0000001000300016	Notice of Violation	State	08/08/2016
CAA	ICIS-Air	DE0000001000300016	Notice of Violation	State	07/21/2016

Statute	System	Source ID	Type of Action	Lead Agency	Date
CAA	ICIS-Air	DE0000001000300016	Notice of Violation	State	05/18/2016
CAA	ICIS-Air	DE0000001000300016	Notice of Violation	State	03/03/2016
CAA	ICIS-Air	DE0000001000300016	Notice of Violation	State	11/07/2015
RCRA	*RCRAInfo*	*DEN201000006*	*DE NOTICE OF VIOLATION (NOV)*	*State*	*11/19/2019*
RCRA	*RCRAInfo*	*DEN201000006*	*DE LETTER OF WARNING (LOW)*	*State*	*05/05/2017*

Entries in italics are not counted as "informal enforcement actions" in EPA policies pertaining to enforcement response tools.

Formal Enforcement Actions (5 Years)

Statute	System	Law/Section	Source ID	Action Type	Case No.	Lead Agency	Case Name	Issued/Filed Date	Settlements/Actions	Settlement/Action Date	Federal Penalty	State/Local Penalty	SEP Cost	Comp Action Cost
CAA	ICIS-Air	OTHER	AIR/DE0000001000300016	Administrative - Formal	DE000A0000100030001601437	State	1-27-20 Settlement Agreement	01/27/2020	1	01/27/2020	$0	$0	$0	$0
CAA	ICIS-Air	OTHER	AIR/DE0000001000300016	Administrative - Formal	DE000A0000100030001601436	State	2019-A-0043	11/05/2019	1	11/05/2019	$0	$67,968	$0	$0
CAA	ICIS-Air	OTHER	AIR/DE0000001000300016	Administrative - Formal	DE000A0000100030001601366	State	7-11-19 Settlement Agreement	07/11/2019	1	07/11/2019	$0	$950,000	$0	$0
CAA	ICIS	211	ICIS/3600046837	Administrative - Formal	EF-2016-8205	EPA	Delaware City Refining Company	11/18/2015	1	11/18/2015	$20,000	$0	$0	$112,000
CERCLA	ICIS	103A	ICIS/3600046837	Administrative - Formal	03-2015-0119	EPA	DELAWARE CITY REFINING COMPANY, LLC	09/29/2015	1	09/29/2015	$73,114	$0	$0	$1,500
CWA	ICIS-NPDES	OTHER	NPDES/DE0000256	Administrative - Formal	DE-12408	State		03/05/2018	1	03/05/2018	$0	$37,888	$0	$0

Environmental Conditions

Water Quality

Permit ID	Combined Sewer System?	Number of CSO (Combined Sewer Overflow) Outfalls	12-Digit WBD (Watershed Boundary Dataset) HUC (RAD (Reach Address Database))	WBD (Watershed Boundary Dataset) Subwatershed Name (RAD (Reach Address Database))	State Water Body Name (ICIS (Integrated Compliance Information System))	Impaired Waters	Impaired Class	Causes of Impairment(s) by Group(s)	Watershed with ESA (Endangered Species Act)-listed Aquatic Species?
DE0000256			020402050703	Red Lion Creek-Delaware River	DELAWARE RIVER	No			Yes

Water Body Designated Uses

Reach Code	Water Body Name	Exceptional Use	Recreational Use	Aquatic Life Use	Shellfish Use	Beach Closure Within Last Year	Beach Closure Within Last Two Years
02040205000479		No	No	No	No	No	No

Air Quality

Nonattainment Area?	Pollutant(s)	Applicable Nonattainment Standard(s)
Yes	Ozone	8-Hour Ozone (1997), 8-Hour Ozone (2008), 8-Hour Ozone (2015)
No	Lead	
Yes	Particulate Matter	PM-2.5 (1997), PM-2.5 (2006)
No	Carbon Monoxide	
No	Nitrogen Dioxide	
No	Sulfur Dioxide	

Pollutants

Toxics Release Inventory History of Reported Chemicals Released in Pounds per Year at Site

Air Pollutant Report TRI Pollution Prevention Report

TRI Facility ID	Year	Total Air Emissions	Surface Water Discharges	Off-Site Transfers to POTWs (Publicly Owned Treatment Works)	Underground Injections	Releases to Land	Total On-site Releases	Total Off-site Transfers
19706TXCDL2000W	2018	560,364	5,104,867	0		76	5,665,307	79,363

TRI Facility ID	Year	Total Air Emissions	Surface Water Discharges	Off-Site Transfers to POTWs (Publicly Owned Treatment Works)	Underground Injections	Releases to Land	Total On-site Releases	Total Off-site Transfers
19706TXCDL2000W	2017	519,955	3,475,891	0		128	3,995,974	87,795
19706TXCDL2000W	2016	241,709	2,456,378	0		114	2,698,201	129,306
19706TXCDL2000W	2015	359,811	3,368,031	0		324	3,728,166	276,212
19706TXCDL2000W	2014	407,021	2,748,504	0		2,253	3,157,778	193,524
19706TXCDL2000W	2013	400,442	2,640,461	0		2,646	3,043,549	179,454
19706TXCDL2000W	2012	277,512	3,412,489	0			3,690,001	232,552
19706TXCDL2000W	2011	166,423	979,479	0			1,145,902	631,535
19706TXCDL2000W	2010	52,221	380,082	0			432,303	102,099
19706TXCDL2000W	2009	243,062	1,353,221	0			1,596,283	88,327

Toxics Release Inventory Total Releases and Transfers in Pounds by Chemical and Year

Chemical Name	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009
1,1,1-TRICHLOROETHANE										
1,2,4-TRIMETHYLBENZENE	970	815	803	1,025	1,264	1,208	1,175	989	185	953
1,2-DICHLOROPROPANE										
1,3-BUTADIENE	274	250	273	490	581	396	569	525		534
1,3-DICHLOROPROPYLENE										
2,4-DIMETHYLPHENOL	168	165	165	157	173	179	173	114	40	147
2-METHOXYETHANOL										
ACETALDEHYDE										
ALUMINUM OXIDE (FIBROUS FORMS)										
AMMONIA	73,997	63,939	26,164	26,936	30,683	36,039	29,084	15,480		12,317
ANTHRACENE	6	6	5	15	15	15	15	15		15
ASBESTOS (FRIABLE)	77,940	80,505	85,321	220,500	166,240	125,560	232,180	595,620	98,300	
BENZENE	4,760	7,560	6,398	5,849	7,308	9,121	11,997	8,010	2,603	14,175
BENZO(G,H,I)PERYLENE	5	5	5	5	5	5	5	5	3	6
CARBON DISULFIDE	1,443	1,223	1,055	1,108	1,229	1,169	1,246	343		784
CARBONYL SULFIDE	596	482	632	479	490	668	537	2,827		19,937
CHLORINE										
CHROMIUM COMPOUNDS(EXCEPT CHROMITE ORE MINED IN THE TRANSVAAL REGION)										
COBALT	291	320	252							
COBALT COMPOUNDS										
COPPER COMPOUNDS										
CREOSOTE	651	2,428	40,583	52,854	29,383	20,174				
CRESOL (MIXED ISOMERS)	337	330	330	313	345	359	358	367		343
CUMENE	339	355	3,172	3,035	2,995	3,197	361	234	119	404
CYANIDE COMPOUNDS	148	145	145	138	152	158	548	1,245		1,985
CYCLOHEXANE	1,899	2,348	1,891	1,787	1,788	1,845	1,822	1,251		1,034
DIETHANOLAMINE										5
DIOXIN AND DIOXIN-LIKE COMPOUNDS (in grams)	1	1	1	1	1	1	1	0		0
ETHYLBENZENE	1,710	2,498	1,805	1,879	1,973	2,087	2,224	2,040	430	2,066
ETHYLENE	3,697	2,962	5,760	6,151	8,135	1,920	4,782	3,701		9,053
ETHYLENE GLYCOL	192	483								252
FORMALDEHYDE										
FORMIC ACID										5
HYDROCHLORIC ACID (1995 AND AFTER ACID AEROSOLS ONLY)	225	214	164	172	201	192	364	51		262
HYDROGEN CYANIDE	150,549	22,581	18,316	33,621	936	1,500	2,985	5,240		1,312
HYDROGEN SULFIDE	14,441	11,846	19,583	15,480	12,421	20,891	14,977			
LEAD COMPOUNDS	604	580	210	603	147	160	126	113	144	1,750
MANGANESE										
MANGANESE COMPOUNDS										

Chemical Name	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009
MERCURY COMPOUNDS	89	98	100	99	59	79	65	31		27
METHANOL		2,151	4,845	5,309	5,153	5,467	5,896	4,198		
METHYL TERT-BUTYL ETHER										
MOLYBDENUM TRIOXIDE	30	59	14	19	15	14				32,098
N-BUTYL ALCOHOL										
N-HEXANE	15,954	17,693	19,735	18,572	20,076	30,090	19,937	13,508	7,965	10,440
NAPHTHALENE	2,168	1,982	1,962	2,042	2,164	2,293	2,007	1,383	661	2,970
NICKEL						39,813				
NICKEL COMPOUNDS			5,912					32,159		29,865
NITRATE COMPOUNDS	5,098,700	3,472,895	2,451,026	3,365,078	2,742,685	2,631,359	3,406,388	974,323	380,000	1,336,142
PHENANTHRENE	9	16	7	218	6	6	7	12		15
PHENOL	281	303	300	293	324	308	313	373		442
PHOSPHORIC ACID										
POLYCYCLIC AROMATIC COMPOUNDS	270	239	208	217	244	228	243	95	411	883
PROPYLENE	4,010	4,980	4,907	5,073	6,529	8,602	12,778	21,913	34,800	62,512
SODIUM HYDROXIDE (SOLUTION)										
SODIUM NITRITE										
SODIUM SULFATE (SOLUTION)										
STYRENE	12	16	14	12	16	18	21	15		23
SULFURIC ACID (1994 AND AFTER ACID AEROSOLS ONLY)	273,190	360,895	107,808	217,011	289,749	257,679	147,486	68,400		81,589
TERT-BUTYL ALCOHOL									3,870	4,517
TETRACHLOROETHYLENE	7	8	4	9	5	6	8	10		71
TOLUENE	8,928	14,874	12,104	11,381	12,378	14,183	14,748	14,636	2,722	17,309
VANADIUM COMPOUNDS										33,655
XYLENE (MIXED ISOMERS)	5,779	5,520	5,528	6,448	5,433	6,014	7,128	8,212	2,149	4,713
ZINC COMPOUNDS										

Demographic Profile

EJSCREEN EJ Indexes

Eleven primary environmental justice (EJ) indexes of EJSCREEN, EPA's screening tool for EJ concerns. EPA uses these indexes to identify geographic areas that may warrant further consideration or analysis for potential EJ concerns. The index values below are for the Census block group in which the facility is located. Note that use of these indexes does not designate an area as an "EJ community" or "EJ facility." EJSCREEN provides screening level indicators, not a determination of the existence or absence of EJ concerns. For more information, see the EJSCREEN home page.

Census Block Group EJ Indexes (percentile)	
Particulate Matter (PM 2.5)	35.5
Ozone NATA Diesel PM	34.7
NATA Air Toxics Cancer Risk	35.4
NATA Respiratory Hazard Index (HI)	37.7
Traffic Proximity	26.4
Lead Paint Indicator	28.6
Superfund Proximity	3.2
Risk Management Plan (RMP) Proximity	6.1
Hazardous Waste Proximity	14.6
Wastewater Discharge Proximity	18.7

Number of EJ Indexes Above 80th Percentile
0

View EJSCREEN Report

Demographic Profile of Surrounding Area (3 Miles)

This section provides demographic information regarding the community surrounding the facility. ECHO compliance data alone are not sufficient to determine whether violations at a particular facility had negative impacts on public health or the environment. Statistics are based upon the 2010 U.S. Census and 2006-2010 American Community Survey 5-Year Summary and are accurate to the extent that the facility latitude and longitude listed below are correct. EPA's spatial processing methodology considers the overlap between the selected radii and the census blocks (for U.S. Census demographics) and census block groups (for ACS demographics) in determining the demographics surrounding the facility. For more detail about this methodology, see the DFR Data Dictionary.

