#### **BEFORE THE ENVIRONMENTAL APPEALS BOARD**

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C.

In re:

MPLX

CAA Appeal No. 20-01

Permit No. V-UO-000005-2018.00

MPLX LP'S REPLY TO EPA REGION 8'S RESPONSE TO PETITION FOR REVIEW

MPLX LP's Reply to EPA Region 8's Response to Petition for Review

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- 3. U.S. EPA Region 8, Notice of Violation Pursuant to 42 U.S.C. §7413(a) to MPLX LP (Nov. 22, 2019).
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- 5. Andeavor, Title V Permit Renewal Application Operating Permit No. V-OU-000005-2000.00 from Thomas Gibbons (MPLX) (Apr. 11, 2018).
- 6. Comments to U.S. EPA Region 8 in Response to Draft 2020 Title V Permit No. V-OU-000005-2000.00 from Thomas Gibbons (MPLX) (Jan. 13, 2020).

MPLX LP respectively submits this Reply to EPA Region 8's Response to Petition to Review.

#### I. SUMMARY OF REPLY ARGUMENT

EPA's case relies on a strawman argument: it claims MPLX is trying to exempt itself from air quality regulations so that hazardous air pollutants can pass "through a 'control device' subject to no requirements whatsoever."<sup>1</sup> MPLX never made this argument, and EPA's effort to rebut what MPLX does not assert obfuscates what this case is really about. This case is about what EPA agreed to in a July 3, 2012, Consent Decree<sup>2</sup> with one hand eight years ago and now wants to take away with the other hand, today. But EPA cannot unilaterally rewrite the terms of the Consent Decree.

The parties to the Consent Decree agreed in 2012 to resolve allegations that five different compressor stations in Utah had violated Clean Air Act regulations, including 40 C.F.R. part 63, subpart HH, at the Wonsits Valley station. As with any consent decree, both parties made concessions; here, those concessions concern two emission control devices. The parties agreed that the operator would install a new control device, referred to here as a "Flare."<sup>3</sup> This conforms to Subpart HH, which requires that the control device used to control emissions from dehydrator "shall be one" of three devices, one of which is a flare.<sup>4</sup>

Utah July 3, 2012) (ECF No. 495) [Hereinafter Ex. 1 Consent Decree].

<sup>&</sup>lt;sup>1</sup> EPA Region 8's Response to Petition for Review (June 15, 2020), at 2 [Hereinafter *Response*].

<sup>&</sup>lt;sup>2</sup> Exhibit 1 Consent Decree, United States, et. al. v. Questar Gas Management Co., 2:08-cv-00167-TS-PMW (D.

<sup>&</sup>lt;sup>3</sup> See Ex. 1 Consent Decree at ¶15.

<sup>&</sup>lt;sup>4</sup> 40 C.F.R §771(d)(1).

A second control device, referred to in the Consent Decree as a "Backup Combustor" already existed at the Wonsits Valley station, and remains for expressly limited backup use, if necessary. In three carefully crafted paragraphs, the Consent Decree plainly states that Subpart HH applies only to the Flare, references the Flare five times, and calls out numerous Subpart HH Flare-specific regulations.<sup>5</sup> These paragraphs do not mention the Backup Combustor.

The Paragraphs concerning Subpart HH compliance do not mention the Backup Combustor because it is not regulated under Subpart HH. Instead, *the Consent Decree* directly regulates glycol emissions to the Backup Combustor, to the extent any might occur. EPA's hyperbole aside, the emission reductions specified by the Consent Decree for the Backup Combustor are the same as the Flare—95%. The Consent Decree also affords the Wonsits Valley station operator a limited "downtime" period to operate if a pilot light on the control device malfunctions. While that express language governs here, EPA fails to mention that when the Consent Decree was entered Subpart HH allowed uncontrolled emissions during "startup, shutdown and malfunction" periods.<sup>6</sup>

The Consent Decree mandates that EPA incorporate the limits for the Flare and the Backup Combustor in Title V permits. In the 2013 Title V permit,<sup>7</sup> EPA did exactly that. The 2013 Title V permit implements the exact substantive language from the Consent Decree, mandating that compliance with Subpart HH is achieved via the Flare, and separately regulating

<sup>&</sup>lt;sup>5</sup> Ex. 1 Consent Decree at ¶¶15–17.

<sup>&</sup>lt;sup>6</sup> 40 C.F.R. §63.762(a).

<sup>&</sup>lt;sup>7</sup> Exhibit 2 Title V Permit (2013) [Hereinafter Ex. 2 2013 Title V Permit].

the Backup Combustor.<sup>8</sup> The 2013 Permit also copied and pasted the material language of the downtime provision.<sup>9</sup>

Now, EPA asks the Board to say "never mind" to the Consent Decree and the 2013 Permit and focus exclusively on Subpart HH. But the Consent Decree, not Subpart HH, regulates operation of both the Backup Combustor and the downtime language. EPA's retreat from the 2013 Permit simply proves that EPA is unilaterally abandoning the Consent Decree.

EPA then appeals to authority, claiming that this matter should be reviewed with an extremely deferential "abuse of discretion" standard that defers to EPA's "technical expertise." Not so. A consent decree is fundamentally a contract interpreted within its four corners and not subject to the EPA's current expertise or whim. EPA then relies on a single sentence in the Consent Decree that does not specifically reference the Backup Combustor or even Subpart HH, claiming that it subjects the Backup Combustor to Subpart HH. But this would render unnecessary the entire framework of the Consent Decree for regulating emissions to the dehydrator, would negate the very provision that does regulate the Backup Combustor, and the language allowing limited downtime, and would lead to multiple other absurd results. Ultimately, EPA claims that it can just put new operative language into the Consent Decree, as the 2020 Permit inappropriately does.

<sup>&</sup>lt;sup>8</sup> Ex. 2 2013 Title V Permit at II.A. & B. <sup>9</sup> *Id*.at II.B.3.(a).

#### II. STANDARD OF REVIEW

By marginalizing the Consent Decree and the unavoidable obligations it imposes, EPA

gets the standard of review wrong. A consent decree is a judgment of the Court that operates as

an injunction and binds the parties.<sup>10</sup> Because the Consent Decree is a court judgment that

dictates what the challenged conditions of the permit must be, EPA receives no deference<sup>11</sup> and

its technical expertise is not implicated.<sup>12</sup>

Rather, EAB must interpret the Consent Decree as it would any other contract based

upon what it says within its four corners.<sup>13</sup> Neither EPA nor the EAB can add, subtract, or

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<sup>&</sup>lt;sup>10</sup> Sinclair Oil Corp. v. Scherer, 7 F.3d 191, 193 (10th Cir. 1993); Vanguards of Cleveland v. City of Cleveland, 23 F.3d 1013, 1018 (6th Cir. 1994); see also Ex. 1 Consent Decree at ¶89 (consent decree "shall constitute a final judgment of the Court as to the United States").

<sup>&</sup>lt;sup>11</sup> The fact that EPA has changed positions since it (1) stipulated to the Consent Decree and (2) issued the original permit, separately deprives EPA of any deference, as does the fact that EPA's current position appears to be "nothing more than a convenient litigating position." *See Christopher v. SmithKline Beecham Corp.*, 567 U.S. 142, 155 (2012). On November 22, 2019, during the same time-frame that EPA and MPLX were addressing the terms of the 2020 Permit, EPA issued a Notice of Violation to MPLX, *see* Exhibit 3 U.S. EPA Region 8, Notice of Violation Pursuant to 42 U.S.C. §7413(a) to MPLX LP (Nov. 22, 2019). [Hereinafter *Ex. 3 NOV*]. The NOV alleges that MPLX has violated, apparently since entry of the Consent Decree, all or virtually all the Subpart HH regulations applicable to combustors. EPA's allegations in the NOV, as with its arguments here, ignore the Consent Decree. And MPLX had no fair notice of EPA's entirely new interpretation of Subpart HH in relation to the Consent Decree, violating MPLX's due process rights.

<sup>&</sup>lt;sup>12</sup> See U.S. v. Armour & Co., 402 U.S. 673, 682 (1971) ("[T]he scope of a consent decree must be discerned within its four corners, and not by reference to what might satisfy the purposes of one of the parties to it."); United States v. General Electric Co., 986 F.Supp.2d 79, 87 (D. Mass. 2013); Ex. 1 Consent Decree at ¶88 ("This Consent Decree constitutes the final, complete, and exclusive agreement and understanding among the Parties..."); see also Kisor v. Wilkie, 139 S. Ct. 2400, 2414 (2019) (deference to agency interpretations does not apply when neither agency expertise nor ambiguous rules are implicated).

<sup>&</sup>lt;sup>13</sup> Sinclair Oil Corp. v. Scherer, 7 F.3d 191, 193–94 (10th Cir. 1993) ("A consent decree ... is to be construed ... basically as a contract ... the terms of the decree and the respective obligations of the parties must be found within the four corners of the consent decree ...."); *Homeward Bound, Inc. v. Oklahoma Health Care Auth.*, 196 F. App'x 628, 633 (10th Cir. 2006) ("This court construes the terms of a consent decree *de novo*, applying traditional principles of contract interpretation. We strive to give effect to the mutual intent of the parties as expressed in the language of the decree itself.") (citation omitted); *see also Am. Homeland Title Agency, Inc. v. Robertson*, 930 F.3d 806, 810 (7th Cir. 2019) (local contract law governs consent decree interpretation).

ignore words in the decree or change its meaning.<sup>14</sup> In issuing the 2020 Permit, EPA must comply with the binding Consent Decree and cannot seek to reinterpret or amend the Consent Decree via the permitting process.<sup>15</sup>

Ultimately, EPA's conduct in issuing the draft 2020 Permit implicates the standard of review trifecta: Agency conduct is unlawful if "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law."<sup>16</sup> A permitting decision that fails to incorporate the terms of the Consent Decree is clearly erroneous and not in accordance with law. It is also clearly erroneous for EPA to exercise "discretion" to reinterpret the Consent Decree.<sup>17</sup> And it would be the height of arbitrary and capricious permitting to allow EPA to issue a permit that violates the law and is an abuse of discretion.<sup>18</sup>

<sup>&</sup>lt;sup>14</sup> Green River Canal Co. v. Thayn, 84 P.3d 1134, 1141 (Utah 2003) ("[W]e consider each contract provision in relation to all of the others, with a view toward giving effect to all and ignoring none."); Mark Steel Corp. v. Eimco Corp., 548 P.2d 892, 894 (Utah 1976) ("We do not add, ignore, or discard words in this process; but attempt to render certain the meaning of the provision, in dispute, by an objective and reasonable construction of the whole contract."); Quinn v. City of Boston, 325 F.3d 18, 30 (1st Cir. 2003) ("Terms in a consent decree cannot be construed in a vacuum; they must instead be read in the context of the decree as a whole.").

<sup>&</sup>lt;sup>15</sup> See Armour, 402 U.S. at 681 ("Because the defendant has, by the decree, waived his right to litigate the issues raised, a right guaranteed to him by the Due Process Clause, the conditions upon which he has given that waiver must be respected, and the instrument must be construed as it is written...."); see also U.S. v. Wayne County, Michigan, No. 87-70992, 1994WL739020 (E.D. Mich. Dec. 22, 1994) (rejecting argument that Consent Decree could not be enforced because it "allows violations of federal law within its four corners"..."If plaintiffs wanted to force defendants to follow every provision in the [Clean Water] Act and the WRCA, they should have proceeded to litigation.").

<sup>&</sup>lt;sup>16</sup> 5 U.S.C. §706.

 <sup>&</sup>lt;sup>17</sup> See United States v. N. Colo. Water Conservancy Dist., 608 F.2d 422, 430 (10th Cir. 1979) (court had no power to overlook stipulations incorporated in consent decree: "Denver cannot be permitted to circumvent the rights afforded the signatories under the 1964 decree.").
 <sup>18</sup> See 5 U.S.C. §706.

#### III. ARGUMENT

#### A. The Backup<sup>19</sup> Combustor is Regulated Under the Consent Decree.

# 1. EPA's Permit Decision is Contrary to the Plain Language of the Consent Decree Thus Violating the Court's Judgment.

MPLX objected to the 2020 Permit, because EPA inappropriately included provisions and requirements in the draft 2020 Permit that conflict with the express terms of the binding Consent Decree.<sup>20</sup> EAB cannot defer to EPA but must instead look to the plain terms of the Consent Decree to determine how the Backup Combustor is regulated and described in the 2020 Permit.<sup>21</sup> Neither EPA, nor EAB, have any authority to modify the Consent Decree under the guise of permitting.