General Statistics	
Total Persons	13,807
Population Density	593/sq.mi.
Percent Minority	39%
Households in Area	4,633
Housing Units in Area	4,841
Households on Public Assistance	70
Persons Below Poverty Level	3,238

Geography	
Radius of Selected Area	3 mi.
Center Latitude	39.591
Center Longitude	-75.634
Land Area	82%
Water Area	18%

Income Breakdown - Households (%)	
Less than $15,000	217 (4.91%)
$15,000 - $25,000	291 (6.58%)
$25,000 - $50,000	942 (21.31%)
$50,000 - $75,000	850 (19.23%)
Greater than $75,000	2,121 (47.98%)

Age Breakdown - Persons (%)	
Children 5 years and younger	866 (6%)
Minors 17 years and younger	3,619 (26%)
Adults 18 years and older	10,189 (74%)
Seniors 65 years and older	1,256 (9%)

Race Breakdown - Persons (%)	
White	8,789 (64%)
African-American	3,716 (27%)
Hispanic-Origin	721 (5%)
Asian/Pacific Islander	674 (5%)
American Indian	10 (0%)
Other/Multiracial	619 (4%)

Education Level (Persons 25 & older) - Persons (%)	
Less than 9th Grade	236 (2.75%)
9th through 12th Grade	744 (8.65%)
High School Diploma	3,096 (36.01%)
Some College/2-year	2,600 (30.24%)
B.S./B.A. (Bachelor of Science/Bachelor of Arts) or More	1,921 (22.35%)

DCRC Compliance Documents from DNREC					
Date	**Category**	**Title (From PDF)**	**Applicable Requirement/Issue**	**Plant Unit/s**	**Compliance Issues Identified in DNREC Documents**
Apr. 4, 2014	annual reports	2014-04-04 2013 BWON Annual Report (subpart FF) (P# AQM-003-00016)	CAA		
Jan. 30, 2015	annual reports	2015-01-30 Annual Compliance Cert & Semi-Annual Report (P# AQM-003-00016)	CAA	facility wide	Pg. 20- Identification Deviation (reports leak; states that records could not be located for a 3 day leak series); Pg.21 similar; Pg.22 stack report submittted 78 days late states shipping company error; pg. 23 reports 127 days of 4 tanks without gaskets & on pg. 45 states they are not actually required and will be asking for this change in next permit ; pg. 29 stating EPA daily visual emissions test not performed for 3 days; pg.37- again daily emission test not performed from 7/1/14 to 1/28/2015; attachment 5 pg.139 report of discharges in excess (20 total for 2014).
Fe.25.2015	annual reports	2015-02-25 Annual Compliance Cert. Review Checklist (P# AQM-003-00016)	CAA- title V ; 7 Del. Admin Code §1130	facility wide	pg. lists pollutants facility is known for (NO2, SO2,CO,PM total, PM10,VOC and other but does not list others in the line provided)
Jul. 23, 2015	annual reports	2015-07-23 NOx Cap Report (P# AQM-003-00016)	CAA	NOx Cap Report -all cap units	1650 TPY cap for whole facility in 2015; the report lists 1775.13 but there is a provision in permit allowing upt o an increase of 1,500 TPY .
Mar.28, 2019	annual reports	2019-03-28 Combined Annual & Semi-Annual Compliance Cert Review Checklist (P#-AQM-003-00016)	permit AQM-003/00016; title VI	facility wide	states on pg. 7 that there were some violations found-all not immediately corrected (10)
Jan. 29, 2014	CEMS & Relative Accuracy Test Audits (RATAs)	2014-01-29 4Q 2013 CEMS Report (P# AQM-003-00016)	40 CFR 60.7 (c)&(d) & Title V	FCCU; H2S in fuel Gas; Sulfur Recovery Units I &II	Sulfur Recovery Unit (SCOT I) stack S-203 had 1.2 % downtime leading to excess emission (4 times the drift specification due to aily calibration error) pg. 10-11
Jan. 29, 2014	CEMS & Relative Accuracy Test Audits (RATAs)	2014-01-29 4Q 2013 CEMS Report T5 (P# AQM-003-00016)	CAA	FCU; FCCU; Boilers 1,2,3,4; DCPP Boiler stack; CCU I&II	crude unit heater pg.3 cause for excess emissions was they were routed away from Nox control device for maintence activity ; pg.6 FCU reason for excess emissions was coker was tripped off due to boiler feed water pump malfunction eleveated CO for 6 minutes ; pg.16-17p Boiler 4 more than 1% downtime; pg.25,26,28 37-H-1 various reasons more than 1% downtime; pg. 35 lists 2 times the unit failed (spt. 6 & 7); pg.39 FCCU 2.4% downtime for various reasons (maintenance/calibration);
Apr. 30, 2014	CEMS & Relative Accuracy Test Audits (RATAs)	2014-04-30 1Q 2014 CEMS Report (P# AQM-003-00016)	CAA	FCCU; H2S in fuel Gas; Sulfur Recovery Units I &II	FCCU 3% downtime ; pg.9-10 SCOT I 3% downtime power interruption causing exceeding emissions of 12 hour rolling average of 250 ppmv;
Apr. 30, 2014	CEMS & Relative Accuracy Test Audits (RATAs)	2014-04-30 1Q 2014 CEMS Report T5 (P# AQM-003-00016)	CAA	FCU; FCCU; Boilers 1,2,3,4; DCPP Boiler stack; CCU I&II	pg.21 Boiler 2-4 power interruption leading to excess emissions and opacity exceeded for 3 minutes in any hour and 15 min in 24 hr period
Jul. 30, 2014	CEMS & Relative Accuracy Test Audits (RATAs)	2014-07-30 2Q 2014 CEMS Report T5 (P# AQM-003-00016)	CAA	FCU; FCCU; Boilers 1,2,3,4; DCPP Boiler stack; CCU I&II	pg. 11 fluid cooking unit excess emissions for 6 hrs b/c personell lowered excess air to CO boiler to control furnace temp. ;

Date	Category	Title (From PDF)	Applicable Requirement/Issue	Plant Unit/s	Compliance Issues Identified in DNREC Documents
Oct. 30, 2014	CEMS & Relative Accuracy Test Audits (RATAs)	2014-10-30 3Q 2014 CEMS Report (P# AQM-003-00016)	40 CFR 60.7 (c)&(d) & Title V	FCCU CO	pg. 3 3 dates with excess emissions (1) 8/19/14 electrical disturbance from fault delmarva power transmissions triped CO boiler (2) 8/22/14 tube leak (3) 9/16/14 returning to service;
Oct. 30, 2014	CEMS & Relative Accuracy Test Audits (RATAs)	2014-10-30 3Q 2014 CEMS Report T5 (P# AQM-003-00016)	CAA	FCU; FCCU; Boilers 1,2,3,4; DCPP Boiler stack; CCU I&II	Pg.11 CCU 2 excess start up emissions ; pg. 12 Ccu excess start up emissions & emission spike during firing testing
Jan. 29, 2015	CEMS & Relative Accuracy Test Audits (RATAs)	2015-01-29 4Q 2014 CEMS Report (P# AQM-003-00016)	CAA	FCCU; H2S in fuel Gas; Sulfur Recovery Units I &II	pg.3 damper on OOS burner failed to open boiler couldn't not control CO emissions;
Jan. 29, 2015	CEMS & Relative Accuracy Test Audits (RATAs)	2015-01-29 4Q 2014 CEMS Report T5 (P# AQM-003-00016)	CAA	FCU;FCCU; Boilers ,2,3,4; DCPP Boiler stack; CCU I&II	Pg.8 CCU 1 non load testing performed on combustion turbine after turn around on unit; Pg. 9 same as pg. 8; pg. 12 CCU 2 end cap on duct burner #4 broke off
Apr. 30, 2015	CEMS & Relative Accuracy Test Audits (RATAs)	2015-04-30 1Q 2015 CEMS Report T5 (P# AQM-003-00016)	CAA	FCU;FCCU; Boilers ,2,3,4; DCPP Boiler stack; CCU I&II	pg.21 Boiler 2-4- cause being boiler 3decreased rate causing opacity to exceed
Jul. 30, 2015	CEMS & Relative Accuracy Test Audits (RATAs)	2015-07-30 2Q 2015 CEMS Report (P# AQM-003-00016)	40 CFR 60.7 (c)&(d) & Title V	FCCU CO	pg.3 operator adjusting air to regenerator causing spike; pg. 11 listing 3 times unit failed test; pg. 13 listing unit failed twice; PG.25 SRU StackS-804 SCOT 2 booster blower tripped causing SCOT 2 to trip on high leading to SO2 exceedance;
Jul. 30, 2015	CEMS & Relative Accuracy Test Audits (RATAs)	2015-07-30 2Q 2015 CEMS Report T5 (P# AQM-003-00016)	CAA	FCU;FCCU; Boilers ,2,3,4; DCPP Boiler stack; CCU I&II	Pg. 5 Fluid Cooking Unit CO exceedance as a result of equipment malfunction in attempt to isolate FCU CO Boiler and send flue gas to backup for control;
Oct. 29, 2015	CEMS & Relative Accuracy Test Audits (RATAs)	2015-10-29 3Q 2015 CEMS Report (P# AQM-003-00016)	40 CFR 60.7 (c)&(d) & Title V	FCCU CO ; H2S fuel gas ; SRU stack S-804	pg.3 lists 3 instances for emission exceedance (1) 8/21/15 FCCU unit upset b/c emergency shutdown (2) 9/18/15 transition from full to partial burn (3) erratic FCCU regenerator temperatures ; pg. 9 H2S fuel gas list 3 instances (1) 8/2/15 upset in DGA regenerator at FCCU cause exceedance of 3 hr limit (2) 8/9/15 ongoing issues (3) 8/21/15 emergency shutdown; pg. 15 SRU stack S-804So2 list SCOT-2 booster blower trip ;
Jan. 1, 2016	CEMS & Relative Accuracy Test Audits (RATAs)	2016-01-29 4Q 2015 CEMS Report (P# AQM-003-00016)	40 CFR 60.7 (c)&(d) & Title V	FCCU; H2S in fuel Gas; Sulfur Recovery Units I &II; Flares North & South	pg. 3 FCCU CO- 3 dates with excess emisiions (1) 10/17/15 lift air blower tripped (2) adjusting generator temperature for Nox control lead to spike in CO (3) lift air blower tripped; pg. 11 lists twice unit failed; pg. 14 failed unit once; pg. 24 SRU stack S-203 caused by electrical upset caused trip;
Jan. 30, 2017	CEMS & Relative Accuracy Test Audits (RATAs)	2017-01-30 4Q 2016 CEMS Report (P# AQM-003-00016)	40 CFR 60.7 (c)&(d) & Title V	FCCU; H2S in fuel Gas; Sulfur Recovery Units I &II; Flares North & South	Pg. 3 FCCU CO outlet damper forced draft fan to close causing trip and spike of CO emissions; pg.9 lists two times when the FCCU SO2 CEMs exceeded full span (1) 8/25/16 for 2 hrs (2) 8/25/16 for 6 hrs; pg. 12 list time unit 23 failed ; pg. 19 failed again, pg. 25 failed; pg. 42 incident report mentions flaring even on June 28 releasing 27,300 lb of sulfur dioxide and 145 lb of hydrogen sulfide & flaring event on jul. 14 released 5,050 b of sulfur dioxide; pg. 51 additional flare releasing 580 lbs sulfur oxide;

Date	Category	Title (From PDF)	Applicable Requirement/Issue	Plant Unit/s	Compliance Issues Identified in DNREC Documents
Apr. 27, 2017	CEMS & Relative Accuracy Test Audits (RATAs)	2017-04-27 1Q 2017 CEMS Report (P# AQM-003-00016)	40 CFR 60.7 (c)&(d) & Title V	FCCU; H2S in fuel Gas; Sulfur Recovery Units I &II; Flares North & South	pg. 6 excess CO emissions due to shutdown; pg. 12 excess sulfur during shutdown; pg. 24 planned maintenance ;
Apr. 27, 2017	CEMS & Relative Accuracy Test Audits (RATAs)	2017-04-27 1Q 2017 CEMS Report T5 (P# AQM-003-00016)	CAA	FCU;FCCU; Boilers ,2,3,4; DCPP Boiler stack; CCU I&II	pg. 7 Fluid Coking Unit-excess emissions during startup & loss of feed to unit; pg. 17 operational issue firing rate reduced in heater leading to excess emissions; pg. 32 unexpected steam turbine trip causing biolers to rapidly decrease firing for opacity spike;
Jul. 28, 2017	CEMS & Relative Accuracy Test Audits (RATAs)	2017-07-28 2Q 2017 CEMS Report (P# AQM-003-00016)	40 CFR 60.7 (c)&(d) & Title V	FCCU; H2S in fuel Gas; Sulfur Recovery Units I &II; Flares North & South	pg. 12 lists 3 periods where FCCU SO2 CEMS exceeeded full span (1) 4/28/17 for 1 hr (2) 4/28/17 for 2 hours (3) 5/3/17 for 2 hours; pg. 25 unit 23 failed; pg. 8 SRU Stack S-203 emission exceeded at startup; pg. 44 incident report for march 10 flaring with 230b of SO2 released and 6,100lb of CO from knockout drum overpressuredand vented to flare line lists no acute or chronic health risks (pg.47); Pg. 48 incident report for march 28 flaring realising over 18lbs of SO2 , unknown why the flare occurred ; pg. 56 April 29 flaring incident report due to accumulation of liquid in depropanizer 643 lbs of SO2 released
Oct. 27, 2017	CEMS & Relative Accuracy Test Audits (RATAs)	2017-10-27 3Q 2017 CEMS Report (P# AQM-003-00016)	40 CFR 60.7 (c)&(d) & Title V	FCCU; H2S in fuel Gas; Sulfur Recovery Units I &II; Flares North & South	pg. 6 FCCU CO-CO exceeded due to feed change;
Oc.t 27, 2017	CEMS & Relative Accuracy Test Audits (RATAs)	2017-10-27 3Q 2017 CEMS Report T5 (P# AQM-003-00016)	CAA	FCU; FCCU; Boilers 2,3,4; DCPP Boiler stack; CCU I&II	pg. 7 Fluid Coking unit 2 exceedances due to boiler start up; pg. 11 crude unit heater troubleshooting twice;
Jan. 30, 2018	CEMS & Relative Accuracy Test Audits (RATAs)	2018-01-30 4Q 2017 CEMS Report T5 (P# AQM-003-00016)	40 CFR 60.7 (c)&(d) & Title V	FCCU; H2S in fuel Gas; Sulfur Recovery Units I &II; Flares North & South	pg. 6 FCCU CO-CO exceeded due to multiple trips of the boiler, process interruption; pg. 13 list 1 instance where FCCU SO2 exceeded full span for 2 hours 12/1.; pg. 24& 29 lists unit 23 failing; pg. 49 incident report for oct. 16 flare releasing 2,500 lb of So2
Apr. 26, 2018	CEMS & Relative Accuracy Test Audits (RATAs)	2018-04-26 4Q 2017 CEMS Report T5 (P# AQM-003-00016)	CAA	FCU; FCCU; Boilers 2,3,4; DCPP Boiler stack; CCU I&II	pg. 37 CCU 2 excess emissions due to troubleshooting
Jul. 30, 2018	CEMS & Relative Accuracy Test Audits (RATAs)	2018-07-30 2Q 2018 CEMS Report T5 (P# AQM-003-00016) (2)	CAA	FCU;FCCU; Boilers ,2,3,4; DCPP Boiler stack; CCU I&II; HYC 37-H-1E(a) & W(b) ; CCR 42-H-1,2,3; Crude 21-H-2 &-701	pg.18 Boiler 3 burner trip due to condensation in steam system; pg. 29& 30 CCU 2 load testing
Oct.29, 2018	CEMS & Relative Accuracy Test Audits (RATAs)	2018-10-29 3Q 2017 CEMS Report (P# AQM-003-00016)	40 CFR 60.7 (c)&(d) & Title V	FCCU; H2S in fuel Gas; Sulfur Recovery Units I &II; Flares North & South	pg. 5 FCCU CO exceeded due to boiler trip and catalyst circulation upset;
Oct. 29, 2018	CEMS & Relative Accuracy Test Audits (RATAs)	2018-10-29 3Q 2017 CEMS Report T5 (P# AQM-003-00016)	CAA	FCU;FCCU; Boilers ,2,3,4; DCPP Boiler stack; CCU I&II; HYC 37-H-1E(a) & W(b) ; CCR 42-H-1,2,3; Crude 21-H-2 &-701	pg. 7 Fluid Coking unit boiler trip due to loss of steam; pg.17 boiler 3 tube leak;

Date	Category	Title (From PDF)	Applicable Requirement/Issue	Plant Unit/s	Compliance Issues Identified in DNREC Documents
Jan. 30, 2018	CEMS & Relative Accuracy Test Audits (RATAs)	2019-01-30 4Q 2018 CEMS Report (P# AQM-003-00016)	CAA	FCU;FCCU; Boilers ,2,3,4; DCPP Boiler stack; CCU I&II; HYC 37-H-1E(a) & W(b) ; CCR 42-H-1,2,3; Crude 21-H-2 &-701	pg. 9 crude unit heater 21-H-2 removed from service and SCR offline b/c low inlet temperatures
Jan. 30, 2014	Deviation & Incident Reports	2014-01-30 Flaring Incident Report Dec. 30, 2013 (P# AQM-003-00016)	§2.5 of DNREC regs	FCCU wet gas compressor 24-K-1	motherboard shorted, UPS system for compressors failed lasted for .8 hrs and released 1,001lbs of SO2
Feb. 6, 2014	Deviation & Incident Reports	2014-02-06 Flaring Incident Report - Jan.7, 2014 (P# AQM-003-00016)	§2.5 of DNREC regs		release from north flare stack; reports 891 lbs of So2 released from 4 hour flaring event;hydrocarbon released in FCCU Quench Drum 24-D-13 from Poly Water Wash Column 26-C-3
Feb. 28, 2014	Deviation & Incident Reports	2014-02-28 Coker Bypass Stack Release Report-Jan.30, 2014 (P# AQM-003-00016)	§2.5 of DNREC regs	Coker Bypass Stack	Letter from DCRC to DNREC stating the jan 30, 2014-flue gas release resulting in exceedance of reportable quantities for SO2 and CO
Apr. 11, 2014	Deviation & Incident Reports	2014-04-11 Loss of Power Incident Report - Mar. 12, 2014 (P# AQM-003-00016)	§2.5 of DNREC regs		power interruption resulting from meteorological conditions in gas flaring and bypass of gas Coker CO Boiler and WGS; released (1) 187,000lbs of SO2 (2) 1,230 lbs of H2S (3) 16, 500 lbs of CO (4) 36 lbs HCN (5) 221 lbs of NH3; duration 3 hrs ; to minimize environmental impacts redirect to sulfur streams to flare system instead of discharge to atmostphere "duration of environmental impact was limited" (pg.4)
Apr. 14, 2014	deviation & Incident Reports	2014-04-14 Hydrocarbon Flaring Incident Report - Mar. 14, 2014 (P# AQM-003-00016)	third addendum of consent decree H-01-0978 section VIII ¶150	Hydrocracker unit	unit shut down from loss of power at refinery, next day start up and pressure valve was lifted to relieve pressure; 929 lbs of SO2 released
Apr. 14, 2014	Deviation & Incident Reports	2014-04-14 Mar. 14 Flaring Incident Report (P# AQM-003-00016)	§2.5 of DNREC regs	36-PSV-958 & 36-C-1	date of release march. 14, 2014- 929lb of So2 over 1.02 hrs; pressure in flare recovery heater rose 36-PSV 958 for the hydrocracker debutanizer tower 36-C-1 doe to freeze up of pipe
Apr. 25, 2014	Deviation & Incident Reports	2014-04-25 Mar. 28 Flaring Incident Report (P# AQM-003-00016)	§2.5 of DNREC regs	42-K-8B;	567 lbs of So2 released in 43 mins; flare recovery header rose flaring happening in north and south due to electrical short in motor
May. 16, 2014	Deviation & Incident Reports	2014-05-16 Apr. 17 Flaring Incident Report (P# AQM-003-00016)	§2.5 of DNREC regs	21-C-1, 21-D-1	196 lbs of So2 released in 13 mins; flare recovery header rose flaring north and south; caused by recent change in crude blend used to try to stabalize desalters.
May. 22, 2014	Deviation & Incident Reports	2014-05-22 Apr. 22 Flaring Incident Report (P# AQM-003-00016)	§2.5 of DNREC regs	42-K-9B	407 lbs of So2 released in 25 mins; compressor started inadvertently started with compressor partially loaded
May. 22, 2014	Deviation & Incident Reports	2014-05-22 Apr. 25 Flaring Incident Report (P# AQM-003-00016)	§2.5 of DNREC regs	C4SHU	148 lbs of So2 released in 25 mins; could not confirm C4SHU was the cause for flairing in the north so used bypass
Aug. 21, 2014	Deviation & Incident Reports	2014-08-21 Notice of Deviation- FCCU CO Boiler Outtage & Flaring Event (P# AQM-003-00016)	Conditions 2.b.5 and 3.c.(2)(ii) of permit	FCCU CO Boiler	8/19/14 fault occurred in transmission line resulting in refinery voltage sag, causing flaring incidents and interruption of FCCU CO Boiler leading to use of the bypass line; excess emissions of SO2, COS, HC3, HCN (does not state exact quantities)

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Sept. 15, 2014	Deviation & Incident Reports	2014-09-15 Hydrocarbon Flaring Incident Report - Aug. 15 (P# AQM-003-00016)	consent decree from civil action number H-01-0978 third addendum section VIII ¶150	feeder #17	internal fault transformer 214B at crude unit tripped feeder #17 ; 2497 lbs of SO2 released from north and south flares
Sept. 18, 2014	Deviation & Incident Reports	2014-09-18 August 19, 2014 Flaring and FCCU COB Trip Incident Report (P# AQM-003-00016)	§2.5 of DNREC regs	FCCU COB	8/19/14 refinery has electrical disturbance from fault on transmission line. Low wattage led to flaring and interruption of FCCU COB; following releases of 6,760 lbs COS,332 lbs HCN,242 lbs SO2 and 257,000 lbs CO; 8/21/2014 DCRC submitted affirmative defense to deviations of tech based emission limitatitons under the permit for this incident
Sept. 22, 2014	Deviation & Incident Reports	2014-09-22 Aug. 22, 2014 FCCU COB Trip Incident Report (P# AQM-003-00016)	§2.5 of DNREC regs	FCCU Bioler	Boiler tripped off due to leak in superheater tube; 2,717 lbs of COS released; 100,844 lbs of CO; 4,417 lbs of HCN
Dec. 18, 2014	Deviation & Incident Reports	2014-12-18 Flaring Incident Report - Nov. 19, 2014 (P# AQM-003-00016)	§2.5 of DNREC regs	26-PSV-907; 26-C-1	339 lbs of So2 released; depropanizer lifted
Ja. 9, 2015	Deviation & Incident Reports	2015-01-09 Sulfur Dioxide Release Report - Dec. 11, 2014 (P# AQM-003-00016)	§2.5 of DNREC regs	knockout drum, SRU II 28-D-210	valve failure on SO2 knockout drum at SRU; 5,998 lbs of SO2 released in 1.8 hrs
Jan. 30, 2015	Deviation & Incident Reports	2015-01-30 Flaring Incident Report - Dec. 31, 2014 (P# AQM-003-00016)	§2.5 of DNREC regs	FCCU; 23-FC-251	151 lbs SO2 released loss of feed flow to FCCU
Jan. 9, 2015	Deviation & Incident Reports	2015-03-09 Flaring Incident Report - Feb. 7, 2015 (P# AQM-003-00016)	§2.5 of DNREC regs	26-D-1	115lbs of SO2 released from increased temperature in poly recycle stream system
Mar.13, 2015	Deviation & Incident Reports	2015-03-13 Flaring Incident Report - Feb. 11, 2015 (P# AQM-003-00016)	§2.5 of DNREC regs	#10 bed on PSA	364 lbs of SO2 released from PSV lifting
Mar. 24, 2015	Deviation & Incident Reports	2015-03-24 FCU Expressway Line Leak Release Report - February 22, 2015 (P# AQM-003-00016)	§2.5 of DNREC regs	coker gas plant	leak in high pressure recovery header "expressway" to the coker gas plant. Released Hydrogen sulfide 5,700 lbs , 11, 200 lbs Methane, 9,100 lbs Ethane, 6,900 lbs Propane, 140 lbs of 1.3 Butandience and 4, 100 lbs Propylene
Apr. 13, 2015	Deviation & Incident Reports	2015-04-13 Mar. 14, 2015 Flaring Incident Report (P# AQM-003-00016)	§2.5 of DNREC regs	42-K-2B; 42-D-2	156 lbs of So2 released CCR Compressor unloaded during operation
May. 7, 2015	Deviation & Incident Reports	2015-05-07 Apr. 7 2015 Flaring Incident Report (P# AQM-003-00016)	§2.5 of DNREC regs	CCR unit 42-K-2 & K-9 compressors , 42-D-2 reactant effluent seperator	436 lbs of So2 released from power disruption
May. 13, 2015	Deviation & Incident Reports	2015-05-13 Incident Report FCU COB Planned Outage Apr. 13, 2015 (P# AQM-003-00016)	§2.5 of DNREC regs	FCU CO Boiler	4/13/2015 personnel diverted FCU flue gas to back-up incinerator to minimize emissions with planned shutdown of FCU CO Boiler for repair. DCRC claiming affirmative defense to release of 620,000 lbs of SO2 emissions
May. 22, 2015	Deviation & Incident Reports	2015-05-22 Apr. 25, 2015 FCU COB Casing Leak and Outage Incident Report (P# AQM-003-00016)	§2.5 of DNREC regs	FCU COB	4/25/15 casing leak on FCU CO Boiler for led to two days of SO2 emissions. To make repairs diverted flue gas to the back-up incinerator, release occurred until FCU CO Boiler was back on may 5, 2015 ; 525,000 lbs of SO2 released
Aug. 21, 2015	Deviation & Incident Reports	2015-08-21 Jul. 22 2015 Flaring Incident Report (P# AQM-003-00016)	§2.5 of DNREC regs	44-C-101; 44-PSV-1926	197 lbs of So2 released butamer upset from electrical fault
Sept.1, 2015	Deviation & Incident Reports	2015-09-01 Aug. 2, 2015 FCCU DGA Regen System Upset Event Incident Report (P# AQM-003-00016)	§2.5 of DNREC regs	FCCU DGA Regeneration System	8/2/15 refinery experienced upset in DGA fuel gas treatment system resulting in exceedance of SO2 ; 3, 070 lbs released