Here, the Consent Decree—consistent with and explicitly incorporating applicable regulations for the Flare—has a carefully crafted framework for regulating emissions from the glycol dehydrator, set out in three straightforward paragraphs. EPA's legal sophistry and contortions of the Consent Decree fail to explain away what the Consent Decree says—the Backup Combustor is subject to a 95% VOC reduction limit established in the Consent Decree,

<sup>&</sup>lt;sup>19</sup> EPA's brief repeatedly puts "backup" in quotes to suggest that MPLX made up the term in this permit proceeding. But this is exactly the term chosen by the parties in the Consent Decree to describe the combustor. *E.g.*, Ex. 1 Consent Decree at ¶17(b). In contrast, the phrase "combination of control devices" never appears in the Consent Decree and the Consent Decree never describes such an arrangement.

<sup>&</sup>lt;sup>20</sup> *Cf.* 40 C.F.R. §71.11(g) (authorizing challenges to permits when an applicant "believe[s] any condition of a draft permit is inappropriate").

<sup>&</sup>lt;sup>21</sup> As EPA's April 13, 2020 Response to Comments and the 2013 Permit make clear, EPA does not dispute that the Consent Decree requires it "to propose as Part 71 permit conditions, the specific emission limits, operating parameters, monitoring requirements, and recordkeeping requirements set forth in Paragraphs 15, 16, 17," among others. Ex. 1 Consent Decree at ¶24; see also United States v. Asarco Inc., 430 F.3d 972, 980 (9th Cir. 2005).

not in Subpart HH, while, in contrast, the Flare is subject to a 95% VOC reduction limit as governed by Subpart HH. Here's how the Consent Decree works:

Paragraph 15 expressly concerns the Flare only and states that "[t] o comply with the control device requirements of Subpart HH, Defendant shall install and operate, within 60 days of the Effective Date of this Consent Decree, *flares* connected to the existing dehydrators at the Wonsits Valley and Island Facilities pursuant to the requirements of 40 C.F.R. §63.765(b)(1)(i)."<sup>22</sup> Paragraph 15 also requires that, *pursuant to a regulation applicable only to flares* (40 C.F.R. §63.771(d)(1)(iii)), "*the flares* shall be designed and operated" in accordance with specified *regulations that apply only to flares*.<sup>23</sup> The new Flare was installed by the prior operator, Questar, in 2012 and became subject to the 2013 Title V Permit.<sup>24</sup> Paragraph 15 does not discuss the Backup Combustor much less require it to comply with Subpart HH.

Next, Paragraph 16 of the Consent Decree states that "[a]fter the installation of the *flares* required by Paragraph 15, QEPFS shall comply with" the initial notification, compliance determination and reporting requirements applicable to a Subpart HH control device.<sup>25</sup> Once again, this Paragraph does not require that the Backup Combustor comply with these initial notification, compliance determination or reporting requirements.

<sup>23</sup> 40 C.F.R. §63.11(b) (emphasis added).

<sup>&</sup>lt;sup>22</sup> Ex. 1 Consent Decree at ¶15 (The Island Facility is not the subject of this appeal) (emphasis added).

<sup>&</sup>lt;sup>24</sup> Ex. 2 2013 Permit Title V Permit at 3 (list of unit descriptions).

<sup>&</sup>lt;sup>25</sup> Ex. 1 Consent Decree at ¶16 (emphasis added).

Paragraph 17(a) requires that the *flare* installed "pursuant to Paragraph 15" shall achieve a 95% reduction of VOC emissions from the glycol dehydrator pursuant to three Subpart HH regulations *applicable only to flares*.<sup>26</sup> Compliance with these *flare-specific regulations* demonstrates compliance with this 95% standard, for the *Flare*.<sup>27</sup>

Then, the Consent Decree, in Paragraph 17(b) takes a completely different tack in regulating emissions from the Backup Combustor. Unlike Paragraph 15, 16, and 17(a)—which specify that only the Flare is subject to Subpart HH, reference the flare five times in that regard, and call out numerous Subpart HH flare-specific regulations—Paragraph 17(b) contains a single sentence setting forth the requirements for the Backup Combustor. This sentence does not reference Subpart HH, or any Subpart HH regulations applicable to combustors. Instead, it states that to meet the 95% standard:

The back-up combustors shall achieve a 95% by weight or greater reduction of VOC emissions from the dehydrator process vent stream when in use, *determined by the pilot flame on the combustor being on when in use.*<sup>28</sup>

Thus, the Consent Decree resolves the regulatory status of the Flare and the Backup Combustor. Subpart HH requires that the control device used to reduce HAP emission "shall be one of the control devices" listed in 40 C.F.R. §771(d)(1). One such listed control device is a flare.<sup>29</sup> While Subpart HH does not mandate a backup control device in the event the pilot light

<sup>&</sup>lt;sup>26</sup> Ex. 1 Consent Decree at  $\P17(a)$ .

<sup>&</sup>lt;sup>27</sup> Id.

 $<sup>^{28}</sup>$  Id. at ¶17(b) (emphasis added).

<sup>&</sup>lt;sup>29</sup> 40 C.F.R. §63.771(d)(i)(iii).

on a flare temporarily goes out, EPA agreed in the Consent Decree that the Backup Combustor would serve this purpose at the Wonsits Valley station. EPA agreed, and the Court ordered, that the Backup Combustor would be subject to exactly the same VOC reduction rate (95%) as the Flare, and that compliance with this rate would be determined by the presence of a lit pilot light. This, of course, results in an environmental benefit, so that emissions would not temporarily vent to the atmosphere in the infrequent event that the flare pilot light malfunctions.

In the 2020 Permit, EPA did not incorporate the terms of the Consent Decree regarding regulation of the Backup Combustor, but instead wrote its own. As set forth above, the Consent Decree mandates that Subpart HH applicability provisions extend *only to the Flare*. In violation of the Consent Decree (which is a binding federal court judgment), EPA inappropriately inserted the acronym "C-2," representing the Backup Combustor, into the applicability section, deeming it applicable to Subpart HH.<sup>30</sup>

EPA then inappropriately inserted the word "C-2" into several Subpart HH control, testing, inspection, monitoring and recordkeeping requirements for combustors, deeming the Backup Combustor applicable to those requirements.<sup>31</sup> But the Consent Decree goes to great lengths to avoid doing exactly that. As set forth above, the Consent Decree addresses Subpart HH control, testing, inspection, monitoring and recordkeeping requirements only in Paragraphs

 <sup>&</sup>lt;sup>30</sup> Exhibit 4 U.S. EPA Region 8, Air Pollution Control Permit to Operate Title V Operating Permit Program at 40 CFR Part 71 at III.3.A (Apr. 13, 2020) [Hereinafter *Ex. 4 2020 Title V Permit*].
 <sup>31</sup> Ex. 4 2020 Title V Permit at III.C & D–F.

15-17(a), which apply only to flares, and provides citations for those requirements, which also apply only to flares.

It gets worse. The 2020 Permit sneaks in the term "combination of control devices" in the general applicability section for glycol dehydrator control devices.<sup>32</sup> This is an apparent attempt to regulate the Backup Combustor and Flare as a combination of control devices under Subpart HH, a tactic that EPA suggests might be appropriate here.<sup>33</sup> But the Consent Decree does not even mention this term.<sup>34</sup>

Keep in mind that the 2020 Permit, as EPA well knows, is simply a renewal of the

original 2013 permit issued promptly after entry of the Consent Decree.<sup>35</sup> Back in 2013, EPA

scrupulously complied with the Consent Decree by incorporating the control device

requirements in the 2013 Permit exactly as set forth in and specified by the Consent Decree,

from a substantive standpoint.<sup>36</sup> The 2013 Permit provided that the Flare would be used to

<sup>36</sup> Ex. 2 2013 Permit at V.A.

<sup>&</sup>lt;sup>32</sup> Ex. 4 2020 Title V Permit at III.C.1.(a)(i).

<sup>&</sup>lt;sup>33</sup> Response at 10.

 $<sup>^{34}</sup>$  Furthermore, there the use of a "combination of control devices" is optional under Subpart HH, and EPA presents no evidence that "combination of control devices" would include the very rare situation here, arising from a Consent Decree, where a limited, if ever, use backup device remained after the Subpart HH device was installed. 40 C.F.R. §63.765(b)(1)(i).

<sup>&</sup>lt;sup>35</sup> As such, EAB can consider the 2013 Permit as a contextual aid to understanding the construction of the Consent Decree, while not departing from the "four corners" rule. *See General Electric Co.*, 986 F.Supp.2d at 87; *See* Exhibit 5 Andeavor, Title V Permit Renewal Application Operating Permit No. V-OU-000005-2000.00 from Thomas Gibbons (MPLX) (Apr. 11, 2018) (renewal application with cover letter, both of which explicitly identify and refer to the 2013 Permit by number) [Hereinafter *Ex. 5 2018 Renewal Application*]. Here, the 2013 Permit, which is expressly referenced in the Consent Decree as a document EPA must develop to incorporate the terms of the Consent Decree, is one such aid. Ex. 1 ¶24. *See U.S. v. ITT Cont'l Baking Co.*, 420 U.S. 223, 238 (1975) ("Such [contract interpretation] aids include the circumstances surrounding the formation of the consent order, any technical meaning words used may have had to the parties, and *any other documents expressly incorporated in the decree.*") (emphasis added).

"comply with" Subpart HH and listed the *exact* control requirements for the Flare established in paragraphs 15-17 of the Consent Decree.<sup>37</sup> The 2013 Permit did not do what the 2020 Permit does: disingenuously slip the term "C-2" into the applicability and regulation specific section of the permit, and then list Subpart HH combustor regulations, nowhere mentioned in the Consent Decree. Nor did it contain the words "combination of control" devices." EPA's conduct now is entirely inconsistent with its conduct back in 2013, in applying the same Consent Decree.<sup>38</sup>

EPA's desperate attempt to hide from the 2013 Permit speaks volumes. EPA was fully aware that MPLX objected to the 2020 Permit because, unlike the 2013 Permit, it failed to properly incorporate the terms of the Consent Decree regarding the Backup Combustor. Indeed, EPA's entire permit decision regarding the Backup Combustor, and its April 13, 2020 Response to comments ("RTC") justifying that decision, *is premised on a full-scale retreat from the 2013 Permit*. The 2013 Permit complied with the court-ordered Consent Decree *because it properly implemented the Consent Decree*, the 2020 Permit does not, and EPA addressed this failure to implement the Consent Decree in several sections of its RTC. Notably, EPA does not (because it cannot) claim it was unaware of the objectionable difference between the 2013 Permit and the 2020 Permit regarding the Backup Combustor, because that difference is the gravamen of this

<sup>&</sup>lt;sup>37</sup> Ex. 2 2013 Permit at V.B.1–2 & 3(b).

<sup>&</sup>lt;sup>38</sup> EPA's position now, as stated in its responses, is that Subpart HH regulates the Backup Combustor, by law, and nothing can "exempt" it. For EPA to suggest, as it does, *see* Response at 10–11, that if MPLX had emphasized the 2013 Permit more in its application and comments, EPA would have decided that the 2013 Permit creates the "exemption" that EPA steadfastly claims does not exist, is frivolous.

entire permit proceeding. EPA knows that it failed to transfer over to the 2020 Permit the Backup Combustor-related terms of the 2013 Permit.

EAB must require EPA to respect and comply with the express terms of the Consent Decree when issuing the permit for the Wonsits Valley facility.<sup>39</sup>

# 2. EPA's "Interpretation" Rewrites the Consent Decree and Leads to Absurd Results.

EPA's avoidance of the plain language of Paragraphs 15, 16, and 17 in the Consent Decree deviates from the Consent Decree's express terms and leads to absurd results. In fact, EPA argues that the structure and express terms of Paragraphs 15–17 should be ignored.

Cutting to the chase, EPA's entire attempt at a rebuttal rests on the final sentence of Paragraph 17(b), which states that "nothing in [Paragraph 17] shall affect the operator's "obligation to meet applicable requirements of 40 C.F.R. Part 63." Basically, EPA's entire case presupposes that this provision overrides everything that came before (even though it took exactly the opposite position when issuing the original 2013 Permit). The result promoted by EPA is untenable when one considers the structure and express provisions of Paragraphs 15, 16, and 17 detailed above. Unlike the flare-specific Subpart HH regulations cited in Paragraphs 15, 16, and 17(a), there is *one sentence* in Paragraph 17(b) that sets forth the requirements for the

<sup>&</sup>lt;sup>39</sup> See Armour, 402 U.S. at 681; see also Pub. Interest Research Grp. of New Jersey, Inc. v. Ferro Merch. Equip. Corp., 680 F. Supp. 692, 694 (D.N.J. 1987) (party to environmental consent decree "will not be heard to say" that performance is different than anticipated); In re: We Energies Oak Creek Power Plant Admin., 2009WL7584286 (EAB June 12, 2009) ("[O]nce EPA has resolved a matter through enforcement resulting in a Consent Decree approved by a court, the Administrator will not determine that a demonstration of noncompliance with the Act has been made in the title V context.").