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Sept. 2, 2015	Deviation & Incident Reports	2015-09-02 Aug. 21 2015 Release Notification Rescinded (P# AQM-003-00016)			upset release and small fire, rescind notification made august 21, 2015. Did report 13,600 lbs of So2
Sept. 25, 2015	Deviation & Incident Reports	2015-09-25 Aug. 28, 2015 FCCU Fractionator Release Event incident Report (P# AQM-003-00016)	§2.5 of DNREC regs	FCCU Fractionator	8/28/15 refinery had release from FCCU Fractionator column resulting in realeases of 260 lbs of H2S, 5,200 lbs of Propane, and 3,900 lbs of Propylene
Oct. 7, 2015	Deviation & Incident Reports	2015-10-07 Nortification of SCR System Unavalibility CCUs I & II	permit APC-97/0503 Operation (amendment 10)(NSPS);	CCU 1& 2	9/10/15 leak present in SCR system from failed weld on ammonia vaporizer duct, system shut down CCU II continued to operate without SCR; CCU II finally shut down on 9/15/15.
Oct. 14, 2015	Deviation & Incident Reports	2015-10-14 Sep. 14, 2015 Flaring Incident Report (P# AQM-003-00016)	§2.5 of DNREC regs	FCCU	188 lbs of SO2 released from FCCU startup upset
Oct. 29, 2015	Deviation & Incident Reports	2015-10-29 Sep. 29, 2015 Flaring Incident Report (P# AQM-003-00016)	§2.5 of DNREC regs	29-D-16; psv-949	118 lbs of So2 released from pressure releave valve lifted, block valve was closed
Dec. 24, 2015	Deviation & Incident Reports	2015- 12-24 Letter re Alkylation Unit Flas Fire Event Nov. 29, 2015 (P# APC-2016-0013)	7 del. Code §6028 & §2.5 of DNREC regs ; 40 CFR 355	Alkylation Unit	11/29/15 flash fire event resulting in release of 105 lbs of iso-butane, 21 lbs of n-butnae, and 14 lbs of propane
Jan.6, 2016	Deviation & Incident Reports	2016-01-06 Dec. 7, 2015 Flaring Incident Report (P# AQM-003-00016)	§2.5 of DNREC regs	feeder #36 faulted to ground	417 lbs of So2 released from power interruption
Jan. 8, 2016	Deviation & Incident Reports	2016-01-08 Dec. 10, 2015 Odor Complaint (P# AQM-003-00016)	7 del. Code §6028 & §2.5 of DNREC regs ; 40 CFR 355	43-D-903	odorous compunds emitted from sewer system near drum43-D-903 odor complaints from school nearby and within resulting from draining of hot condensate to storm sewer and oily water sewer
Mar. 18, 2016	Deviation & Incident Reports	2016-03-18 Feb. 17, 2016 Flaring Incident Report (P# AQM-003-00016)	§2.5 of DNREC regs	42-K-9A	178 lbs of So2 released 3.4 of valve to flare line open
Mar. 23, 2016	Deviation & Incident Reports	2016-03-23 Feb. 22 2016 Flaring Incident Report (P# AQM-003-00016)	§2.5 of DNREC regs	SRU-1 and SCOT II	582 lbs of So2 released resulting from power interruption to SRU-1 and SCOT II
Mar. 23, 2016	Deviation & Incident Reports	2016-03-23 Incident Reports- Loss of power and acid gas flaring (P# AQM-003-00016)	third addendum of consent decree H-01-0978 section VIII ¶150	SRU 1 & SCOT 2	2/22/16 scot I taken down for planned maintenance, when power was shut off to feed power to UPS circuits was lost causing interrupton in powe rto SRU-1 SCOT II and DCS screens were lost in control room, and gas was not redirected. As a result the acid gas entering the SRU unit was sent to the flare recovery header creating additional volume led to flaring event; 582 lbs of SO2 released.
May. 11, 2016	Deviation & Incident Reports	2015-05-11 Incident Report - April 11, 2016 Hydrocarbon Flaring (P# AQM-003-00016)	third addendum of consent decree H-01-0978 section VIII ¶150	SRU 1 & SCOT 2	4/11/16 3 flaring events: pressure relief valve on Deisobitanizer column lifted, 694 lbs of SO2 released in total
May.16, 2016	Deviation & Incident Reports	2016-05-16 AQM Notice of Violation (P# AQM-003-0016)	7 del. Code §6003 (a)(1)		notice of violation for date range 7/1/13 to 12/31/15 stating that "DCRC permit does not contain provisions allowing the release of any pollutants from the flare system, therefore any pollutant released as a result of flaring incidents are unpermitted and are in violation of 7 del. C. §6003(a)(1)" **INCLUDES LIST OF VIOLATIONS IN DATE RANGE (26 total)
May.19, 2016	Deviation & Incident Reports	2016-05-19 Apr. 20, 2016 Flaring & Line Leak Incident Report (P# AQM-003-00016)	§2.5 of DNREC regs	process line	4/20/16 process line leak and flaring, 9, 833 lbs of So2 released and 1160 lbs of H2S

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May.19, 2016	Deviation & Incident Reports	2016-05-19 Apr. 20, 2016 Hydrocarbon Flaring Incident Report (P# AQM-003-00016)	third addendum of consent decree H-01-0978 section VIII ¶150	High Pressure Separator	4/20/16 leak in outlet line air cooler feeding high pressure separator at hydrocracker unit. 9, 833 lbs of SO2 released
Jul.28, 2016	Deviation & Incident Reports	2016-07-28 Flaring Incident Report (P# AQM-003-00016)	§2.5 of DNREC regs	22-K-302A	27,300 lbs of So2 & 145 lbs of H2S released from coker wet gas compressors
Jul.28, 2016	Deviation & Incident Reports	2016-07-28 Hydrocarbon Flaring Incident Report (P# AQM-003-00016)	consent decree from civil action number H-01-0978 third addendum section VIII ¶150	22-K-302 A&B; 22-PC-321	WGS shut down due to high level of suction drum ; trip of compressor ; 23, 700 lbs of So2 released 145 lbs H2S
Aug. 15, 2016	Deviation & Incident Reports	2016-08-15 Memo re Issuance of NOV for Excess Emisssions Due to Power Outtage 1.23.2016 (P# AQM-003-00016)	40 CFR 61.3449(a)(2)(i); 7 del. §1142 section 2.3.1.5 , 7 del § 1114 section 2.1; 7 del §1111 section 2.1 ; 40 CFR 60.103(a); 40 CFR 60.104(a)(2)(i); 40 CFR 61.271©(2)	facility wide	notice of violation for date range 2/22/16 to 3/8/16 stating that "series of electrical outtages which ultimeately resulted in a near total power outage…the power loss led to heavy flaring … operational impact to the refinery was extensive and incolved all processing units and utilities... pg5-6 lists 18 violations for DCRC that DNREC found.
Sept. 7, 2016	Deviation & Incident Reports	2016-09-07 Coker CO Boiler Trip Events Incident Report (P# AQM-003-00016)	§2.5 of DNREC regs	Coker CO Boiler tripped offline due to low air flow caused by forced draft fan 22-F-403A and discharge damper #2 closed.	event 1- 3,100 lbs of So2, 950 lbs of NH3, 2350 lbs of H2S, 110lbs of HCN and 70,400lbs of CO released; Event 2- 21,800 lbs of So2, 3,180 Lbs of NH3, 7,900 lbs of H2S, 375 lbs of HCN and 236,200 lbs of CO released
Nov. 3, 2016	Deviation & Incident Reports	2016-11-03 Oct.4 2016 Stratco Exchanger Leak Incident Report (P# AQM-003-00016)	§2.5 of DNREC regs	Stratco Unit	10/4/16 leak from stratco unit exchanger released 5,500 lbs of isobutane
Nov. 18, 2016	Deviation & Incident Reports	2016-11-18 Oct. 21, 2016 Flaring Incident Report (P# AQM-003-00016)	§2.5 of DNREC regs	44-C-1	190 lbs of So2 released from pressure releive valve on Butamizer stabalizer tower lifted during start up
Nov. 30, 2016	Deviation & Incident Reports	2016-11-30 Incident Investigations of FCU COB Outages (P# AQM-003-00016)	permit conditions not met (da.1.c& da.1.H)	FCU COB	letter expressing concerns over the august 25, 2016 flaring event and stating that "should the FCU COB have to be taken down for repairs attributable to causes from the aug. 25 incident prior to next scheduled FCU turnaround , DCRC will also shu down the FCU"
Dec. 9, 2016	Deviation & Incident Reports	2016-12-09 Nov. 9, 2016 Flaring Incident Report (P# AQM-003-00016)	§2.5 of DNREC regs	loss of FCCU Wet gas compressor 24-K-2	580 lbs of So2 released
Dec. 9, 2016	Deviation & Incident Reports	2016-12-09 Nov. 9, 2016 Hydrocarbon Flaring Incident Report (P# AQM-003-00016)	third addendum of consent decree H-01-0978 section VIII ¶150	FCCU wet gas compressor 24-K-1	11/9/16 flaring event caused by loss of FCCU WGS compressor. Check valve closed and compressor lost flow and tripped off line . Restarted but second flaring event occurred, when attempting to thestart the WGS … 580 lbs of SO2 released
Dec. 22, 2016	Deviation & Incident Reports	2016-12-22 Isobutane Leak Incident Report Nov. 23 2016 (P# APC-2016-0013)	§2.5 of DNREC regs	line leak in pipe rack for tank 56	3,280 lbs of So2 released
Jan. 24, 2017	Deviation & Incident Reports	2017-01-24 Email from L. Rennie re FW Fax for Coker CO exceedance during start up Today	permit AQM-003/00016	Coker	fas notification from DCRC to DNREC for Co hourly limits due to extended coke loading period and will not complete all start up activities within the 116 hour exemption period in permit
Mar. 9, 2017	Deviation & Incident Reports	2017-03-09 Feb. 8 2017 Flaring Incident Report (P# AQM-003-00016)	§2.5 of DNREC regs	loss of CCR Recontact Compressor 42-K-2s	200 lbs of So2 released
Mar. 15, 2017	Deviation & Incident Reports	2017-03-15 Email to L. Boyd re Annual Comp Cert Tank Deviations updated info	permit AQM-003/00016	tanks	email from DNREC to DCRC asking for annual compliance certification for 2016 and id'ed deviations; asking for DCRC to share the corrective actions taken and if they have been completed or an expected date of completion

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Apr. 7, 2017	Deviation & Incident Reports	2017-04-07 March. 10, 2017 Flaring and CO exceedance Incident Report (P# AQM-003-00016)	§2.5 of DNREC regs	FCC WGS stack	3/10/17 FCCU WGS stack elevated and exceed limit of 1,000 lbs/hr during planned shutdown of FCCU. Flaring occurred in FCCU knock out drum. Resulted in emissions greater than DNREC reportable quantity for CO and SO2 (230 lbs)
Apr. 13, 2017	Deviation & Incident Reports	2017-04-13 Mar. 15, 2017 Flaring Incident Report (P# AQM-003-00016)	§2.5 of DNREC regs	spill c=valve pressure control valve 42-PC-128A stuck open allowing back flow	350 lbs of So2 released
May. 12, 2017.	Deviation & Incident Reports	2017-05-12 Mar. 28 2017 Flaring Incident Report (P# AQM-003-00016)	Condition 3- Table 1.n.1.v.B. of Title V permit	valve on compressor unit 42-K-9B was open	18 lbs of So2 released
May. 26, 2017	Deviation & Incident Reports	2017-05-26 Apr. 29 2017 Flaring Incident Report (P# AQM-003-00016)	§2.5 of DNREC regs	upset FCCU Depropanizer tower b/c PSV lifted from drum 24-D-3	650 lbs of So2 released
Oct. 18, 2017	Deviation & Incident Reports	2017-10-18 Aug. 25, 2016 FCU COB Incident (P# AQM-003-00016)			letter stating DCRC submitted to DNREC additional information about august 25 incident and had meeting on Oct. 11, 2016 to review said info.; Responses to DNREC's questions
Nov. 15, 2017	Deviation & Incident Reports	2017-11-15 Oc.t 16, 2017 Hydrocarbon Flaring Incident Report (P# AQM -003-00016)	§2.5 of DNREC regs	Coker wet gas compressors	10/16/17 flaring event from coker tripping offline due to power interruption; 2,500 lbs of So2 released
Jan. 11, 2018	Deviation & Incident Reports	2018-01-11 FCCU CO exceedance Incident Report- Dec.15, 2017 (P# AQM-003-00016)	§2.5 of DNREC regs	FCCU	12/5/18 release from loss at CO Boiler resulted in 6,260 lbs of CO released
Feb. 7, 2018	Deviation & Incident Reports	2018-02-07 Jan. 9, 2018 Flaring Incident Report (P# AQM-003-00016)	§2.5 of DNREC regs	high pressure in CCR 42-D-2 ; spillback pressure control valve 42-FC-121 had failed positioner	180 lbs of So2 released
Feb. 15, 2018	Deviation & Incident Reports	2018-02-15 FCCU CO Boiler Duct Leak Incident Report Jan.18, 2018 (P# AQM-003-00016)	§2.5 of DNREC regs	FCCU CO Boiler	1/18/2018 release of SO2 from leak on FCCU CO Boiler outlet duct; 250 lbs during 24 hr and 530 lbs over 52 hrs
Mar. 20, 2018	Deviation & Incident Reports	2018-03-20 Feb. 19, 2018 Flaring Incident Report (P# AQM-003-00016)	§2.5 of DNREC regs	recontact compressor 42-K-2B tripped offline at CCR	140 lbs of So2 released
Mar. 29, 2018	Deviation & Incident Reports	2018-03-29 Fax Memo from T. Godlewski re CCU2 Exceedance (P# AQM-003-00016)		CCU 2	fax stating excess CO in CCU2 while duct burning
Aug. 10, 2018	Deviation & Incident Reports	2018-08-10 Tank 470 Overflow Incident Report July 14, 2018 (P# AQM 003-00016)	7 del. Code §6028 & §2.5 of DNREC regs ; 40 CFR 355	tank 470	released 400 gallons of light cycle oil from roof vent
Sept. 14, 2018	Deviation & Incident Reports	2018-09-14 Fax Memo from R. Kuderka re FCC Stack CO 1HR exceedance (P# AQM-003-0016)		FCC Stack CO	9/14/18 exceedance of FCC Stack CO 1hr average being over 500 ppm (reports 505 ppm) from catalyst circulation upset
Sept. 17, 2018	Deviation & Incident Reports	2018-09-17 Fax Memo from L. Boyd re FCCU tripped offline (P# AQM-003-00016)		23-P-401B	informing the prescrubber recirculation pump tripped offline
Sept. 20, 2018	Deviation & Incident Reports	2018-09-20 Aug. 22 2018 FCCU CO Exceedance Incident Report (P# AQM-003-00016)	§2.5 of DNREC regs	FCCU flare while attempting to place standby Forced Draft Combustion Air Fan 23-K-404A	164,000 lbs of CO released
Sept. 20, 2018	Deviation & Incident Reports	2018-09-20 FCCU CO Exceedance Incident Report Aug. 22, 2018 (P# AQM-003-00016)	§2.5 of DNREC regs	FCCU	release form FCCU due to loss of CO Boiler; released 164,000 lbs of CO
Oct. 2, 2018	Deviation & Incident Reports	2018-10-02 Coker CO Boiler Trip Event Incident Report Sep.4, 2018 (P# AQM-003-00016)	§2.5 of DNREC regs	Coker	release from coker due to trip of CO Boiler; 42,000lbs So2, 2,600 lbs NH3, 6,500 LB H2S, 310 lb HCN, and 195,000 lbs of CO released

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Nov. 8, 2018	Deviation & Incident Reports	2018-11-08 Email from L. Boyd re Updated Env. Incidents through 10-31-18 w attachments		facility wide	list of air incidents for refinery through 10/31/18
Nov. 29, 2018	Deviation & Incident Reports	2018-11-29 Fax Memo from L. Boyd re Crude Unit Exceedance		21-H-701, 21-H-2	exceedance of crude rolling 24 hr average for Nox
Dec. 12, 2018	Deviation & Incident Reports	2018-12-12 Hydrocarbon Flaring Incident Report Nov.14, 2018 (P# AQM-003-00016)	§2.5 of DNREC regs	FCCU Gas plant depropanizer	11/14/18 pressure in FCCU gas plant deporpanizer tower rose , pressure relief valve lifted resulting in flaring event ; released 600 lbs of SO2
Dec. 15, 2018	Deviation & Incident Reports	2018-12-15 Fax Memo from R. Kuderka re Crude Unit Exceedance			exceedance of crude unit heater Nox
Feb. 12, 2019	Deviation & Incident Reports	2019-02-12 Fax Memo from R.Kuderka re Crude Unit Exceedance			crude unit heater Nox exceedance
Feb. 13, 2019	Deviation & Incident Reports	2019-02-13 Coker CO Boiler Trip Event Incident Report (P# AQM-003-00016)	§2.5 of DNREC regs	coker CO boiler tripped offline due to low air flow caused by forced draft fan 22-F-403B failed closed	600,000 lbs of So2, 4,500 lbs of NH3, 11,500 lbs of H2S, 550 lbs of HCN, and 335,000 lbs of CO released
Feb. 15, 2019	Deviation & Incident Reports	2019-02-15 Fax Memo from L. Boyd re Crude Unit exceedance		21-H-701, 21-H-2	exceedance of crude rolling 3 hr average for Nox
Mar. 2, 2019	Deviation & Incident Reports	2019-03-02 Fax Memo from B. McMichael re SRU1 Sulfur Pit exceedance		SRU 1	exceedance of SRU1 Sulfur Pit
Mar. 2, 2019	Deviation & Incident Reports	2019-03-02 Fax Memo re SRU 1 Sulfur Pit exceedance		SRU 1	exceedance of SRU1 Sulfur Pit
Mar. 4, 2019	Deviation & Incident Reports	2019-03-04 Feb. 3 2019 Crude Unit Fire & Flaring Incident 6028 Report	7 del. §6028 & §2.5 of del regs		there was a fire SO2 released 4, 900 lbs loss of hydrocarbon containment causing fire and emergency unit shutdown in North within 15 there was fire in south
Mar. 4, 2019	Deviation & Incident Reports	2019-03-04 Hydrocarbon Flaring Incident Report - Feb. 3-4 2019	consent decree from civil action number H-01-0978 third addendum section VIII	21-K-3 damaged , 21-K-1	references fire above
Mar. 4, 2019	Deviation & Incident Reports	2019-03-04 Letter from L. Boyd re Feb. 3, 2019 crude unit Fire & Flaring Incident 6028 Report	7 del. Code §6028 & §2.5 of DNREC regs ; 40 CFR 355	Crude unit	2/3/19 crude unit loss of hydrocarbon contianment resulting in fire and emergency shutdown- fire lasted 13 hrs-; flaring resulted in 4,300 lbs of SO2, fire resulted in 600 lbs of So2 = 4,900 lbs total
Mar. 6, 2019	Deviation & Incident Reports	2019-03-06 Fax Memo from J. Daniels re Crude Unit NOx exceedance			exceedance of crude unit Nox 3 hour rolling limit
Mar. 19, 2019	Deviation & Incident Reports	2019-03-19 Fax Memo from R. Kuderka re SRU 2 Unit Sulfur Pit exceedance		SRU 2	SRU 2 Sulfur Pit Exceedance
Mar. 19, 2019	Deviation & Incident Reports	2019-03-19 Fax Memo from T. Godlewski re wastewater treatment plant trip			unexpected trip of waste water treatment plant incenerator
Apr. 12, 2019	Deviation & Incident Reports	2019-04-12 Mar. 14 2019 FCCU Upset & Hydrocarbon Flaring Event	§2.5 of DNREC regs		4,300 lbs of So2 and 68,000 lbs of CO released due to tube leak
Apr. 23, 2019	Deviation & Incident Reports	2019-04-23 Fax Memo from T. Godlewski re FCU startup (P# AQM-003-00016)	permit condition 3.c.2.vii	unit 22	unit 22 start up
May. 8, 2019	Deviation & Incident Reports	2019-05-08 Letter from M. Wolo re Inspection Failure Repairs		304-TF-2, 313-TF-49 & 325-TF-2	follow to storage vessel inspection failures
May. 8, 2019	Deviation & Incident Reports	2019-05-08 Letter re Inspection Failure Repairs		304-TF-2, 313-TF-49 & 325-TF-2	follow to storage vessel inspection failures
Jun. 3, 2019	Deviation & Incident Reports	2019-06-03 May 4 2019 FCU Start Up Hydrocarbon Flaring Incident Report	§2.5 of DNREC regs	21HC3350, 22-K-302A	275 lbs of SO2 released flaring at north and south flares

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Jul. 25, 2019	Deviation & Incident Reports	2019-07-25 Fax Memo from L. Boyd re FCCU pump valve replacement		FCCU	FCCU Pre-scrubber recirculation pump removed from service to replace valve and stop leak to clarifier
Aug.28, 2019	Deviation & Incident Reports	2019-08-28 July 31 2019 Hydrocarbon Flaring Incident Report	§2.5 of DNREC regs	26-PCV-302	316 lbs of So2 released process control valve failed
Sept. 4, 2019	Deviation & Incident Reports	2019-09-04 Fax Memo from B. McMichael re Crude Unit exceedance			exceedance of crude rolling 3 hr average for Nox
Sept. 24, 2019	Deviation & Incident Reports	2019-09-24 Fax Memo from R. Kuderka re Boiler House #2 Boiler exceedance		Boiler House No. 2	Opacity exceedance
Oct.7, 2019	Deviation & Incident Reports	2019-10-07 Sep. 2019 Seal Inspections			visual and secondary seal gap measurements
Oct. 10, 2019	Deviation & Incident Reports	2019-10-10 Fax Memo from L. Boyd re Crude Unit exceedance			exceedance of crude rolling 3 hr average for Nox
Oct. 11, 2019	Deviation & Incident Reports	2019-10-11 Fax Memo from L. Boyd re Crude Unit exceedance			exceedance of crude rolling 24 hr average for Nox
Nov. 10, 2019	Deviation & Incident Reports	2019-11-10 Fax Memo from J. Daniels re Wastewater treatment plant trip			unexpected trip of waste water treatment plant incenerator
Nov. 14, 2019	Deviation & Incident Reports	2019-11-14 Fax Memo from L. Boyd re Wastewater treatment plant trip			unexpected trip of waste water treatment plant incenerator
Nov. 20, 2019	Deviation & Incident Reports	2019-11-20 Fax Memo from R. Kuderka re Coker Cansolv CO exceedances			Exceedance of 1 hr average coker cansolv Co
Nov. 20, 2019	Deviation & Incident Reports	2019-11-20 Fax Memo from R. Kuderka re Coker Cansolv CO second exceedance			Exceedance of 1 hr average coker cansolv Co
Nov. 20, 2019	Deviation & Incident Reports	2019-11-20 Fax Memo from R. Kuderka re Coker Cansolv CO third exceedance			Exceedance of 1 hr average coker cansolv Co
Nov. 21, 2019	Deviation & Incident Reports	2019-11-21 Fax Memo from R. Kuderka re Coker Cansolv CO exceedance			exceedance of 1 hr average coker cansolv Co
Nov. 22, 2019	Deviation & Incident Reports	2019-11-22 Letter from J. Peacock re Coker Cansolv CO exceedance			exceedance of 1 hr average coker cansolv Co
Nov. 22, 2019	Deviation & Incident Reports	2019-11-22 Letter from J. Peacock re Coker Cansolv CO second exceedance			exceedance of 1 hr average coker cansolv Co
Nov. 22, 2019	Deviation & Incident Reports	2019-11-22 Oct. 23 2019 Flaring Incident Report	§2.5 of DNREC regs	42-D-30	300 lbs of So2 released b.c PSA feed knock-out drum registered false high PSA tripped
Nov. 23, 2019	Deviation & Incident Reports	2019-11-23 Letter from J. Peacock re Coker Cansolv CO exceedance			exceedance of 1 hr average coker cansolv Co
Nov. 24, 2019	Deviation & Incident Reports	2019-11-24 Letter from J. Peacock re Coker Cansolv CO exceedance			exceedance of 1 hr average coker cansolv Co
Nov. 25, 2019	Deviation & Incident Reports	2019-11-25 Fax Memo from R. Kuderka re Coker Cansolv 4pm exceedance			exceedance of 1 hr average coker cansolv Co
Nov. 25, 2019	Deviation & Incident Reports	2019-11-25 Letter from J. Peacock re Coker Cansolv CO exceedance & compliance			exceedance of 1 hr average coker cansolv Co
Dec. 17, 2019	Deviation & Incident Reports	2019-12-17 Fax Memo from L. Boyd re CCR Unit exceedance		CCR	exceedance of CCR's daily average due to piping repair
Dec. 23, 2019	Deviation & Incident Reports	2019-12-23 Nov. 27 2019 Poly 26-R-3 Leak Incident Report	§2.5 of DNREC regs	N7	4,250 lbs of propane, 2,000 lbs of propylene, 820 lbs of isobutane released reactor taken down for routine catalyst change, but during start up there was a leak in bottom outlet nozzle
Dec. 24, 2019	Deviation & Incident Reports	2019-12-24 Dec. 2 2019 FCCU SO2 Exceedance Incident Report	§2.5 of DNREC regs		2,250 lbs of So2 released FCC unit full burn mode due to leak on FCC CO Boiler