Backup Combustor. This sentence does not reference Subpart HH, but instead establishes a Consent Decree-based limit of 95% for the Backup Combustor, determined by the presence of a lit pilot light.<sup>40</sup> Under EPA's new "interpretation," the parties, in three separate sections of the Consent Decree, identified the flare as the Subpart HH control device, referenced it five times, parsed out the regulations that applied to it, and then—even though the Consent Decree mandates a separate standard for the Backup Combustor, never identifies the Backup Combustor as a Subpart HH control device, and never discusses any of the Subpart HH requirements that might be applicable to combustors—also intended for the Backup Combustor to be governed by Subpart HH even though the Consent Decree explicitly sets forth a different standard. In other words, EPA claims the parties meant to regulate the Backup Combustor under Subpart HH through a 13-word sentence that does not even mention the Backup Combustor, or any Subpart HH combustor-specific regulations, or even Subpart HH itself and that conflicts with the express terms of the prior two sentences and the overarching structure of the portions of the Consent Decree concerning the control device. EPA proffers no reason why the parties to the Consent Decree would negotiate in such an absurd way, because there is none.

Needless to say, courts reject arguments in which a party tries to use a stray sentence to override express provisions that came before. For example, in Segar v. Mukasey, the D.C. Circuit Court of Appeals rejected the same type of interpretive reasoning that EPA uses here.<sup>41</sup>

<sup>&</sup>lt;sup>40</sup> Ex. 1 Consent Decree at ¶17(b).
<sup>41</sup> Segar v. Mukasey, 508 F.3d 16 (D.C. Cir. 2007).

In Segar, the U.S. Drug Enforcement Agency argued that a general catch-all sentence at the end

of a footnote in what was in effect a consent decree to prevent racially discriminatory hiring

overrode pages of express provisions.<sup>42</sup> The D.C. Circuit easy disposed of DEA's argument:

Specifically, the DEA argues that the footnote reserves to the Administrator the authority to select a candidate who never submitted an application (and is not a current SES employee), whose application was never reviewed and rated by the candidate's superior or the SES selection panel, and whom the panel never put on the list of best-qualified candidates.4 This is not a reasonable reading of the contract as a whole.

The DEA essentially construes the footnote as saying "never mind" to the seven single-spaced pages that establish a process for evaluating and selecting SES candidates. ...

Most important, the DEA's interpretation effectively deletes from the document the textual promise that the Administrator "will" make his or her selection from that list.

This reading of the two provisions violates the cardinal principle of contract construction noted above: that a document should be read to give effect to all its provisions and to render them consistent with each other. That principle bars us from attributing to the footnote a meaning that would require us to read the seven pages of text] out of the contract. Yet that is what the DEA asks us to do.

The government's reading is also inconsistent with the stipulated purpose of the consent decree.<sup>43</sup>

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<sup>&</sup>lt;sup>42</sup> *Id.* at 17–18, 22–25.

<sup>&</sup>lt;sup>43</sup> *Id.* at 23–24 (citations omitted; cleaned up); *see also Quinn v. City of Boston*, 325 F.3d 18, 30 (1st Cir. 2003) ("Terms in a consent decree cannot be construed in a vacuum; they must instead be read in the context of the decree as a whole.").

Like DEA's interpretation of a single sentence in *Segar*, EPA's reading of the last sentence of Paragraph 17 is not reasonable because that construction says "never mind" to (1) the rest of the Paragraph 17(b) that specifies how the Backup Combustor is to be treated; and (2) the "textual promise" in three other preceding paragraphs that only the Flare would be subject to Subpart HH.<sup>44</sup>

Similarly, in *Sierra Club v. Meiburg*, a consent decree imposed in several pages a requirement to develop certain Clean Water Act limitations, but "conspicuously absent from those obligations was any mention of" of implementation plans.<sup>45</sup> The court held that if "the parties had intended for the decree to put such an important and substantial responsibility" on a party, it "would have spelled that out just as they spelled out its responsibility to establish" the limitations."<sup>46</sup> Here, the parties knew how to subject a control device to subpart HH—and did so for the Flare in painstaking detail in paragraphs 15-17—but conspicuously decided not to do so for the combustor, instead regulating it in one sentence in Paragraph 17(b). If the parties to the Consent Decree wanted to impose the important Subpart HH regulations for Backup Combustor, they would have done so in Paragraphs 15-17, and not in a roundabout way in Paragraph 17(b), which does not, on its face, have anything to do with Subpart HH. EPA's interpretation leads to the entirely unreasonable and illogical conclusion that the parties decided

<sup>&</sup>lt;sup>44</sup> See Segar, 508 F.3d at 24.

<sup>&</sup>lt;sup>45</sup> Sierra Club v. Meiburg, 296 F.3d 1021 (11th Cir. 2002).

<sup>&</sup>lt;sup>46</sup> *Id.* at 1030.

to openly and obviously subject the Flare to Subpart HH in three paragraphs, but for reasons not apparent anywhere in the Consent Decree, rejected that same approach for the Backup Combustor yet also wanted to subject the Backup Combustor to Subpart HH. This interpretation defies common sense and should be rejected.

EPA acknowledges, as it must, that Paragraph 15, which applies only to the Flare, is the applicability provision for Subpart HH, but asserts that it be disregarded because Paragraph 15 "did not survive the 2014 termination of the Consent Decree."<sup>47</sup> This violates the rule that the provisions of a consent decree must be interpreted as a whole.<sup>48</sup> MPLX is merely referring to Paragraph 15 and the rest of the Consent Decree to explain the unambiguous meaning of Paragraph 17(b). Neither EPA nor EAB can simply pretend that Paragraphs 15 (or Paragraph 16, or any other "terminated" provision of the Consent Decree) never existed. Moreover, Paragraph 17, *which incorporates by reference Paragraph 15*, and which implements the Subpart HH regulations in Paragraph 16, did survive termination.

Further, EPA's position would have led to absurd enforcement results the moment the Consent Decree became effective. The parties to the Consent Decree intended that Paragraph 15 carefully address the fact that the Consent Decree would be entered *after* initial notification requirements for the Flare under Subpart HH had passed.<sup>49</sup> So, Questar, the then operator, did

<sup>&</sup>lt;sup>47</sup> Response at 13.

 <sup>&</sup>lt;sup>48</sup> E.g., Green River Canal Co., 84 P.3d at 1141; Mark Steel Corp., 548 P.2d at 894; Quinn, 325 F.3d at 30 (1st Cir. 2003).
 <sup>49</sup> Ex. 1 Consent Decree at ¶15.

Ex. I Consent Decree at ¶15.

not need to make an initial notification, thereby avoiding compliance jeopardy. Proving once again that Subpart HH applies only to the Flare, there is no provision in Paragraph 15, or anywhere else, excluding the Backup Combustor from the initial notification requirement. The reason is simple—the Backup Combustor is not subject to Subpart HH.

Likewise, Paragraph 16 states that "after installation of the flares" the operator shall comply with all initial compliance determination, notification, and reporting requirements in Subpart HH.<sup>50</sup> But these deadlines were based on a "compliance date" that had already passed as of the date of the Consent Decree.<sup>51</sup> To address this compliance issue, the Consent Decree provides that for purposes of these requirements, the "compliance date" would be the effective date" of the Consent Decree. In that way, the "clock" for compliance—such as the requirement to submit a notification of compliance status report—would begin at the effective date of the Consent Decree.<sup>52</sup> Paragraph 16 does not afford any such compliance relief for the Backup Combustor, because the Consent Decree regulates the Backup Combustor separately in Paragraph 17(b), which imposes non-Subpart HH requirements. Again, however, to adopt EPA's interpretation of the Consent Decree would be to decide that the parties agreed to deem Questar out of compliance on the effective date. This defies logic, and EPA's position must be rejected.

<sup>&</sup>lt;sup>50</sup> Ex. 1 Consent Decree at ¶16.

<sup>&</sup>lt;sup>51</sup> 40 C.F.R. §63.760(f)(1) & (2).

<sup>&</sup>lt;sup>52</sup> See 40 C.F.R. §63.775(d).

The only reasonable interpretation of the general reference to "Part 63" in the last sentence is that it means exactly what it says: only "applicable requirements" *of Part 63* remain in force. Obviously, it did not apply to the Backup Combustor, because, for all the reasons discussed above, the parties agreed that the Backup Combustor would not be "applicable" to Part 63, specifically Subpart HH. Instead, the "applicable requirements" for the Backup Combustor are the limited control efficiency and flare pilot requirement in Paragraph 17(b). EPA agreed with this straightforward interpretation in 2013, when it wrote the original Title V permit and applied Subpart HH only to the flare. That EPA dislikes what it agreed to in the Consent Decree in 2012, and dislikes how it permitted the Wonsits Valley station in 2013, does not allow it to unilaterally strike a new bargain today.<sup>53</sup>

# **B.** EPA's Permitting Decision to Revoke the 140-hour "Downtime" Provision Violates the Consent Decree.

EPA also tries to say "never mind" to the "downtime" provision in Paragraph 17, despite the plain language of the Consent Decree that put it there: "The flares installed pursuant to Paragraph 15 shall achieve a 95% by weight or greater reduction of VOC emissions . . . at all times *except as provided in Paragraph 17(b)*."<sup>54</sup> Paragraph 17(b) then states that if the pilot light goes out on the Flare, emissions must "expeditiously" be routed to the Backup Combustor and mandates the same control efficiency (95%) for the Backup Combustor as the Flare.<sup>55</sup> If

 <sup>&</sup>lt;sup>53</sup> Further, EPA fails to mention that that the last sentence applies to "this Paragraph" which is all of Paragraph 17. There are multiple aspects of Paragraph 17 that apply to the Flare. The last sentence of Paragraph 17(b) is that the reference to Part 63 concerns the Flare and the requirement that it meet all Part 63 rules, not just Subpart HH.
 <sup>54</sup> Ex. 1 Consent Decree at ¶17(a) (emphasis added).
 <sup>55</sup> Id.

both the Flare and Backup Combustor pilot lights go out, then "[t]he time period during which the glycol dehydrator is operated without either (1) a flare with the pilot flame on or (2) the back-up combustor with its pilot flame on shall not exceed 140 hours at the Wonsits Valley Facility .....<sup>56</sup> If the control device is on it must achieve a 95% reduction of VOC, and if the control device is not on (due to pilot light malfunction), that malfunction period must not exceed 140-hours annually.

The 2020 Permit simply writes this out of the Consent Decree by including new language *that is not even in the Consent Decree*. To emphasize, *EPA unilaterally modified the words of the Consent Decree to eliminate the downtime provision*. The 2020 Permit inserts a footnote into the downtime provision that simply overrides that provision.<sup>57</sup> Ex. 2 at 11, fn.2. The footnote states that "at all times the dehydrator is operational, the process stream must be routed to one of the two [control devices], and the [control device] to which the process stream is routed must be functioning."<sup>58</sup> EPA's new language includes a supposed rationale for EPA's new position regarding the meaning of the Consent Decree and a purported interpretation of Subpart HH.<sup>59</sup> None of this language is in the Consent Decree. Yet EPA is duty bound to import the exact language of the Consent Decree into the 2020 Permit—just as it did with the 2013 Permit, when it still chose to comply with, rather than violate, the Consent Decree.

<sup>&</sup>lt;sup>56</sup> EPA acknowledges that this is an annual allowance. See Ex. 1 Consent Decree at 17(b).

<sup>&</sup>lt;sup>57</sup> Ex. 4 2020 Title V Permit at 11, fn.2.

<sup>&</sup>lt;sup>58</sup> Id.

<sup>&</sup>lt;sup>59</sup> Id.

EPA initially acknowledges that the Consent Decree means exactly what it says.<sup>60</sup> But EPA leaps to the old canard that the last sentence of Paragraph 17 (the supposed "catch all" that regulates the Backup Combustor under Subpart HH) trumps the plain language and intent of the downtime provision. But if the parties intended that there would be no downtime allowance for either the Flare or Backup Combustor, why did they write one, and expressly place a limit on it? EPA's position is that the parties to the Consent Decree drafted a downtime provision for both the Flare and Backup Combustor, decided on and inserted a specific time allowance, and then negated that provision in a "catchall" sentence that immediately followed. This is an absurd result that must be rejected.<sup>61</sup>

EPA asserts that the downtime provision exists for reasons completely unrelated to Subpart HH. EPA claims that the downtime allowance is necessary to provide "credit" in calculating the "potential to emit" ("PTE") of the Wonsits Valley station under the New Source Review regulations.<sup>62</sup> That is, the emission reductions associated with the downtime allowance can be considered and deducted in calculating the potential for purposes of determining whether the facility exceeds NSR major source permitting thresholds. But why would the parties address NSR in a section of the Consent Decree addressing NESHAP rules? EPA has no answer.<sup>63</sup>

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<sup>&</sup>lt;sup>60</sup> Response at 14.