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Jan. 21, 2020	Deviation & Incident Reports	2020-01-21 Fax Memo from L. Boyd re Hula skirt tear (P# AQM-003-00016)	permit condition 3 table 1.ob.1.i	coker silo	visible emissions in excess of limit tear
Feb. 5, 2019	Deviation & Incident Reports	2020-02-05 Fax Memo from M. Wolo re FCCU COB exceedance		FCCU COB	exceedance of limits CO while cleaning
Feb. 7, 2020	deviation & Incident Reports	2020-02-07 Fax Memo from J. Daniels re Coker Unit exceedance of CO		CO	exceeded CO max 1 hr rolling
Jan.14, 2014	Notices of Violation	2014-01-14 NOV - Excess Emissions from FCU on 9-28 & 11-23-2013 (P# AP-81-0829)	condition 2.5 of FCU permit APC-81/0829-OPERATION (Amendment 8)(PSD-NSR)does not authorize any emissions from FCU Bypass stack ; condition 3,5 of APC-81/0829-OPERATION (Amendment 8)(PSD-NSR) company bears burden to demonstrate continued operation of FCU should not be subject to enforcement for noncompliance ….; 7 del. admin. code 1100	FCU COB	9/28/13 :tripped offline, operators diverted to FCU bypass stack which are not authorized emissions under permit; 137,000 lbs of CO, 4,580 lbs of H2S, 1,850 lbs of NH3, 217 lbs ofHCN and 31,000 lbs of SO2 released; 11/23/13 boiler feed water pump malfuntioned brough spare pump online but COB safety system already activated leading to converting to FCU bypass and unauthorized emissions of 57,900 lbs of CO, 1,930 lbs of H2S, 779 lbs of NH3, 92 lbs of HCN and 15,000 lbs of SO2; Refinery did not demonstrate it should not be subject to enforcement
Nov. 3, 2015	Notices of Violation	2015-11-03 Notice of Violations FCCU (P# AQM-003-00016)	40 CFR 60.104(a)(1) & Permit AQM-003-00016-Parts 1,2,3 conditions a.2.1.i.B,bc.2.i.B, c.2.ii, d.2.ii, e.2.ii, c.3.iA, da.i,1,B., e.1.i.A, ga.1.iE, a.2.1.A.,f.3.ii; 7 del. Admin. Code §6003(a)(1); 7 del admin code 1102 section 2.1	DGA system failure; FCCU upset and wet gas compressors shut down (24-K-1 & 24-K-2) leading to fire on compressor deck ; flaring in unit 45	resulted in incrased H2S content in RFG and subsequent combustion in vairous heaters and boilers leading to several exceedances with a total of 3,070 lbs of SO2 resulting in violation of permit and CFR limits; DCR permit does not contain provisions allowing release of any pollutants from flare system (8/21/15 unpermitted release of 9,400 lbs of SO2 from flare stack and additional 4,200 lbs of SO2 from 24-K-1 machine mechanical failure and fire); 8/28/15 sour LPG mixture from FCCU gas plant leaked leading to emissions release from open vent valve on fractionator; federally reportable violations--> DGA upset caused all affected fuel gas combustion devices to combust non-compliant fuel gas from 8/2/15 to 8/6/15; FCCU fire caused unpermitted release of 13, 600 lbs SO2 from flare & fire on 8/21/15; unpermitted release of 260 lbs H2S, 5,200 lbs of C3H8 and 3,900 lbs of C3H6 from FCCU ractionator on 8/28/15
Feb. 29, 2016	Notices of Violation	2016-02-29 NOV - Excess Emissions from FCU in 4-2015 and 5-2015 (P# APC-1981-0829)	4/13-4/23 -permit condition 3.3 APC-81/0829-OPERATION (Amendment 8)(PSD-NSR), 2.1.5.3 & 3.5 4/25-5/05- 7 del code §6003(a)(1) & 1102 section 2.1, and permit APC-81/0829-OPERATION (Amendment 8)(PSD-NSR) condition 3.3, 3.5 , 3.8	FCU COB outage ; two dampers to water seal drums upstream flow to FCU CCOB and FCU BUI malfunctioned; leaking FCU COB casing	4/13/15- 4/123/15- Outage of FCU COB and consequent bypassing of WGS train resulted in 620,000 lbs of SO2 released; 4/25-5/ 525,000 lbs of So2 released from lekaing FCU COB; 4/13-4/23 during outage and bypass there was 620,000 lbs of SO2 released ; tube leak in FCU COB boiler resulted in boiler taken offline and using bypass leding to 1,145,000 lbs of SO2 and two exceedances of CO when the FCU COB firebox temp fell & a crack in FCU COB casing lead to further release of pollutants from 4/25-4/29

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Jul.18, 2016	Notices of Violation	2016-7-18 Notice Of Violations _SRU Drum Leak 12.11.14 & FCU Gas Leak 02.22.2015 (P# AQM-003-00016)	permit AQM-003/00016 part 2 (	SRU	12/11/14 SRU valve leak resulted in 5,998 lbs of SO2 ; 2/22/15 liquid and vapor spraying from 6 inch line in expressway resulting in 5,700 lbs of H2S, 140 lbs 1.3 Butadiene, 11,200 lbs methane, 9,100 lbs of euthane, and 4,100 lbs of propylene
Aug. 1, 2016	Notices of Violation	2016-08-01 Nov-Failure To Submit Timely Supplement to the T5 Application Permit Application for DCRC Power Plant (P# APC -1990-0289)	permit AQM-003/00016	facility wide	notice for failure to submit timely supplement to the Title V permit Appliocation - submitted complete application 18 months after the required submission date
Dec. 9, 2016	Notices of Violation	2016-12-09 AQM Notice of Violation (P# AQM-003-00016)	7 del. Code §6003 (a)(1), §1102 section 2.1; permit (AQM-003/00016-Part 2 (renewal1)) condition 3 table da.1.i.C. & da.i.i.H	COB Outage;	8/816 COB outage discharge damper pilot valve in CO failed /c high vibration in area redirected to bypass 3,100 lbs of SO2, 950 lbs of H2S, 110 lbs of HCN and 70, 400 lbs of CO released; 8/25 Cob outage Coker CO Boiler tripped b.c expansion of joint flange shorting signal to pilot valve reirected to bypass & pluggged valved caused excess water from main seal drum to over flow to CO boiler 21,800 So2, 3180 NH3,7,900 lbs of H2S, 375 lbs of HCN and 236, 200 lbs of CO released
Jul. 17, 2017	Notices of Violation	2017-07-17 Notice of Violations-Failure to Operate MVRS (P# AQM-003-00016)	permit AQM-003/00016 part 2(renewal 1)(revision 1) condition 3 - table 1 b.5.i.B, b.5.ii.F., b.5.ii.G, b.5.ii. H, b.5.ii.I.; 40 CFR 63.562 (c)(2)(ii)&©(3); 7 del code §1124 ections 43.3.3.1-3, 43.3.3.6	Lack of use- Marine Vapor Recovery System	loaded straight Run Naphtha without routing displaced vapors through vapor combustion units
Sept.7, 2017	Notices of Violation	2017-09-07 AQM Notice of Violation Memo (P# AQM-003-00016)	7 del. Code §6003 (a)(1)	2/18/16 FCU / SMR-HP &HC; 2/22/16 sulfur recovery area claus trains; 4/11/16 CCR Tail Gas Compressor suction relief valve lifted, strainer plugged/valve lifted in flare header & pressure monitor at deisobutanizer not reading correctly; 4/20/16 leak hydrocracker unit; 6/28/16 coker main fractionator-tripping of wet gas compressors	2/18/16-power outage trains lost power diverted to flare 582 lbs of So2 released; 4/11/16- 3 events (1) valve left open at tail gate system and lifted to to high pressure (2)strainer plugged loss of cooling water to stratco unit refrigirant accumulator drum liftingrelief valve (3) monitor at deisobutanizer not reading correctly leading to relief valve lifting leading to flare header line total released: 693.9 lbs of So2; 4/20- leak from cracked weld outlet line in hydrocracker unit released 9,832.8 lbs of So2; 6/28- upset at coker main fractionator b/c liquid carryover and tripping of wet gas compressors releasing 27, 326.5 lbs of SO2
Sept. 26, 2017	Notices of Violation	2017-09-26 Notice of Violations_hydrocarbon Flaring Incidents Jan-June 2017 (P# AQM-003-0016)	permit AQM-003/00016 part 2 (	flare system unit 45	lists flaring incidents: 2/8/17 from upset condition at the CCR recontact compressors; 3/10/17 planned shutdown WG compressor pressure built up; 3/15/17 spill back pressure control valve stuck open; 4.12.17 pressure spike in flash drum at desulfurizer train 3

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Nov. 16, 2017	Notices of Violation	2017-11-16 AQM Notice of Violation (P# AQM-003-00016)	permit AQM-003/00016 part 2(renewal 1)(revision 1) c.2.v.ii; 7 del code §1100	FCU leak	8/21/16 leak in FCUscrubber section near feed injection nozzels, feed pulled and FCU shut down DCRC did not provide required notification; concerning b.c FCU unit #22 is one of the largest with potential to emit xtremely large quantities of pollutants
Feb. 22, 2018	Notices of Violation	2018-02-22 Notice of Violation- Hydrocarbon Flaring Incident Jul-Dec 2017 (P# AQM-003-00016)	permit AQM-003/00016 part 2 (	unit 45	lists flaring incidents: 7/25/17 from WG compressor trip; 10.16.17 trip from Wg compressor as LPs-1 &2 were incorrectly wired in series
Jun. 19, 2018	Notices of Violation	2018-06-19 AQM Notice of Violation Memo (P# AQM-003-00016)	permit AQM-003/00016 part 2(renewal 1)(revision 1) condition 3 table 1.ga.2.i.A.1&2; 7 del code §1100	cracked Naphtha HydroTreater Unit Feed and Reboiler Heaters (25-H-401 & 402)	DCRC failed stack tests pg.4 "may suggest that good air pollution control practices are not being utilized to their fullest capacities "-Heater 401 out of compliance 12/2017-->12/2018; 402 out of compliance starting feb 2018 ; all exceeded PM emission limits
Jul.18, 2018	Notices of Violation	2018-07-18 AQM Notice of Violation Memo (P# AQM-003-00016)	permit AQM-003/00016 part 2(renewal 1)(revision 1) condition 3 table 1.db.1.i.A&C ; 7 del code §1100	Baghouse 2&4 out of compliance starting 12.19.17 ,Baghouse 1 &3 out of compliance starting 12.20.17, and baghouse 5 out of compliance starting 12.21.17	failed stack tests for Coke Handling and Storage Complex. Test results for stacks was .136 gr/dscf more than limit of .014 gr/dscf; units were restested feb 21-->march 6 still failed improved but still exceeded limit in range of 2 to 24 times more ; units remain to be used during non compliance
Aug. 6, 2018	Notices of Violation	2018-08-06 Notice of Violation dated Jul. 18, 2018 (P# AQM-003-00016)	permit AQM-003/00016 part 2(renewal 1)(revision 1) condition 3 table 1.db.1.i.A&C ; 7 del code §1100	Baghouse 2&4 out of compliance starting 12.19.17 ,Baghouse 1 &3 out of compliance starting 12.20.17, and baghouse 5 out of compliance starting 12.21.17	response to july 18 violations, DCRC in response to manufacturor "donalson" commissioned replacement of all bags in all 5 cokeconveyor baghouses when the retest showed improvements but still high, DCRC 3rdparty consultant with expertise in baghouse systems replacement of pulse jet system components recommended as result, will do that in 6-8 weeks and will then do additional testing and coordinate with DNREC
Sept. 26, 2018	Notices of Violation	2018-09-26 AQM Notice of Violation Memo (P# AQM-003-00016)	7 del. Code §6003 (a)(1)	1/9/18-suction Drum 42-D-2, valve 42-FC-121; 2/19/18-compressor 42-K-2B, suction drum 42-D-2, compressor 42-K-2A;	1/9-pressure control valve had failed positioner, fully open. Drum pressure rise, control valve to flare line open to relieve pressure 180 lbs of So2 released; 2/19-upset condition at CCR recontact compressor 42-K-2B failure of main lube oil pump caused compressor to trip offline and released 140 lbs of SO2.
Nov. 28, 2018	Notices of Violation	2018-11-28 AQM Memo re Notice of Violation (P# AQM-003-00016)	permit AQM-003/00016 part 2(renewal 1)(revision 3)condition e.5.i.B., condition 3 table 1 e.1.i.j. ; section 2of regs7 del admin code §1111	FCCU COB	FCCU COB tripped offline due to failure of forced draft fan and bypass valve releasing 164,000 lbs of CO
Nov. 28, 2018	Notices of Violation	2018-11-28 Notice of Violation Memo (P# AQM-003-00016)	7 del. Code §6003 (a)(1), §1102 section 2.1; section 2 of §1111, section 2.1 of §1114; permit AQM-003/00016 part 2(renewal 1)(revision 3) condition 3 table 1 da.1.i.H, da.1.i.C, da.5.i.B., & da.11.i.	FCCU COB	FCCU COB tripped offline due to loss of steam from operator error, released 42,000 lbs of SO2, 2,600 lbs of NH3, 6,500 lbs H2S, 310 lbs HCN, 195, 000 lbs of CO; DCRC bypassed FCU and continued to operatein violation of permit

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March. 11, 2019	Notices of Violation	2019-03-11 DE NOVs Hydrocarbon Flaring Jul - Dec 2018 (P# AQM-003-00016)	7 del. Code §6003 (a)(1), §1100 section 2.1; permit (AQM-003/00016-Part 2 (renewal1)) condition 3 table da.1.i.C. & da.i.i.H	7/4/18-251 substantion and desulfurizer trains tripped offline and CCR reformer, train 5, and CNHT all off for repairs ; 7/5- compressor 2-K-2B, safety relieve valve lifted ; 11/4- FCCU Gas Plant Depropanizer Tower 24-C-3, valve 24-PSV-923	two hydrocarbon flaring incidents between jul 1,2018 and dec. 31, 2018. (1) july 4-5, 2018 desulfurizer trains 1-3 tripped offline releasing 475 lbs SO2 from loss of power at substation, 7/5- lost flow and safety relieve valve lifted (2) Nov,4, 2018 releasing 598 lbs of SO2 from tower high pressure and pressure relief valve lifted
May. 3, 2019	Notices of Violation	2019-05-03 NOV Unpermitted FCU Emissions on 1-14-19 (P# AQM-003-00016)	7 del. Code §6003 (a)(1), §1102 section 2.1; section 2 of §1111, section 2.1 of §1114; permit AQM-003/00016 part 2(renewal 1)(revision 3) condition 3 table 1 da.1.i.C, da.5.i.B., & da.11.i.	FCCU COB, draft fan failed 22-K-403B	low air flow tripped FCCU COB offline and by pass was done releasing 60,000 lbs of SO2, 4, 500 lbs NH3, 11,500 lbs H2S, 550 lbs HCN, and 335,000 lbs of CO; states actuator for inlet/damper has been repaired and forced draft fan is placed on standby
May. 14, 2019	Notices of Violation	2019-05-14 NOV Unpermitted CUA Emissions on 2-3-2019 (P# AQM-003-0016)	7 del. Code §6003 (a)(1), §1100 section 2.1; permit (AQM-003/00016-Part 2 (renewal1)) condition 3 table da.1.i.C. & da.i.i.H	failed pipe used on pre-wash tower draw drum 21-D-12; damaged by fire 21-K-3 compressor but was fixed after fire.	inadequatedly winterized pipe in subfreezing temps for 2 weeks; line froze, ruptured releasing hydrocarbon and causing fire in north. Second fire in south from initial heat of north fire caused line to blow and 3rd leak on off gas line when flaged was comprimised from heat of the fires causing damage to equipment ; total released from fire: 842 lbs HC, 592 lbs of SO2, 438 lbs of CO, 80 lbs of Nox, 2 lbs H2S with additianl 4,300 lbs of So2 from flaring
Sept. 5, 2019	Notices of Violation	2019-09-05 NOV Flare System Pollutants (P# AQM-003-00016)	7 del. Code §6003 (a)(1); permit (AQM-003/00016-Part 2 (renewal1)(revision 3)	3/14/19- FCCU COB tube leak, WGS 24-K-1&2,; 3/15 44-FC-1101 WGS; 5/3- FCCU down , polymerization unit unplanned shutdown	3/14-b/c of tube leak FCCU was in full burn mode temperatures r4each max in regenarator defense bed and had to remove feed from unit making the FCCU WGS stall and re routed to flare gas system releasing 4,100 lbs of SO2; 3/15 flow controller from butamer diisobutanizer left in manual mode after pump swap, tower pressure increased and pressure relief valve lifted releasing 200 lbs of SO2; 5/3- only FCCU WGS operational during start up increased pressure in low line reaching max setpoint pressure, spill back valve opened releasing 275lbs of So2.
Aug. 31, 2016	Emission Test Reports	2016-08-31 Delaware City Refinery 2014 Emission Statement	permit condition 3 table 1	facility wide	total Nox was 1,967,658 limit being 2,225 TPY for 2014;
Sept. 6, 2016	Emission Test Reports	2016-09-06 Delaware City Refinery 2015 Emission Statement	permit condition 3 table 1	facility wide	total Nox was 1,524,335 TPY limit being 1,650 TPY for 2015;
May. 4, 2018	Emission Test Reports	2018-05-04 Coke Storage and Handling Emission Test Report (P# APC-1982-1209)	permit APC-82/1209 Construction (amendment 7); 40 CFR 60 &51	Petroleum Coke Storage & Handling Complex	corrective action diganosis and implementation underway and subsequent re-test- done by Montrose Air Quality Services LLC
Oct. 4, 2019	Emission Test Reports	2019-10-04 SCOT I & II Emission Test Report (P# AQM-003-00016)	permit AQM-003/00016 part 2 (revision 5)	scOT I &II (28-S-203 & 28-S-804)	28-S-203 shows exceedance beyond limit of 3.2 lb/hr during testing trip events and issues with flame stability. In process of rescheduling re test to be in compliance with permit; test done by Weston Inc.

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Oct. 4, 2019	Emission Test Reports	2019-10-04 SCOT I & II Emission Test Report Letter (P# AQM-003-00016)- DUPLICATE	permit AQM-003/00016 part 2 (revision 5)	scOT I &II (28-S-203 & 28-S-804)	28-S-203 shows exceedance beyond limit of 3.2 lb/hr during testing trip events and issues with flame stability. In process of rescheduling re test to be in compliance with permit; test done by Weston Inc.
Dec. 19, 2019	Emission Test Reports	2019-12-19 SCOT I Emission Test Report (P# AQM-003-00016)	permit AQM-003/00016 part 2 (revision 5)	scOT I (28-S-203)	emissions in exceedance of limit 3.2 lb/hr from flame instability; DCRC did second round of testing oct. 29 which showed compliance - Weston Inc.
Feb. 10, 2020	Inspection Reports	2020-02-10 Fixed Equipment Dept Inspection Report	CAA	Unit 40: 5-TF-200, 48-TF-112, 72-TF-50, 73-TF-78, 135-TF-78, 147-Tf-78, 182-Tf-78, 203-TF-112, 223-TF-112, 224-TF-112, 227-TF-400, 248-TF-200, 283-TF-200, 313-TF-49, 416-TF-3, 580-TF-10	fixed equipment inspection report-only 1 in folder; Sean Walker (fed. Inspector); pg. 21 (147-Tf-78) comment states there is small area of standing water on roof needs to be cleaned up; pg. 37 (224-TF-112) need to plug drain deck opening; pg. 42 (227-TF-400) need to install gasket cap on gauge pole; pg.45 (248-TF-200) need to clean deck surfaces of stored product; pg. 62 (580-TF-10) 3/4 in. gap btwn gauge poleand gauge wiper, new wiper installed to elimate gap 1/29/2020;
May. 19, 2014	LADR Reports	2014-05-19 External LDAR Audit (P# AQM-003-00016)	consent decree from civil action number H-01-0978 third addendum section VIII (third addendum) ¶1109-1111; 40 CFR 60 subparts GGG and VV; 40 CFR 61 subparts J &V; 40 CFR 63 subparts H & CC; applicable state and local LDAR (does not name them)	multiple, Desulfurizer, crude	3rd party consultant for audit- Sage Env. Consulting; Pg. 2 found on multiple: open ended lines (10), desulfurizer overlooked compoents (13) from the LDAR inventory in field and not inventoried in the database, on multiple: misclassified DTM compoents (9) valves that were inaccurately classified as difficult-to-monitor, desulfurizer sample system compliance: the audit identified one sample system without proper closed-purged controls of an estimated 47 sample systems examined, and crude: missed follow up- only one valve that missed the first month of the two successive months of monitoring after a leak ; all corrective actions completed in time by DCRC & Sage found the program to be applicable with state, federal and local LDAR regs and the Consent Decree except for issues in Audit results Section 1, Table 2 on pg. 6 (menitoned above)

Date	Category	Title (From PDF)	Applicable Requirement/Issue	Plant Unit/s	Compliance Issues Identified in DNREC Documents
Aug. 19, 2016	LADR Reports	2016-08-19 External LDAR Audit (P# AQM-003-00016)	consent decree from civil action number H-01-0978 third addendum section VIII (third addendum) ¶1109-1111; 40 CFR 60 subparts GGG and VV; 40 CFR 61 subparts J &V; 40 CFR 63 subparts H & CC; applicable state and local LDAR (does not name them)	alky spiter, Poly and other multiple	Audit done by 3rd party ERM Consulting; Alky Spiter: overlooked components (1) untagged component during field evaluation of 6 process units, refinery verified not accounted for in Leak Detection and Repair Program; Poly: one technician did not monitor the bottom bonnet of a control valve while the audit team observed monitoring technique; Multiple: 11 open ended lines identified during walkthrough and comparative monitoring of 6 process units, and an analysis of the monitoring data identified 17 instances where technician set the background concentration of monitoring instrument greater then or equal to 10 ppm and the resulting net concentration measured was less than the repair action level (therefore not identified as requiring repair); all were corrected in timeframe allowed after audit.
Jun. 22, 2018	LADR Reports	2018-06-22 External Audit of LDAR Program (P# AQM-003-00016)	consent decree from civil action number H-01-0978 third addendum section VIII (third addendum) ¶1109-1111; 40 CFR 60 subparts GGG and VV; 40 CFR 61 subparts J &V; 40 CFR 63 subparts H & CC; applicable state and local LDAR (does not name them)	facility wide	third party auditor ERM Consulting; violations listed: 5 untagged components during field evaluation of 4 process units not accounted for in Leak Detection and Repair program; 10 open ended lines ID'd during walkthroughs and comparitive monitoring of 4 process units; 1 technician did not monitor bonnet leak interface on the control valve/connections on a process line on a pump body while audit team observed; and refinery records indicate 1 instrument (PID#69923) did not have calibration precision record for the 4Q16 and 4Q17 monitoring periods; all corrective actions were taken in timely way
Jan. 30, 2014	Periodic, Compliance & SSM Reports	2014-01-30 Periodic Compliance Report - CCUs, CRUs, and SRUs (subpart UUU)(P# AQM-003-00016)	40 CFR 63 subpart UUU	CCUs, CRUs and SRUs	10/2/13 control equipment problem on pre scrubber recirculation pump pressure dropped & FCCU WGS operating below NSPS PM emission limit.
Feb. 26, 2014	Periodic, Compliance & SSM Reports	2014-02-26 DCPP CCU 1 Compliance Test 2013 (P# APC-1997-0503)	permit APC-97/0503 Operation (amendment 8)(NSPS);	CCU 1	in compliance for PM; H2So4 not in compliance total (15.8 TPY), exceeded emission limit of 3.1 TPY , conducted additonal test and still in exceedance with total of 4.96 TPY.; DCRC wants to use second method to prove compliance which includes cation and anion analysis that could produce other sulfate salts which would bring the calcualtion down to 2.93 TPY incompliance but DNREC request additonal information on validity of approach
Jul. 23, 2014	Periodic, Compliance & SSM Reports	2014-07-23 Compliance Test of DCPP Boiler #3 (P# APC-90-0290)	permit APC-90/0290- Operation (amendment 6)Boiler 3)	DCPP Boiler 3	DCRC failed to report unit as not in compliance b/c they did not take into account H2SO4 emissions. Therefore, unit exceeded permited limits for TSP and marginally in compliance with TPY limit for PM10.
Jul. 30, 2014	Periodic, Compliance & SSM Reports	2014-07-30 Periodic Compliance Report - CCUs, CRUs, and SRUs (subpart UUU)(P# AQM-003-00016)	40 CFR 63 subpart UUU	CCUs, CRUs and SRUs	SRU stack S-203 3/13/14 power interruption loss of equipment resulting in excess emissions of SO2 for 12 hr rolling period;