<sup>&</sup>lt;sup>61</sup> See Segar, 508 F.3d at 23–24.

<sup>&</sup>lt;sup>62</sup> See Response at 13–14 & fn. 60.

<sup>&</sup>lt;sup>63</sup> EPA claims that the Backup Combustor "receives and processes emission from glycol dehydrator D-1; that is in fact, the only function described for combustor C-2." But the Backup Combustor only combusts dehydrator vapors

Furthermore, EPA's argument turns the concept of PTE on its head. EPA's position is that there is no downtime allowance, because Subpart HH prohibits it. Thus, since EPA contends that the 140-hour downtime allowance is unlawful, there is nothing to take credit for in calculating PTE. Second, during a downtime period, emissions increase, not decrease. Thus, during this period, there is no reduction or "credit" to be considered in calculating PTE. Also, EPA's explanation for the downtime provision is entirely different than the one it offered in its RTC. There, EPA claimed that the downtime provision limits the period that the Backup Combustor may have its pilot light off when the dehydrator emissions are not even being routed to it.<sup>64</sup> Clearly, EPA is grasping at straws.<sup>65</sup>

Obviously, EPA cannot unilaterally modify the Consent Decree. As a federal court order, only a court can make a material modification to a Consent Decree. If, at this late date, EPA harbors concerns about the terms of the Consent Decree, its sole remedy is a motion to modify the Consent Decree filed with the Court that issued the Consent Decree.<sup>66</sup>

EPA ultimately gives up on its legal contortions of the Consent Decree language and simply asserts that Subpart HH today does not allow for any malfunction-related downtime. As

when the flare pilot is temporarily off, and EPA presents no evidence that this is anything but an unlikely occurrence. EPA does reference a footnote to a "potential to emit" calculation in the 2018 permit renewal application, but this calculation was used only to calculate NOx and CO emissions which are much less than the de minimis reporting value of 0.1 tons per year for emissions on EPA's permit application forms. <sup>64</sup> Exhibit 6 Comments to U.S. EPA Region 8 in Response to Draft 2020 Title V Permit No. V-OU-000005-2000.00 from Thomas Gibbons (MPLX) at 3–4 (Jan. 13, 2020) [Hereinafter *Ex. 6 MPLX Response to Comments*].

<sup>&</sup>lt;sup>65</sup> EPA emphasizes the "integrity" of the public comment process, Response at 17, but gave the public a rationalization for the downtime provision that it now abandons here.

<sup>&</sup>lt;sup>66</sup> See United States v. Asarco Inc., 430 F.3d 972, 979 (9th Cir. 2005).

to the Backup Combustor, this issue is irrelevant, because the Backup Combustor is regulated under the Consent Decree, not Subpart HH. In any case, EPA fails to understand that at the time the Consent Decree was negotiated and filed, Subpart HH had a 'Startups, Shutdowns, and Malfunctions" ("SSM") provision which exempted sources from the requirement to comply with emission standards during periods of SSM.<sup>67</sup> EPA removed this (and another similar provision) in August 2012, *after* the Consent Decree was filed.<sup>68</sup> So the inclusion of a short downtime period for a pilot light malfunction in the Consent Decree is unremarkable and does not advance EPA's argument in any way.

Again, if EPA is now unhappy that the Consent Decree allegedly does not conform to current law, EPA must seek a modification of the Consent Decree from the court, not attempt to unilaterally impose its current views on MPLX via a permitting process.<sup>69</sup>

#### IV. CONCLUSION AND REQUESTED RELIEF

For the reasons set forth above and in the Petition, MPLX respectfully requests that EAB accept the Petition and find that EPA's permitting decision was clearly erroneous, arbitrary and capricious, an abuse of discretion, and not in accordance with law because it inappropriately added terms to the 2020 Permit and violated the Consent Decree. EAB should then either (1) order EPA to strike all provisions that fail to comply with the Consent Decree

<sup>&</sup>lt;sup>67</sup> 40 C.F.R. §63.762(c)(July 1, 2011); *see* 77 Fed. Reg. 49505 (Aug. 16 ,2012) (40 C.F.R. §63.762(c) SSM provisions removed effective October 15, 2012).

<sup>&</sup>lt;sup>68</sup> See 77 Fed. Reg. 49490, 49505 (Aug. 16, 2012).

<sup>&</sup>lt;sup>69</sup> See Armour, 402 U.S. at 681; N. Colo. Water Conservancy Dist., 608 F.2d at 430; see also Wayne County, 1994WL739020.

(*i.e.*, all permit provisions that seek to subject the Backup Combustor ("C-2") to Subpart HH, rather than the express terms of the Consent Decree and all permit provisions that seek to modify the downtime provision specified by the Consent Decree) and reissue a draft 2020 permit that complies with the Consent Decree; or (2) vacate the permitting process previously conducted and order EPA to restart the permitting process and reissue a draft permit in compliance with the Consent Decree.

Dated this 14th day of July, 2020.

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MPLX LP's Reply to EPA Region 8's Response to Petition for Review

#### **Statement of Compliance with Word Count Limitation**

Statement of Compliance with Word Count Limitation I certify that this Reply to EPA Region 8's Response to Petition for Review submitted by MPLX, exclusive of the Table of Contents, the Table of Authorities, the list of Exhibits attached to this Response, those Exhibits, this Statement of Compliance, and the attached Certificate of Service, contains 6,836 words, as calculated using Microsoft Word.

#### **CERTIFICATE OF SERVICE**

The undersigned hereby certifies that on the 14th day of July 2020, a true and correct copy of the foregoing document was served upon EPA Region 8 as listed below by EAB electronic filing and via email:

Michael Boydston Office of Regional Counsel US EPA Region 8 (8RC) 1595 Wynkoop Street Denver, Colorado 80202 Telephone: (303) 312-7103 boydston.michael@epa.gov

/s/ Colin G. Harris

Colin G. Harris

MPLX LP's Reply to EPA Region 8's Response to Petition for Review

## **EXHIBIT 1**

Consent Decree, United States, et. al. v. Questar Gas Management Co., 2:08-cv-00167-TS-PMW (D. Utah July 3, 2012) (ECF No. 495).

#### IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF UTAH, CENTRAL DIVISION

#### UNITED STATES OF AMERICA,

Plaintiff,

UTE INDIAN TRIBE OF THE UINTAH AND OURAY RESERVATION, FRANCES M. POOWEGUP, IRENE C. CUCH, PHILLIP CHIMBURAS, and RON WOPSOCK,

Plaintiffs-Intervenors

QUESTAR GAS MANAGEMENT COMPANY,

Defendant.

#### CONSENT DECREE

Case No. 2:08-CV-00167-TS-PMW

District Judge TED STEWART

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WHEREAS, Plaintiff United States of America, (the "United States") on behalf of the United States Environmental Protection Agency ("EPA"), filed a complaint in this action on February 29, 2008, alleging that Defendant QEP Field Services Company ("QEPFS"), formerly known as Questar Gas Management Company, violated Section 112 of the Clean Air Act ("Act"), 42 U.S.C. § 7412, Part C, Title 1 of the Act, 42 U.S.C. §§ 7470-7479, and Title V of the Act, 42 U.S.C. §§ 7661-7661f, at its Coyote Wash, Chapita, Island, Wonsits Valley, and River Bend compressor stations (the "Facilities").

WHEREAS, EPA administers the Act's programs for National Emission Standards for Hazardous Air Pollutants ("NESHAP"), Prevention of Significant Deterioration ("PSD"), and federal operating permits under Title V of the Act with respect to the Facilities located on Indian country land in Utah.

WHEREAS, the Complaint alleges, <u>inter alia</u>, QEPFS's Coyote Wash, Chapita, Island, Wonsits Valley, and River Bend compressor stations are all major sources of HAP emissions under Section 112(a)(1) of the Act, 42 U.S.C. § 7412(a)(1), are subject to HH requirements pursuant to 40 C.F.R. §§ 63.760(b)(1) & 63.765(a), and that QEPFS failed to comply with numerous HH requirements concerning the Facilities.

WHEREAS, the Complaint alleges, <u>inter alia</u>, QEPFS's Coyote Wash, Chapita, Island, Wonsits Valley, and River Bend compressor stations are major sources of HAP emissions, their RICE units are subject to ZZZZ regulations pursuant to 40 C.F.R. § 63.6590(a), and QEPFS failed to comply with numerous ZZZZ requirements regarding the Facilities.

WHEREAS, the Complaint alleges, <u>inter alia</u>, QEPFS's Coyote Wash, Chapita, Island, Wonsits Valley, and River Bend compressor stations are each a "major emitting facility" as

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defined by Section 169(1) of the Act, 42 U.S.C. § 7479(1), a "major stationary source" as defined by 40 C.F.R. § 52.21(b)(1)(i)(b), and that QEPFS failed to comply with permit requirements concerning the facilities pursuant to Section 165(a) of the Act, 42 U.S.C. § 7475(a), and 40 C.F.R. §§ 52.21(a)(2)(iii), and (j) - (q) (2007).

WHEREAS, the Complaint alleges, <u>inter alia</u>, QEPFS's Coyote Wash, Chapita, Island, Wonsits Valley, and River Bend compressor stations are each a "Part 71 Source" within the meaning of 40 C.F.R. §§ 71.1 and 71.3, subject to the Title V operating permit program set forth in Title V of the Act at 42 U.S.C. § 7661 - 7661f, and that QEPFS failed to file applications for Part 71 federal operating permits within 12 months after the Chapita and Island Facilities became Part 71 sources and failed to comply with numerous 40 C.F.R. § 71.9 requirements concerning the facilities.

WHEREAS, on October 7, 2010, the Court granted the motion to intervene of Frances M. Poowegup, Irene C. Cuch, Phillip Chimburas, Curtis Cesspooch, and Richard Jenks, Jr., on May 15, 2012 granted the motion to intervene of Ron Wopsock, and on May 15, 2012 granted the motion to dismiss the claims of Curtis Cesspooch and Richard Jenks, Jr., with prejudice.

WHEREAS, Defendant QEPFS has denied and continues to deny the allegations in the Complaint and Complaint-in-Intervention and maintains that it has been and remains in compliance with the Act, is not liable for civil penalties or injunctive relief, and that it is agreeing to the obligations imposed by this Consent Decree solely to avoid further costs and uncertainty of litigation.

WHEREAS, the United States, QEPFS, and Plaintiff-Intervenors recognize, and the Court by entering this Consent Decree finds, that this Consent Decree has been negotiated by the

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Parties in good faith and will avoid litigation between the Parties and that this Consent Decree is fair, reasonable, and in the public interest.

NOW, THEREFORE, before the taking of any testimony, without the adjudication or admission of any issue of fact or law except as provided in Section I, and with the consent of the Parties, IT IS HEREBY ADJUDGED, ORDERED, AND DECREED as follows:

#### I. JURISDICTION AND VENUE

1. This Court has jurisdiction over the subject matter of this action, pursuant to 28 U.S.C. §§ 1331, 1345, and 1355, and Section 113(b) of the Act, 42 U.S.C. § 7413(b), and over the Parties. Venue lies in this District pursuant to Section 113(b) of the Act, 42 U.S.C. § 7413(b), and 28 U.S.C. § 1391(c) and 1395(a), because the violations alleged in the Complaint are alleged to have occurred in, and Defendant conducts business in, this judicial district. For purposes of this Decree, or any action to enforce this Decree, Defendant consents to the Court's jurisdiction over this Decree and any such action and over Defendant and consents to venue in this judicial district.

2. For purposes of this Consent Decree, Defendant agrees that the Complaint states claims upon which relief may be granted pursuant to Section(s) 112 of the Clean Air Act ("Act"), 42 U.S.C. § 7412; Part C, Title 1 of the Act, 42 U.S.C. §§ 7470-7479; and Title V of the Act, 42 U.S.C. §§ 7661-7661f.

#### II. <u>APPLICABILITY</u>

3. The obligations of this Consent Decree apply to and are binding upon the United States, Plaintiff-Intervenors, and Defendant, and upon any successors, assigns, or other entities or persons otherwise bound by law.

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4. QEPFS will condition any transfer, in whole or in part, of ownership of, operation of, or other interest (exclusive of any non-controlling non-operational shareholder or security interest) in, any of the Facilities upon the execution by the transferee of a modification to the Consent Decree which makes the terms and conditions of the Consent Decree apply to such Facility applicable to the transferee. As soon as possible prior to the transfer, QEPFS shall notify the United States of the proposed transfer and of the specific Consent Decree provisions that the transferee is assuming. Within a reasonable time thereafter, OEPFS shall provide a certification from the transferee that the transferee has the financial and technical ability to assume the obligations and liabilities under this Consent Decree that are related to the transfer. By no later than sixty (60) days after the transferee executes a document agreeing to substitute itself for QEPFS for all terms and conditions of this Consent Decree that apply to the Facility that is being transferred, the United States, QEPFS, and the transferee shall jointly file with the Court a motion requesting the Court to substitute the transferee as the Defendant for those terms and conditions of this Consent Decree that apply to the Facility that is being transferred (if the United States concurs). If QEPFS does not secure the agreement of the United States to a Joint Motion within sixty (60) days, then QEPFS and the transferee may file a motion without the agreement of the United States. The United States thereafter may file an opposition to the motion. QEPFS will not be released from the obligations and liabilities of any provision of this Consent Decree unless and until the Court grants the motion substituting the transferee as the Defendant to those provisions.

5. Defendant shall provide a copy of this Consent Decree to all officers, employees, and agents whose duties include compliance with any provision of this Decree.

#### III. <u>DEFINITIONS</u>

6. Terms used in this Consent Decree that are defined in the Act or in regulations promulgated pursuant to the Act shall have the meanings assigned to them in the Act or such regulations, unless otherwise provided in this Decree. Whenever the terms set forth below are used in this Consent Decree, the following definitions shall apply:

a. "Complaint" shall mean the complaint filed by the United States in this action;

b. "Complaint in Intervention" shall mean the complaint, and amendments thereto, filed by the Plaintiff-Intervenors in this action;

c "Consent Decree" or "Decree" shall mean this Decree;

d. "Day" shall mean a calendar day unless expressly stated to be a business day. In computing any period of time under this Consent Decree, where the last day would fall on a Saturday, Sunday, or federal holiday, the period shall run until the close of business of the next business day;

e. "Defendant" shall mean QEP Field Services Company ("QEPFS"), successor by name change to Questar Gas Management Company;

f. "EPA" shall mean the United States Environmental Protection Agency and any of its successor departments or agencies;

g. "Effective Date" shall have the definition provided in Section XIV.

h. "Facilities" (or, individually, "Facility") shall mean Defendant's Coyote Wash, Chapita, Island, Wonsits Valley, and River Bend compressor stations in Uintah County, Utah. Provided, however, that references to the "Facilities" in Section V (Compliance Requirements) shall not include the River Bend Facility, as that Facility shall be closed in accordance with the terms of this Consent Decree.

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i. "Paragraph" shall mean a portion of this Decree identified by an arabic numeral;

j. "Parties" shall mean the United States, Defendant, Plaintiff-Intervenors, and the Tribe (the latter of which is a party to this action and this Consent Decree to the limited extent that it was granted intervention under the Court's January 13, 2010 Order (Docket No. 142) solely for sovereign jurisdictional issues raised by the claims and defenses in this case, and also for the purpose of Paragraphs 27 and 77 hereof regarding creation by it of an entity to administer the Tribal Clean Air Trust Fund);

k. "Plaintiff-Intervenors" shall mean Frances M. Poowegup, Irene C. Cuch, Phillip Chimburas, and Ron Wopsock;

1. "Section" shall mean a portion of this Decree identified by a roman numeral;

m. "Tribe" shall mean the Ute Indian Tribe of the Uintah and Ouray Reservation; and

n. "United States" shall mean the United States of America, acting on behalf of EPA.

# IV. <u>CIVIL PENALTY</u>

7. Not later than 30 Days after the Effective Date of this Consent Decree, Defendant shall pay the sum of \$3,650,000 to the United States as a civil penalty, together with interest accruing thirty (30) days after the Effective Date, if the Civil Penalty is not timely paid at the rate specified in 28 U.S.C. § 1961 as of the date of lodging.

8. Defendant shall pay the civil penalty due by FedWire Electronic Funds Transfer ("EFT") to the U.S. Department of Justice in accordance with written instructions to be timely provided to Defendant, following lodging of the Consent Decree, by the Financial Litigation Unit of the U.S. Attorney's Office for the District of Utah. At the time of payment, Defendant shall send a copy of the EFT authorization form and the EFT transaction record, together with a

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transmittal letter, which shall state that the payment is for the civil penalty owed pursuant to the Consent Decree in United States v. Questar Gas Management Co., and shall reference the civil action number and DOJ case number 90-5-2-1-08432, to the United States in accordance with Section XIII of this Decree (Notices); by email to <u>acctsreceivable.CINWD@epa.gov;</u> and by mail to:

EPA Cincinnati Finance Office 26 Martin Luther King Drive Cincinnati, Ohio 45268

9. Defendant shall not deduct any penalties paid under this Decree pursuant to this Section or Section VIII (Stipulated Penalties) in calculating its federal income tax.

# V. COMPLIANCE REQUIREMENTS

# A. River Bend Compressor Facility

10. Within 60 days of the effective date of this Consent Decree, QEPFS shall permanently shut-down the River Bend Compressor Facility by taking all equipment out of service and blind-flanging the inlet and outlet piping of the Facility, and withdrawing its March 2006 Part 71 permit application for the Facility.

# B. Equipment Removal Requirements

11. Not later than the Effective Date of this Consent Decree, QEPFS shall remove the glycol dehydration unit reboilers from the Chapita and Coyote Wash Facilities.

12. Not later than 30 days after the Effective Date of this Consent Decree, QEPFS shall place its order for all equipment necessary to remove the TK-200 and TK-300 condensate storage tanks, as identified in QEPFS' October 2006, Title V permit application, from the Coyote Wash Facility. QEPFS shall physically remove such tanks not later than 120 days after receipt of such equipment.

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13. Not later than 60 days after the Effective Date of this Consent Decree, QEPFS shall blind flange one rich burn engine from both the Island and Coyote Wash Compressor Facilities (leaving each facility with no more than one rich burn engine), so as to remove such engines from service. Not later than 90 days after the Effective Date of this Consent Decree, QEPFS shall move such engines to the adjacent yard or to another location off site.

14. Not later than 30 days after completing the requirements of Paragraphs 11 - 13 of this Consent Decree, QEPFS shall certify to EPA that it has completed such requirements and shall identify the dates each action was completed.

# C. <u>Dehydrator Requirements</u>

15. The dehydrators located at the Wonsits Valley and Island Facilities are subject to "major source" standards under 40 C.F.R. Part 63, Subpart HH – NESHAPs for oil and natural gas facilities (hereinafter "Subpart HH"). To comply with the control device requirements of Subpart HH, Defendant shall install and operate, within 60 days of the Effective Date of this Consent Decree, flares connected to the existing dehydrators at the Wonsits Valley and Island Facilities pursuant to the requirements of 40 C.F.R. § 63.765(b)(1)(i). Pursuant to 40 C.F.R. § 63.771(d)(1)(iii), the flares shall be designed and operated in accordance with the requirements of 40 C.F.R. § 63.11(b). The initial notification requirements of 40 C.F.R. § 63.9(b)(4) shall be deemed satisfied on the Effective Date of this Consent Decree.

16. After the installation of the flares required by Paragraph 15, QEPFS shall comply with all other initial compliance determination, notification, and reporting requirements in 40 C.F.R. Part 63, Subparts A and HH within the time set forth in the regulations. For purposes of the initial compliance determination, notification, and reporting requirements of 40 C.F.R. § 63.775(d), the "compliance date" shall be the Effective Date of this Consent Decree.

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17. The flares installed pursuant to Paragraph 15 shall achieve a 95% by weight or greater reduction of VOC emissions from the dehydrator process vent stream at all times except as provided in Paragraph 17(b).

a. Compliance with 40 C.F.R. § 63.11(b), and with the associated monitoring and recordkeeping required in 40 C.F.R. §§ 63.773(d)(3)(i)(C) and 63.774(b) and (e), shall be sufficient to determine compliance with this 95% VOC reduction requirement of this Paragraph.

b. During periods of time when the pilot flame at the flares is off, QEPFS shall re-light the pilot flame or route emissions from the dehydrator process vent stream to a back-up combustor as expeditiously as practicable. The back-up combustors shall achieve a 95% by weight or greater reduction of VOC emissions from the dehydrator process vent stream when in use, determined by the pilot flame on the combustor being on when in use. The time period during which the glycol dehydrator is operated without either (1) a flare with the pilot flame on or (2) the back-up combustor with its pilot flame on shall not exceed 140 hours at the Wonsits Valley Facility and 500 hours at the Island Facility. Nothing in this Paragraph shall affect QEPFS's obligation to meet applicable requirements of 40 C.F.R. Part 63.

18. Not later than 90 days after the Effective Date of this Consent Decree, QEPFS shall certify to EPA that the actions required in Paragraph 15 have been completed and the date on which they were completed.

D. <u>Condensate Tanks</u>

19. QEPFS shall, within 30 days of the Effective Date of this Consent Decree, connect the condensate storage tanks at the Chapita (TO-1, TO-2), Island (TO-1, TO-2) and Wonsits Valley Facilities (T-1) to an existing or new combustor at those Facilities. Within 60 Days of the Effective Date of this Consent Decree, QEPFS shall certify to EPA that the design of

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the conveyance systems from these condensate storage tanks to the combustors does not, under normal operating conditions, cause or contribute to a release of volatile organic compounds from the storage tanks through thief hatches or pressure relief valves. QEPFS shall equip the combustors with thermocouples (or other heat sensing monitoring devices) to continuously monitor the presence of the pilot flame. QEPFS shall comply with the provisions of this Paragraph at the Coyote Wash Compressor Station (TK-200 and TK-300) until the tanks are removed pursuant to Paragraph 12.

20. QEPFS shall monitor and record the presence of a pilot flame with a continuous recording device, such as a chart recorder or similar device.

21. Not later than 60 days after the Effective Date of this Consent Decree, QEPFS shall certify to EPA that the actions required in Paragraph 19 have been completed and identify the dates on which they were completed.

# E. <u>RICE Requirements</u>

22. RICE with a site rating of 500 hp or greater at the Facilities are subject to 40 C.F.R. Part 63, Subpart ZZZZ-National Emission Standards for Hazardous Air Pollutants from Stationary Reciprocating Internal Combustion Engines (hereinafter "Subpart ZZZZ"). For purposes of Subpart ZZZZ compliance, the Facilities shall become existing affected major sources under Subpart ZZZZ as of the Effective Date of this Consent Decree. The initial notification requirements of 40 C.F.R. § 63.9(b), 40 C.F.R. § 63.6645, and any other initial notifications required by ZZZZ for all existing RICE at the Facilities, shall be deemed satisfied on the Effective Date of this Consent Decree. QEPFS shall thereafter comply with all other compliance demonstration, notification, and reporting requirements of 40 C.F.R. Part 63, Subparts A and ZZZZ by the date set forth in the regulations. For purposes of the testing and

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initial compliance requirements in 40 C.F.R. § 63.6610 and the compliance reporting requirements in 40 C.F.R. § 63.6650(b), the "compliance date" and "start up" date shall be the Effective Date of this Consent Decree. Performance tests must be conducted at any load condition within plus or minus 10 percent of 100 percent load unless the engine cannot achieve plus or minus 10 percent of 100 percent load at the time of the test. Under such circumstances, the engine shall be tested at maximum achievable load, and the differential pressure across the catalyst shall be monitored and shall be maintained consistent with operating limitations in Subpart ZZZZ. If the engine load is increased by 20 percent or greater averaged over a 30 day period commencing within 60 days of the last test, then the engine shall be re-tested at the newly achievable maximum load and the corresponding differential pressure established. For the purposes of this provision regarding engine load during and after performance testing, QEPFS shall monitor and record load at each engine.

23. For RICE with a site rating of 500 hp or greater operated at the Facilities, QEPFS shall comply with the requirements specified below:

a. <u>Emissions Control</u>

(1) <u>Rich burn engines</u>. QEPFS has installed and is operating a nonselective catalytic reduction (NSCR) control device and an air-fuel ratio (AFR) device on the rich-burn RICE at the Island and Coyote Wash Facilities. The rich burn RICE at Coyote Wash shall not exceed emission limits of 1.0 gram per horse power hour (g/hp-hr) for NOx and 1.0 g/hp-hr for CO. The rich burn RICE at Island shall not exceed emission limits of 8.0 g/hp-hr for NOx and 5.0 g/hp-hr for CO.