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Nov. 22, 2014	Periodic, Compliance & SSM Reports	2014-11-22 Periodic Compliance Report (subpart CC) (P# AQM-003-00016)	40 CFR 63 subpart CC, 40 CFR 60 subpart GGG/DNREC Reg. 24 section 29 ; consent decree definitions and requirements for valves and valve leaks	32-E-2 &25	heat exchanger system found to be leaking, retested still leaked, taken down and replaced heat bundles, in compliance after that
Jan.6, 2015	Periodic, Compliance & SSM Reports	2015-01-06 CCU1 Compliance Test 2014 (P# APC-1997-0503)	permit APC-97/0503 Construction (amendment 8)(NSPS);	CCU 1	after first run, operational difficulties did not allow for further test runs; other than that in compliance
Jan. 30, 2015	Periodic, Compliance & SSM Reports	2015-01-30 Periodic Compliance Report-CCUs, CRUs, and SRUs(subpart UUU) (P# AQM-003-00016)	40 CFR 63 subpart UUU	CCUs, CRUs and SRUs	8/19/14 power disruption and CO Boiler trip; Co boiler leak 8/22/14;
May. 27, 2015	Periodic, Compliance & SSM Reports	2015-05-27 Compliance Test of FCU, Co Boiler, and Wet Gas Scrubber (P# APC-1982-0891)	permit APC-82/0981-Operation(amendment 9)(NSPS)	FCCU , FCCU COB, WGS	letter from DCRC requesting permit limit of 1 lb TSP/1000 lb of coke burned be maintained
Jul. 30, 2015	Periodic, Compliance & SSM Reports	2015-07-30 Periodic Compliance Report (subpart UUU) (P# AQM-003-00016)	40 CFR 63 subpart UUU	CCUs, CRUs and SRUs	pg. 21 SRU Stack S-804- SCOT II booster blower tripped resulting in SO2 exceedance
Nov. 22, 2015	Periodic, Compliance & SSM Reports	2015-11-22 Periodic Compliance Report (subpart CC) (Mar.28-Sept.24, 2015) (P# AQM-003-00016)	40 CFR 63 subpart CC	heat exchange systems	1 exchange system was found to be leaking
Jan. 29, 2016	Periodic, Compliance & SSM Reports	2016-01-29 Compliance Report (July 1-Dec 31, 2015) (P# AQM-003-00016)	40 CFR 63 subpart UUU	CCUs, CRUs and SRUs	pg. 4 identified one deviation for HAP emissions. From 8/21/15 due to a regenerator air compressor uspet the Belco scrubber dirreferential pressure dropped ; 10/21/15 pre-scrubber recirculation pump discharge pressure dropped
Feb. 18, 2016	Periodic, Compliance & SSM Reports	2016-02-18 Compliance Test of DCPP Boiler #2 (P# AQM-003-00016)	permit AQM-003/00016 part 3(renewal 1)(revision 5)	DCPP Boiler 2	H2So4 limits not in compliance with permit limit of 10.9. TPY and facility has no explanation for its emissions being 39.66 TPY
Jun. 23, 2016	Periodic, Compliance & SSM Reports	2016-06-23 Partial Compliance Evaluation Edit - Unit #10 Waste Water Treatment Plant (P# AQM-003-00016)	permit AQM-003/00016 part 2 (	waste water treatment plant	pg.7 list deviation for equipment standards- CPI bays were undergoing yearly maintenance emissions from possible pinched gasket- states deviation was corrected;pg. 10 list deviation for compliance with equipment standards again and recordkeeping, during inspection torn sleeve was found on equalization tank 324, all of the torn sleeves had been replaced by the follow up inspection.
Jan. 17, 2017	Periodic, Compliance & SSM Reports	2017-01-17 2016 Partial Compliance Evaluation Report (P# AQM-003-00016)	permit AQM-003/00016 part 2 section b, permit APC-95/0471-C/O(A3)(LAER)(MACT)(NSPS)	MVRS	pg. 3 permit section 2.2 not met for visible emissions but it states it was corrected so it passed overall
Jan. 30, 2017	Periodic, Compliance & SSM Reports	2017-01-30 Periodic Compliance Report (subpart UUU)(July1-Dec. 31, 2016) (P# AQM-003-00016)	40 CFR 63 subpart UUU	CCUs, CRUs and SRUs	pg. 4 lists emission deviation occurred 11/30/16 releasing 4,386 lbs of CO .
May. 22, 2017	Periodic, Compliance & SSM Reports	2017-05-22 Compliance Test of MVRU System (P# AQM-003-00016)	permit apc-95/0471-operation (amendment 1) (RACT)	MVRS Piers 2 & 3	pier 1 exceeded DE THC % by .4% same with pier 2 but with .7%
Jul. 28, 2017	Periodic, Compliance & SSM Reports	2017-07-28 Periodic Compliance Report (Jan1- Jun 30,2017) (subpart UUU)(P# AQM-003-00016)	40 CFR 63 subpart UUU	CCUs, CRUs and SRUs	pg. 4 lists deviation of 500 ppmv Co limit but states all were during start up-shutdown or hot standby.
Aug. 10, 2017	Periodic, Compliance & SSM Reports	2017-08-10 2017 Partial Compliance Evaluation Report (P# AQM-003-00016)	permit AQM-003/00016 part 1(renewal 2)	Catalytic Hydro-desulfurizer Trains (unit 29) and Tetra Unit (Unit 32)	pg. 34 exceedances reported but no corrective action listed under condition 3(b)(1)(i), 3©(2)(ii)(A)&(C)

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Sept. 17, 2017	Periodic, Compliance & SSM Reports	2017-09-17 2017 Partial Compliance Evaluation Report (P# AQM-003-00016)	permit AQM-003/00016 part 1 section C & E, part 2section K & M	SMRHP, SHU, HC, CCR	pg.5S SHU Unit33-1 & -2 SO2 not in compliance with limits but it was corrected;pg. 11 Unit 37 SMRHP not in compliance with H2S limits but corrected it ; CCR not in compliance with H2S but corrected it; pg. 16 Unit 42 not in compliance H2S limits but corrected - not clear how they were corrected
Sept. 22, 2017	Periodic, Compliance & SSM Reports	2017-09-22 Partial Compliance Evaluation Report for Cracked Naphtha Hydrotreater and Olefins Plant (P# AQM-003-00016)	permit AQM-003/00016 part 1(renewal 2)	cracked Naphtha HydroTreater Unit Feed and Reboiler Heaters (25-H-401 & 402)	pg. 5 lists operational limitations- lists highest 3 hour average from 2014-2017
Oct. 2, 2017	Periodic, Compliance & SSM Reports	2017-10-02 2017 Partial Compliance Evaluation Report (P# AQM-003-00016)	permit AQM-003/00016 part 1 section fe,fg, and part 2 section c	crude unit Heaters 21-H-701 &21-H-2 and SWS	pg. 7 crude unit heaters exceeded H2S limits but was corrected & pg. 8 exceeded Nox but was corrected; pg.13 unit 40 (SWS) exceeded operational limits but was corrected
Nov. 15, 2017	periodic, Compliance & SSM Reports	2017-11-15 2017 Partial Compliance Evaluation Report (P# AQM-003-00016)	permit AQM-003/00016 part 2 (renewal 1)(revision 1) section j	SCOT I &II, SRA	pg. 6-7 SCOT I & II exceeded operational limits for H2S, but it was corrected; pg. 18 non compliance with section 3(C)(2)(ii)(b) but was corrected;
Nov. 15, 2017	Periodic, Compliance & SSM Reports	2017-11-15 Periodic Compliance Report (Mar 28- Sept 24,2017) (subpart CC)(P# AQM-003-00016)	40 CFR 63 subpart CC	heat exchange systems	2 heat exchnage systems were found to be leaking 1 at FCCU and other at the CNHTU
Nov. 17, 2017	Periodic, Compliance & SSM Reports	2017-11-17 2017 Partial Compliance Evaluation Report (P# AQM-003-00016)	permit AQM-003/00016 part 3(renewal 2) sections a,c,d,f,g	DCPP facility wide	pg. boilers 1-4 exceeded operational limitations for RFG but was corrected as well as on pg. 10 exceeded Nox emissions but was corrected;& pg. 14 exceeded visible emissions, but were corrected; Unit 82 on pg.19 exceeded PM; Unit 84 pg. 19 exceeded Nox and CO emissions but were corrected; pg. 33 combined limits exceededfor RFGs
Jan. 20, 2018	Periodic, Compliance & SSM Reports	2018-01-30 Periodic Compliance Report (subpart UUU) (P# AQM-003-00016)	40 CFR 63 subpart UUU	CCUs, CRUs and SRUs	pg. 23 FCCU CO exceeded CO emissions due to feed change; pg. 35 FCCU CO exceeded Co emissions multiple times (11/23/17 multiple trips)(11/27/17 process interruption) and (12/15/17 trip);
Feb. 8, 2018	Periodic, Compliance & SSM Reports	2018-02-08 CNHTU Heater 25-H-402 Monitoring Data (P# AQM-003-00016)	permit AQM-003/00016	25-H 401 &2	pg. 33 only one filter showed above .5mg investigation threshold, all were visually inspected and showed no damage. - Melrose Inc consulting but Josh Carr named as inspector
Apr. 25, 2018	Periodic, Compliance & SSM Reports	2018-04-25 Final Report for 25-H-402 &-403 Compliance Test Nov.2017 (P# APC-1998-0522)	permit APC-98/0522 Operation (amendment 1)(NSPS);	heaters 25-H-402& 402	heaters were not in compliance with PM emissions limits with results being heater 401= 23.3 TPY and 402 being 6.2 TPY
May. 10, 2018	Periodic, Compliance & SSM Reports	2018-05-10 Coke Handling System PM Compliance Test Dec. 2017 (P# APC-1982-1209)	permit APC 82/1209 construction (amendment 7)	coke handling system	4 baghouses exceeded PM emission limits under the permit
Jul. 3, 2018	Periodic, Compliance & SSM Reports	2018-07-03 Coke Handling System PM Compliance Test Feb. 2018 (P# APC-1982-1209)	permit APC-82/1209 Construction (amendment 7); 40 CFR 60 &51	coke handling system	all baghouses were above their permit limits
Jan. 17, 2019	Periodic, Compliance & SSM Reports	2019-01-17 Compliance Test 2019 for SCOTs I & II (P# AQM-003-00016)	permit AQM-003/00016 part 2 (renewal 1)(revision 4)	SCOT I &II	SCOT I passed for NOX & CO limits, failed H2SO4 emission limit of 3.2 lb/hr reporting 3.8 lb/hr DCR said its likely due to flame control settings--> retested and passed ; SCOT II in compliance

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Jan. 30, 2019	Periodic, Compliance & SSM Reports	2019-01-30 Periodic Compliance Report (subpart UUU) (P# AQM-003-00016)	40 CFR 63 subpart UUU	CCUs, CRUs and SRUs	pg. 5 lists emission exceedances for CO dated 8/22/18 (164 lbs released) & 9/15/18 (72 Lbs released); pg. 13 FCCU CO shows reasons for two dates listed 8/22- boiler trip causing draft fan damper malfunction & 9/15 catalyst circulation upset;
Jun. 29, 2019	Periodic, Compliance & SSM Reports	2019-06-29 Email from T. Godlewski re Coke Handling Complex update	permit AQM-003/00016	Baghouses	DNREC requested update on PM control at refinery, (Godlewski sent)- state they implemented all recommendations made by the 3rd party consultant and have been effective in at reducing PM emissions below the permit level. In May 2019 did additional testing revealing only 1 deviance in Baghouse 5 due to a torn bag
Jul. 17, 2019	Periodic, Compliance & SSM Reports	2019-07-17 Compliance Test for MVRS (P# APC-1995-0471)	permit apc-95/0471-operation (amendment 1)(MACT) (RACT)	MVRS	test run 1 was garnered from. Excel sheet submitted by contractor showed VOC emissions exceeding 500 pmP in both north and south flares with an averages of (780 ppmP and 708ppmP); CO emissions from south flare exceeded during all of run 4- 187 lbs/hr when limit is 153.2 lb/hr; also notes on pg. 2 that there were multiple calculation and transcription errors with the final report and were addressed with facility and test contractor
Sept. 6, 2019	Periodic, Compliance & SSM Reports	2019-09-06 Partial Compliance Evaluation Report FCU COB SNCR WGS22-H-2 BUI (P# AQM-003-00016)	permit AQM-003/00016 part 2 (renewal 1)(revision 3) section da,db	FCU, FCU COB, WGS, SNCR, BUI and petroleum coke storage and handling complex	pg. 5 lits unit 22 as not compliant with operational limits but it was corrected
Oct. 1, 2019	Periodic, Compliance & SSM Reports	2019-10-01 SCOT I & II Emission Compliance Test Report (P# AQM-003-00016)	40 cfr 60	SCOT I &II	SRU 203 failed H2SO4 compliance with average emission of 3.76 lb/hr (permit limit 3.2lb/hr)
Oct. 16, 2019	Periodic, Compliance & SSM Reports	2019-10-16 2019 Partial Compliance Evaluation Report (P# AQM-003-00016)	permit AQM-003/00016 part 1 section fe, fg, and part 2 section c	SCR, SWS, crude unit and crude unit heaters 21-H-701, 21-H-2, 21-R-700,470-TF-50 & 471-TF-28	pg. 8 states exceeded So2 limits fro 12 month rolling basis but was due to fire and flaring that were corrected- same for Nox limit and visible emission limits
Nov. 8, 2019	Periodic, Compliance & SSM Reports	2019-11-08 2019 Partial Compliance Evaluation Report (P# AQM-003-00016)	permit AQM-003/00016 part 1 section c, and part 2 section M	SHU, CCR	pg.8 lists Nox limit exceeded but corrected; pg 9-10 HAP deviations but DCRC determined compliance with pH paper until work order was complete;
May. 23, 2014	permit Documents	2014-05-23 Penalty Assessment for Secretary's Order 2013-A-0022 (P# AQM-003-00016)	permit AQM-003/00016	FCCU, COB	letter stating the secretary issued penalty of $ 460,200 and cost recovery of $69,030 for violations on FCCU related to permit inspection, flarings, and FCU and COB outages