(2) <u>Lean burn engines</u>. QEPFS has installed and is operating an oxidation catalyst control device on each lean burn RICE. All lean burn RICE at the Coyote

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Wash and Wonsits Valley Facilities shall not exceed an emission limit of 1.0 g/hp-hr for NOx and 1.0 g/hp-hr for CO, except that engine C206 (Waukesha A27; serial number C-13271/2) at the Wonsits Valley Facility shall not exceed an emission limit of 1.30 g/hp-hr for NOx. The three existing lean burn RICE at the Chapita Facility shall not exceed 2.50 g/hp-hr for NOx and 1.0 g/hp-hr for CO.

b. <u>Emissions Controls Maintenance</u>. Oxygen sensors shall be replaced within 2000 hours of engine run time.

c. <u>Performance Testing for NOx and CO.</u>

(1) Not later than 180 days after the Effective Date of the Consent Decree, QEPFS shall conduct initial performance tests for NOx and CO emissions on each RICE using the test protocol selected from the list below.

(2) QEPFS shall retest each RICE semi-annually using the test protocol selected from the list below. QEPFS shall submit to EPA the test results for NOx and CO with the semi-annual report required pursuant to Subpart ZZZZ.

(3) The test must be conducted at any load condition within plus or minus 10 percent of 100 percent load unless the engine cannot achieve plus or minus 10 percent of 100 percent load at the time of the test. Under such circumstances, the engine shall be tested at maximum achievable load, and the differential pressure across the catalyst shall be monitored and shall be maintained consistent with operating limitations in Subpart ZZZZ. If the engine load is increased by 20 percent or greater averaged over a 30 day period commencing within 60 days of the last test, then the engine shall be re-tested at the newly achievable maximum load and the corresponding differential pressure established. For the purposes of this provision regarding

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engine load during and after performance testing, QEPFS shall monitor and record load at each engine.

(4) QEPFS shall select among the following test methods: 40 C.F.R.
Part 60, Appendix A, Method 1 or 1A - Sampling port location and number of traverse points;
40 C.F.R. Part 60, Appendix A, Method 3, 3A or 3B - O2 concentration at inlet and outlet; 40
C.F.R. Part 60, Appendix A, Method 4 - Moisture Content; 40 C.F.R. Part 60, Appendix A,
Method 7E – Determination of nitrogen oxides emissions; 40 C.F.R. Part 60, Appendix A,
Method 10 – Determination of carbon monoxide emissions.

# F. <u>40 C.F.R. Part 71 (Clean Air Act Title V) Operating Permit Requirements</u>

24. The Coyote Wash, Chapita, Island, and Wonsits Valley Facilities are each subject to the requirements of 40 C.F.R. Part 71. Not later than 180 days after the Effective Date of this Consent Decree, QEPFS shall submit updated Part 71 permit applications for the Wonsits Valley, Coyote Wash, Chapita, and Island Compressor Facilities that reflect current operations. Not later than 60 days after receipt of the Part 71 permit applications, EPA shall notify QEPFS whether the Part 71 permit applications are complete. EPA shall not unreasonably delay its determination that the applications are complete. EPA agrees to propose as Part 71 permit conditions, the specific emission limits, operating parameters, monitoring requirements, and recordkeeping requirements set forth in Paragraphs 15, 16, 17, 19, 20, 22, and 23 in the Part 71 permits that it proposes for public comment. QEPFS may contest any permit conditions inconsistent with this Consent Decree in the proposed Part 71 permits in accordance with the provisions of 40 C.F.R. Part 71.11. The requirements under Paragraphs 15, 16, 17, 19, 20, 22, and 23 are deemed "applicable requirements" under Part 71 and Title V of the Clean Air Act. EPA shall propose for public comment draft Part 71 permits for two of the Facilities within 90

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days after each application is deemed complete; EPA shall propose for public comment draft Part 71 permits for the remaining two Facilities within 180 days after each application is deemed complete. The United States agrees that the provisions of Paragraphs 15, 16, 17, 19, 20, 22, and 23 of this Consent Decree include adequate monitoring to assure that the Facilities meet the limits, standards, and requirements set forth in this Decree.

# G. <u>Limits on Emissions</u>

25. The emission limits and control requirements set forth in Paragraphs 15, 16, 17, 22, and 23 of this Consent Decree are "federally enforceable" and "legally enforceable" for purposes of calculating the potential to emit of hazardous air pollutants, VOCs, NOx, and CO emissions at the Coyote Wash, Chapita, Wonsits Valley, and Island Facilities under the Clean Air Act and any implementing regulations, including PSD/NSR applicability. In addition, the monitoring, reporting, and recordkeeping requirements provided for in this Consent Decree ensure that the emission limits and control requirements are enforceable as a practical matter, which is sometimes referred to as "practicably enforceable."

# VI. ADDITIONAL INJUNCTIVE RELIEF/TRIBAL CLEAN AIR MITIGATION PROJECT

26. Not later than 180 days after the Effective Date of this Consent Decree, QEPFS shall convert all natural gas powered pneumatic instrument control systems at the Facilities to compressed instrument air systems. Not later than 30 days after completing this project, QEPFS shall submit a report to EPA with a description of the work completed.

27. Not later than 60 Days after the Effective Date of this Consent Decree, Plaintiff-Intervenors shall form a non-profit corporation (referred to herein as the "Tribal Clean Air Trust Fund") in accordance with applicable Utah or tribal law and this Paragraph of the Decree, including the filing of bylaws and articles of incorporation, to fund beneficial environmental

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projects on the Uintah and Ouray Reservation of Northern Utah, including projects to reduce emissions of air pollution on the Reservation, mitigate the impacts of air pollution on tribal members, screen for air pollution related health impacts among tribal members, or educate tribal members about the deleterious impacts of air pollution on public health and the environment. Creation of the Tribal Clean Air Trust Fund under tribal law is contingent on the creation of a non-profit corporation for the purposes set forth in this Consent Decree, including the provisions in this Paragraph concerning the uses of and limitations on assets of the Tribal Clean Air Trust Fund, that was subject to timely review and consent of the Parties prior to its creation.

a. The assets of the Tribal Clean Air Trust Fund shall not be commingled with property of the Ute Indian Tribe of the Uintah and Ouray Reservation, and grants from the Tribal Clean Air Trust Fund shall not be made to or for the benefit of any Party to this action. Assets of the Tribal Clean Air Trust Fund shall not be used to enforce this Consent Decree directly or indirectly or to pursue any claim, action, demand, or proceeding against QEPFS or its employees, affiliates, successors, or assigns, including but not limited to claims under the Clean Air Act, and the bylaws and/or articles of incorporation of the Tribal Charitable Trust Fund shall expressly state this limitation on the use of its assets.

b. In satisfaction of the claims of Plaintiff-Intervenors, not later than 90 Days after the Effective Date of this Consent Decree, or such later date as provided in Paragraph 27.c, below, Defendant shall pay \$350,000 to the Tribal Clean Air Trust Fund, payable in accordance with written instructions that shall be provided to Defendant by the Tribal Clean Air Trust Fund.

c. In the event bylaws and articles of incorporation governing the administration of the Tribal Clean Air Trust Fund as required in Paragraph 27, above, have not been timely filed with the State of Utah or pursuant to tribal law, or if the Tribal Clean Air Trust

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Fund has not provided payment instructions as required in Paragraph 27.b, Defendant shall not make the payment required in Paragraph 27.b. In that event Defendant shall make the payment required within 30 Days of receiving the bylaws, articles of incorporation, and payment instructions; except that if the Plaintiff-Intervenors (or the Board of Directors of the Tribal Clean Air Trust Fund) do not establish and provide the bylaws or articles of incorporation within 120 Days of the Effective Date of this Consent Decree, QEPFS's obligation to make the payment required in Paragraph 27.b shall terminate.

d. Plaintiff-Intervenors' right to enforce QEPFS's obligations under this Consent Decree, whether through dispute resolution, an action in court, or any other means shall be limited to a claim or dispute with respect to QEPFS's obligation to make the payment required under this Paragraph 27.

# VII. <u>REPORTING REQUIREMENTS</u>

28. On the date QEPFS submits its annual or other periodic reports pursuant to 40 C.F.R. Subparts HH or ZZZZ or, if no such reports are submitted during a calendar year, not later than January 31 of the succeeding calendar year, Defendant shall submit a report for the preceding year that shall include a description of any non-compliance with the requirements of this Consent Decree and an explanation of the violation's likely cause and of the remedial steps taken, or to be taken, to prevent or minimize such violation. If the cause of a violation cannot be fully explained at the time the report is due, Defendant shall so state in the report. Defendant shall thereafter investigate the cause of the violation and shall then submit an amendment to the report, including a full explanation of the cause of the violation, within 30 Days of the Day Defendant becomes aware of the cause of the violation. Nothing in this Paragraph or the

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following Paragraph relieves Defendant of its obligation to provide the notice required by Section IX of this Consent Decree (Force Majeure).

29. Whenever any violation of this Consent Decree, or any other event affecting Defendant's performance under this Decree poses an immediate threat to the public health or welfare or the environment, Defendant shall notify EPA orally or by electronic or facsimile transmission as soon as possible, but no later than 24 hours after Defendant first knew of the violation or event. This procedure is in addition to the requirements set forth in the preceding Paragraph.

30. All reports shall be submitted to the EPA official designated in Section XIII of this Consent Decree (Notices).

31. Each report submitted by Defendant under this Section shall be signed by an official of the submitting party and include the following certification:

I certify that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

This certification requirement does not apply to emergency or similar notifications where compliance would be impractical.

32. The reporting requirements of this Consent Decree do not relieve Defendant of any reporting obligations required by the Clean Air Act or implementing regulations, or by any other federal, state, or local law, regulation, permit, or other requirement.

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33. Any information provided pursuant to this Consent Decree may be used by the United States in any proceeding to enforce the provisions of this Consent Decree and as otherwise permitted by law.

# VIII. STIPULATED PENALTIES

34. Defendant shall be liable for stipulated penalties to the United States for violations of this Consent Decree as specified below, unless excused under Section IX (Force Majeure) or Section X (Dispute Resolution). Only as specified below, a violation includes failing to perform any obligation required by the terms of this Decree, including any work plan or schedule approved under this Decree, according to all applicable requirements of this Decree and within the specified time schedules established by or approved under this Decree.

35. <u>Late Payment of Civil Penalty</u>. If Defendant fails to pay the civil penalty required to be paid under Section IV of this Decree (Civil Penalty) when due, Defendant shall pay a stipulated penalty of \$1000 per Day for each Day that the payment is late.

36. <u>Stipulated Penalty Amounts</u>:

# a. Dehydrators

	Violation	Stipulated Penalty
1.	For failure to install and operate flares and	For each unit: \$1,000 per day for the first
	combustors as specified in Paragraph 15	30 days of noncompliance, \$1,500 per day
	and 17.	from the $31^{\text{st}}$ to $60^{\text{th}}$ day of noncompliance, and
		\$2,000 per day thereafter.

# b. Condensate Tanks

	Violation	Stipulated Penalty
1.	For failure to comply with the obligations specified in Paragraph 19.	For each unit: \$1,000 per day for the first 30 days of noncompliance, \$1,500 per day from the 31 <sup>st</sup> to 60 <sup>th</sup> day of noncompliance, and \$2,000 per day thereafter.
2.	For failure to remove condensate tanks as specified in Paragraph 12.	For each unit: \$1,000 per day for the first 30 days of noncompliance, \$1,500 per day from the 31 <sup>st</sup> to 60 <sup>th</sup> day of noncompliance, and \$2,000 per day thereafter.

# c. Compressor Engines

	Violation	Stipulated Penalty
1.	For failure to blind flange engines as specified in Paragraph 13.	For each unit: \$1,000 per day for the first 30 days of noncompliance, \$1,500 per day from the 31 <sup>st</sup> to 60 <sup>th</sup> day of noncompliance, and \$2,000 per day thereafter.
2.	For failure remove engines as specified in Paragraph 13.	For each unit: \$500 per day for the first 30 days of noncompliance, \$1,000 per day from the 31 <sup>st</sup> to 60 <sup>th</sup> day of noncompliance, and \$1,500 per day thereafter.
3.	For failure to conduct tests on the RICE emission controls as required by Paragraph 23(c).	For each unit: \$500 per day for the first 30 days of noncompliance, \$1,000 per day from the 31 <sup>st</sup> to 60 <sup>th</sup> day of noncompliance, and \$1,500 per day thereafter.
4.	For failure to meet the emissions limits in Paragraph 23(a).	For each unit: \$500 per day for the first 30 days of noncompliance, \$1,000 per day from the 31 <sup>st</sup> to 60 <sup>th</sup> day of noncompliance, and \$1,500 per day thereafter.
5.	For failure to meet the requirements of Paragraph 23(b).	For each unit: \$500 per day for the first 30 days of noncompliance, \$1,000 per day from the 31 <sup>st</sup> to 60 <sup>th</sup> day of noncompliance, and \$1,500 per day thereafter.

# d. Pneumatic Controllers

	Violation	Stipulated Penalty
1.	For failure to convert natural gas powered	For each unit: \$200 per day for the first
		30 days of noncompliance, \$500 per day from
	compressed instrument air systems as	the $31^{\text{st}}$ to $60^{\text{th}}$ day of noncompliance, and
	specified in Paragraph 26.	\$1,000 per day thereafter.

# e. General Recordkeeping/Reporting Requirements

	Violation	Stipulated Penalty
1.	For failure to maintain records or submit	For each violation: \$200 per day for the first
	reports as required by Paragraphs 14, 17,	30 days of noncompliance, \$500 per day from
	18, 20, 21, 22, 23(c)(3), and 28.	the $31^{\text{st}}$ to $60^{\text{th}}$ day of noncompliance, and
		\$1,000 per day thereafter.

37. Except as provided in Paragraph 40 and its subparts below, stipulated penalties under this Section shall begin to accrue on the Day after performance is due or on the Day a violation occurs, whichever is applicable, and shall continue to accrue until performance is satisfactorily completed or until the violation ceases. Stipulated penalties shall accrue simultaneously for separate violations of this Consent Decree.

38. QEPFS shall pay stipulated penalties upon written demand by the United States no later than sixty (60) days after QEPFS receives such demand. A demand for the payment of stipulated penalties shall identify the particular violation(s) to which the stipulated penalty relates, the stipulated penalty amount that the United States is demanding for each violation (as best can be estimated), the calculation method underlying the demand, and the grounds upon which the demand is based.

39. The United States may in the unreviewable exercise of its discretion, reduce or waive stipulated penalties otherwise due it under this Consent Decree.

40. Stipulated penalties shall not accrue and need not be paid during any Dispute Resolution, as provided below:

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a. In the event of a dispute over stipulated penalties, stipulated penalties will not accrue commencing upon the date that QEPFS notifies the United States of a dispute in accordance with Paragraph 55 if QEPFS has placed the disputed amount demanded in a commercial escrow account with interest.

b. If the dispute is resolved by agreement or by a decision of the United States that is not appealed to the Court, Defendant shall pay the escrowed amount of penalties or other amount determined to be owing, together with interest, to the United States within 30 Days of the Effective Date of the agreement or the receipt of EPA's decision or order.

c. If the dispute is appealed to the Court and thereafter is resolved in QEPFS' favor, the escrowed amount plus accrued interest will be returned to QEPFS; otherwise, EPA will be entitled to the amount that was determined to be due by the Court, plus the interest that has accrued in the escrow account on such amount.

41. Defendant shall pay stipulated penalties owing to the United States in the manner set forth and with the confirmation notices required by Paragraph 8 unless the United States provides alternate payment instructions, except that the transmittal letter shall state that the payment is for stipulated penalties and shall state for which violation(s) the penalties are being paid.

42. If Defendant fails to pay stipulated penalties according to the terms of this Consent Decree, Defendant shall be liable for interest on such penalties, as provided for in 28 U.S.C. § 1961, accruing as of the date payment became due. Nothing in this Paragraph shall be construed to limit the United States from seeking any remedy otherwise provided by law for Defendant's failure to pay any stipulated penalties.

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43. Subject to the provisions of Section XII of this Consent Decree (Effect of Settlement/Reservation of Rights), the stipulated penalties provided for in this Consent Decree shall be in addition to any other rights, remedies, or sanctions available to the United States for Defendant's violation of this Consent Decree or applicable law. Where a violation of this Consent Decree is also a violation of the Clean Air Act, 43 U.S.C. § 7401, *et seq.*, or its implementing regulations, Plaintiff may seek stipulated penalties or statutory penalties for the violation, but not both.

### IX. FORCE MAJEURE

44. If any event occurs or fails to occur which causes a delay or impediment to performance in complying with any provision of this Consent Decree that QEPFS believes to be a force majeure, QEPFS shall notify the EPA official specified in Section XIII (Notice) of its force majeure claim in writing as soon as practicable, but in any event within twenty (20) business days of the date when QEPFS first knew of the event or should have known of the event by the exercise of due diligence. In this notice, QEPFS shall specifically reference this Paragraph and describe the anticipated length of time the delay may persist, the cause or causes of the delay, and the measures taken or to be taken by QEPFS to prevent or minimize the delay and the schedule by which those measures will be implemented. QEPFS shall take all reasonable steps to avoid or minimize such delays. The notice required by this part will be effective upon the mailing of the same by overnight mail or by certified mail, return receipt requested, to EPA as specified in Section XIII (Notices).

45. Failure by QEPFS to substantially comply with the notice requirements of Paragraph 44 shall render this Section IX (Force Majeure) voidable by the United States as to the

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specific event for which QEPFS has failed to comply with such notice requirement, and, if voided, is of no effect as to the particular event involved.

46. The United States shall notify QEPFS in writing regarding its claim of a delay or impediment to performance within forty-five (45) days of receipt of the force majeure notice provided under Paragraph 44.

47. If the United States agrees that the delay or impediment to performance has been or shall be caused by circumstances beyond the control of QEPFS including any entity controlled by QEPFS and that QEPFS could not have prevented the delay by the exercise of due diligence, the United States and QEPFS shall stipulate in writing to an extension of the required deadline(s) for all requirement(s) affected by the delay by a period equivalent to the delay actually caused by such circumstances. Such stipulation shall be treated as a non-material change to the Consent Decree pursuant to Paragraph 77, and therefore shall not need to be approved by the Court. QEPFS will not be liable for stipulated penalties for the period of any such delay.

48. If the United States does not accept QEPFS's claim of a delay or impediment to performance, QEPFS must submit the matter to the Court for resolution to avoid payment of stipulated penalties, by filing a petition for determination with the Court by no later than 60 Days after receipt of the notice in Paragraph 46. Once QEPFS has submitted this matter to the Court, the United States shall have 60 Days to file its response to the petition. If the Court determines that the delay or impediment to performance has been or shall be caused by circumstances beyond the control of QEPFS including any entity controlled by QEPFS and that the delay could not have been prevented by QEPFS by the exercise of due diligence, QEPFS shall be excused as to that event(s) and delay (including stipulated penalties), for a period of time equivalent to the delay caused by such circumstances.

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49. QEPFS shall bear the burden of proving that any delay of any requirement(s) of this Consent Decree was caused by or will be caused by circumstances beyond its/their control, including any entity controlled by it, and that it could not have prevented the delay by the exercise of due diligence. QEPFS shall also bear the burden of proving the duration and extent of any delay(s) attributable to such circumstances. An extension of one compliance date based on a particular event may, but will not necessarily, result in an extension of a subsequent compliance date or dates.

50. Unanticipated or increased costs or expenses associated with the performance of QEPFS's obligations under this Consent Decree shall not constitute circumstances beyond its control or serve as the basis for an extension of time under this Section IX.

51. Notwithstanding any other provision of this Consent Decree, the Parties do not intend that QEPFS's serving of a force majeure notice or the Parties' inability to reach agreement shall cause this Court to draw any inferences nor establish any presumptions adverse to any Party.

52. As part of the resolution of any matter submitted to this Court under this Section IX, the United States and QEPFS by agreement, or the Court, by order, may in appropriate circumstances extend or modify the schedule for completion of work under the Consent Decree to account for the delay in the work that occurred as a result of any delay or impediment to performance agreed to by the United States or approved by this Court. QEPFS shall be liable for stipulated penalties for their failure thereafter to complete the work in accordance with the extended or modified schedule.

#### X. <u>DISPUTE RESOLUTION</u>

53. This Court shall retain jurisdiction of this matter for the purposes of implementing and enforcing the terms and conditions of the Consent Decree and for the purpose of adjudicating all disputes that may arise under the provisions of the Consent Decree, until the Consent Decree terminates in accordance with Section XVII of this Consent Decree (Termination).

54. The dispute resolution procedure set forth in this Section X will be available to resolve any and all disputes arising under this Consent Decree, provided that the Party making such application has made a good faith attempt to resolve the matter with the other Parties.

55. The dispute resolution procedure required herein will be invoked upon the giving of written notice by one of the Parties to this Consent Decree to another advising the other appropriate Party(ies) of a dispute pursuant to this Section X. The notice will describe the nature of the dispute, and will state the noticing Party's position with regard to such dispute. The Party or Parties receiving such notice will acknowledge receipt of the notice and the Parties will expeditiously schedule a meeting to discuss the dispute informally.

56. Disputes submitted to dispute resolution will, in the first instance, be the subject of informal negotiations between the Parties. Such period of informal negotiations will not extend beyond 90 Days from the date of the first meeting between representatives of the Parties, unless the Parties agree in writing that this period should be extended. Failure by the Parties to extend the informal negotiation period in writing will not terminate the informal negotiation period provided that the Parties are continuing to negotiate in good faith. Informal negotiations may include the exchange of written summaries of the Parties' positions.

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57. In the event that the Parties are unable to reach agreement during such informal negotiation period as provided in Paragraph 56, the United States shall provide QEPFS, within 90 Days after the end of the informal negotiation period, with a written summary of its position regarding the dispute. QEPFS shall have 30 Days to respond in writing. The position advanced by the United States shall be considered binding unless, within 45 Days of QEPFS's receipt of the written summary of the United States' position, QEPFS files with the Court a petition which describes the nature of the dispute. The United States shall respond to the petition within 45 Days of filing. In resolving the dispute between the Parties, the position of the United States shall be upheld unless QEPFS demonstrates by a preponderance of the evidence in the administrative record that the United States' position was incorrect.

58. Where the nature of the dispute is such that a more timely resolution of the issue is required, a Party may seek shorter time periods than those set forth in this Section X.

59. The Parties do not intend that the invocation of this Section X by a Party shall cause the Court to draw any inferences or establish any presumptions adverse to either Party.

60. As part of the resolution of any dispute submitted to dispute resolution, the Parties, by agreement, or this Court, by order, may, in appropriate circumstances, extend or modify the schedule for completion of work under this Consent Decree to account for the delay in the work that occurred as a result of dispute resolution. QEPFS shall be liable for stipulated penalties for its failure thereafter to complete the work in accordance with the extended or modified schedule

# XI. INFORMATION COLLECTION AND RETENTION

61. The United States and its representatives, including attorneys, contractors, and consultants, shall have the right of entry into any Facility covered by this Consent Decree, at all reasonable times, upon presentation of credentials, to:

a. monitor the progress of activities required under this Consent Decree;

b. verify any data or information submitted to the United States in

accordance with the terms of this Consent Decree;

c. obtain samples and, upon request, splits of any samples taken by Defendant or its representatives, contractors, or consultants;

d. obtain documentary evidence, including photographs, video, and similar data; and

e. assess Defendant's compliance with this Consent Decree.

62. Upon request, Defendant shall provide EPA or its authorized representatives splits of any samples taken by Defendant. Upon request, EPA shall provide Defendant splits of any samples taken by EPA.

63. Until five years after the termination of this Consent Decree, Defendant shall retain, and shall instruct its contractors and agents to preserve, all non-identical copies of all documents, records, or other information (including documents, records, or other information in electronic form) in its or its contractors' or agents' possession or control, or that come into its or its contractors' or agents' possession or control, and that relate in any manner to Defendant's performance of its obligations under this Consent Decree. This information-retention requirement shall apply regardless of any contrary corporate or institutional policies or procedures. At any time during this information-retention period, upon request by the United

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States, Defendant shall provide copies of any documents, records, or other information required to be maintained under this Paragraph.

64. At the conclusion of the information-retention period provided in the preceding Paragraph, Defendant shall notify the United States at least 90 Days prior to the destruction of any documents, records, or other information subject to the requirements of the preceding Paragraph and, upon request by the United States, Defendant shall deliver any such documents, records, or other information to EPA. Defendant may assert that certain documents, records, or other information is privileged under the attorney-client privilege or any other privilege recognized by federal law. If Defendant asserts such a privilege, it shall provide the following: (1) the title of the document, record, or information; (2) the date of the document, record, or information; (3) the name and title of each author of the document, record, or information; (4) the name and title of each addressee and recipient; (5) a description of the subject of the document, record, or information; and (6) the privilege asserted by Defendant. However, no documents, records, or other information required under this Consent Decree shall be withheld on grounds of privilege.

65. Defendant may also assert that information required to be provided under this Section is protected as Confidential Business Information ("CBI") under 40 C.F.R. Part 2. As to any information that Defendant seeks to protect as CBI, Defendant shall follow the procedures set forth in 40 C.F.R. Part 2.

66. This Consent Decree in no way limits or affects any right of entry and inspection, or any right to obtain information, held by the United States pursuant to applicable federal laws, regulations, or permits, nor does it limit or affect any rights, duties, or obligations of Defendant

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regarding entry and inspection or to maintain documents, records, or other information imposed by applicable federal or state laws, regulations, or permits.

#### XII. EFFECT OF SETTLEMENT/RESERVATION OF RIGHTS

67. This Consent Decree resolves:

a. The civil and administrative claims of the United States for the violations alleged in the Complaint filed in this action through the date of lodging and all civil and administrative liability of Defendant for violations at the Facilities through the date of lodging of the following statutory or regulatory provisions: (a) PSD requirements at Part C of Subchapter I of the Act, 42 U.S.C. § 7475, and the regulations promulgated thereunder at 40 C.F.R. § 52.21, insofar as they result from initial construction or modification of the Facilities that resulted in a significant net increase of NOx, VOC and/or CO, and commenced and ceased before the Date of Lodging of the Consent Decree; (b) National Emissions Standards for Hazardous Air Pollutants, 40 C.F.R. Part 63, Subparts A, HH, and ZZZZ; (c) Title V of the Clean Air Act, 42 U.S.C. § 7661; and (d) Section 114 of the Clean Air Act, 42 U.S.C. § 7414.

b. The civil claims of Plaintiff-Intervenors for the violations alleged in the Complaint in Intervention filed in this action through the date of lodging and all civil liability of Defendant to Plaintiff-Intervenors for violations at the Facilities through the date of lodging of the following statutory or regulatory provisions: (a) PSD requirements at Part C of Subchapter I of the Act, 42 U.S.C. § 7475, and the regulations promulgated thereunder at 40 C.F.R. § 52.21, insofar as they result from initial construction or modification of the Facilities that resulted in a significant net increase of NOx, VOC and/or CO, and commenced and ceased before the Date of Lodging of the Consent Decree; (b) National Emissions Standards for Hazardous Air Pollutants,

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40 C.F.R. Part 63, Subparts A, HH, and ZZZZ; (c) Title V of the Clean Air Act, 42 U.S.C. § 7661; and (d) Section 114 of the Clean Air Act, 42 U.S.C. § 7414.

c. All claims of the Tribe arising out of the limited grant of intervention under the Court's January 13, 2010 Order (Docket No. 142).

68. The United States reserves all legal and equitable remedies available to enforce the provisions of this Consent Decree, except as expressly stated in Paragraph 67, above. This Consent Decree shall not be construed to limit the rights of the United States to obtain penalties or injunctive relief under the Act or implementing regulations, or under other federal laws, regulations, or permit conditions, except as expressly specified in Paragraph 67. The United States further reserves all legal and equitable remedies to address any imminent and substantial endangerment to the public health or welfare or the environment arising at, or posed by, Defendant's Facilities.

69. In any subsequent administrative or judicial proceeding initiated by the United States for injunctive relief, civil penalties, other appropriate relief relating to the Facilities or Defendant's violations, Defendant shall not assert, and may not maintain, any defense or claim based upon the principles of waiver, res judicata, collateral estoppel, issue preclusion, claim preclusion, claim-splitting, or other defenses based upon any contention that the claims raised by the United States in the subsequent proceeding were or should have been brought in the instant case, except with respect to claims that have been specifically resolved pursuant to Paragraph 67 of this Section.

70. This Consent Decree is not a permit, or a modification of any permit, under any federal, State, or local laws or regulations. Defendant is responsible for achieving and maintaining complete compliance with all applicable federal, State, and local laws, regulations,

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and permits; and Defendant's compliance with this Consent Decree shall be no defense to any action commenced pursuant to any such laws, regulations, or permits, except as set forth herein. The United States does not, by its consent to the entry of this Consent Decree, warrant or aver in any manner that Defendant's compliance with any aspect of this Consent Decree will result in compliance with provisions of the Act, 42 U.S.C. § 7401, *et seq.*, or with any other provisions of federal, State, or local laws, regulations, or permits. Provided, however, that no provision of this Consent Decree requires QEPFS to apply for or obtain a permit under the Federal Minor Source Review Program in Indian Country, 40 C.F.R. §§ 49.151-161; any such requirement shall be governed solely by 40 C.F.R. §§ 49.151-161.

71. This Consent Decree shall not be construed to create rights in, or grant any cause of action to, any third party not party to this Consent Decree.

#### XIII. <u>NOTICES</u>

72. Unless otherwise specified herein, whenever notifications, submissions, or communications are required by this Consent Decree, they shall be made in writing and addressed as follows:

Notification to the United States:

Chief, Environmental Enforcement Section Environment and Natural Resources Division U.S. Department of Justice Box 7611 Ben Franklin Station Washington, D.C. 20044-7611 Re: DOJ No. 90-5-2-1-08432

and

Director, Air & Toxics Technical Enforcement Program Office of Enforcement, Compliance and Environmental Justice U.S. Environmental Protection Agency; Region 8 1595 Wynkoop Street Denver, CO 80202

# Notification to EPA:

Director, Air & Toxics Technical Enforcement Program Office of Enforcement, Compliance and Environmental Justice U.S. Environmental Protection Agency Region 8 1595 Wynkoop Street Denver, CO 80202

Notification to Defendant:

Perry H. Richards Senior Vice-President, QEP Resources Inc. 1050 17<sup>th</sup> Street; Suite 500 Denver, CO 80265

Notification to the Plaintiff-Intervenors:

Secretary, Business Committee Ute Indian Tribe of the Uintah and Ouray Reservation PO Box 190 Fort Duchesne, UT 84026

Plaintiff-Intervenors agree that notice to the Secretary of the Business Committee of the Ute

Indian Tribe of the Uintah and Ouray Reservation shall constitute notice to each Plaintiff-

Intervenor.

73. Any Party may, by written notice to the other Parties, change its designated notice

recipient or notice address provided above.

74. Notices submitted pursuant to this Section shall be deemed submitted upon

mailing, unless otherwise provided in this Consent Decree or by mutual agreement of the Parties

in writing.

#### XIV. EFFECTIVE DATE

75. The Effective Date of this Consent Decree shall be the date upon which this Consent Decree is entered by the Court or a motion to enter the Consent Decree is granted, whichever occurs first, as recorded on the Court's docket.

# XV. <u>RETENTION OF JURISDICTION</u>

76. The Court shall retain jurisdiction over this case until termination of this Consent Decree, for the purpose of resolving disputes arising under this Decree or entering orders modifying this Decree, pursuant to Sections X and XVI, or effectuating or enforcing compliance with the terms of this Decree. The Plaintiff-Intervenors and the Tribe, by virtue of their participation in this litigation and this Consent Decree, have expressly and unequivocally waived sovereign immunity from suit in the federal district court of Utah for the limited purpose of effectuating and enforcing this Consent Decree, including Paragraph 27. The Plaintiff-Intervenors and the Tribe agree that the entity created pursuant to Paragraph 27 (the Tribal Clean Air Trust Fund) shall be considered and deemed an arm of the Tribe and as such also has waived any and all sovereign immunity from suit in the federal district court of Utah for the limited purpose of effectuating and enforcing this Consent Decree, including Paragraph 27.

# XVI. MODIFICATION

77. This Consent Decree contains the entire agreement of the Parties and shall not be modified by any prior oral or written agreement, representation, or understanding. With the exception of Paragraph 27, which may be modified only by the written agreement of all the Parties, the other terms of this Consent Decree may be modified by a subsequent written agreement signed only by the United States and QEPFS. The United States may consult with the Ute Indian Tribe of the Uintah and Ouray Reservation regarding any modification to this

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Consent Decree. Where a modification constitutes a material change to this Decree, it shall be effective only upon approval by the Court.

78. Any disputes concerning modification of this Decree shall be resolved pursuant to Section X of this Decree (Dispute Resolution), provided, however, that, instead of the burden of proof provided by Paragraph 57, the Party seeking the modification bears the burden of demonstrating that it is entitled to the requested modification in accordance with Federal Rule of Civil Procedure 60(b).

# XVII. TERMINATION

79. If QEPFS has completed the requirements of Section V (Compliance Requirements) of this Decree, has thereafter maintained substantial compliance with this Consent Decree for a period of 18 months and has paid the civil penalty and any accrued stipulated penalties as required by this Consent Decree, Defendant may serve upon the United States a Notice of Termination, stating that Defendant has satisfied those requirements, together with all necessary supporting documentation. The Notice of Termination shall not include Paragraphs 17, 19, 20, and 23, which shall survive this Consent Decree.

80. Unless the Plaintiff objects in writing with specific reasons within sixty (60) days of receipt of the certification, the Court shall order that this Consent Decree be terminated on QEPFS's motion. If the Plaintiff objects to QEPFS's certification, then the matter shall be submitted to the Court for resolution under Section X (Dispute Resolution) of this Consent Decree.

81. Termination of this Consent Decree will end the Parties' obligations under this Decree, including obligations under Section V (Compliance Requirements) and Section VIII (Stipulated Penalties), with the exception of the obligations referenced in Paragraphs 17, 19, 20,

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and 23, which shall expressly survive termination of this Decree. The obligations referenced in Paragraphs 17, 19, 20, and 23 shall continue for each Facility until such time as QEPFS ceases operation of the Facility; obtains a federal minor source preconstruction permits for the Facility that include emissions limits for the units and pollutants covered in Paragraphs 17, 19, 20, and 23; obtains a PSD permit for the Facility that include emissions limits for the units and pollutants covered in Paragraphs 17, 19, 20, and 23; or some combination thereof for each Facility.

82. Upon Termination of this Consent Decree pursuant to Paragraph 80, if Title V permits have been issued containing the applicable requirements contained in Paragraphs 17, 19, 20, and 23, Plaintiff shall enforce such applicable requirements through the Title V permits and the Act.

83. Upon Termination of this Consent Decree pursuant to Paragraph 80, if Title V permits have not been issued or have been issued and expired:

a. For violations of "applicable requirements" contained in Section V other than Paragraphs 17, 19, 20, and 23, Plaintiff shall enforce such "applicable requirements" through Section 113 of the CAA, and not through this Consent Decree.

b. For violations of "applicable requirements" contained in Paragraphs 17,
19, 20, and 23, Plaintiff shall enforce such "applicable requirements" through this Consent
Decree pursuant to motion to the Court.

#### XVIII. <u>COSTS</u>

84. The Parties shall bear their own costs in this action, including attorneys' fees.

# XIX. PUBLIC PARTICIPATION

85. This Consent Decree shall be lodged with the Court for a period of not less than30 Days for public notice and comment in accordance with 28 C.F.R. § 50.7. The United States

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reserves the right to withdraw or withhold its consent if the comments regarding the Consent Decree disclose facts or considerations indicating that the Consent Decree is inappropriate, improper, or inadequate. Defendant consents to entry of this Consent Decree without further notice and agrees not to withdraw from or oppose entry of this Consent Decree by the Court or to challenge any provision of the Decree, unless the United States has notified Defendant in writing that it no longer supports entry of the Decree.

#### XX. <u>SIGNATORIES/SERVICE</u>

86. Each undersigned representative of Defendant and the Assistant Attorney General for the Environment and Natural Resources Division of the Department of Justice certifies that he or she is fully authorized to enter into the terms and conditions of this Consent Decree and to execute and legally bind the Party he or she represents to this document.

87. This Consent Decree may be signed in counterparts, and its validity shall not be challenged on that basis. Each Party agrees to accept service of process by mail with respect to all matters arising under or relating to this Consent Decree and to waive the formal service requirements set forth in Rules 4 and 5 of the Federal Rules of Civil Procedure and any applicable Local Rules of this Court including, but not limited to, service of a summons.

### XXI. <u>INTEGRATION</u>

88. This Consent Decree constitutes the final, complete, and exclusive agreement and understanding among the Parties with respect to the settlement embodied in the Decree and supercedes all prior agreements and understandings, whether oral or written. No other document, nor any representation, inducement, agreement, understanding, or promise, constitutes any part of this Decree or the settlement it represents, nor shall it be used in construing the terms of this Decree.

# XXII. FINAL JUDGMENT

89. Upon approval and entry of this Consent Decree by the Court, this Consent

Decree shall constitute a final judgment of the Court as to the United States, the Tribe, Plaintiff-Intervenors, and Defendant.

Dated and entered this<u>3rd</u> day of <u>July</u>, 2012.

TED STEWART United States District Judge

FOR PLAINTIFF UNITED STATES OF AMERICA:

Date: 5/13/12

ACIA S. MORENO

Assistant Attorney General Environment and Natural Resources Division

eenn Jere L. Ellington

James D. Freeman Mart C. Elmer Maya S. Abela Attorneys Environmental Enforcement Section Environment and Natural Resources Division United States Department of Justice South Terrace, Suite 370 999 18th Street Denver, CO 80202

Date: 5/15/12

# FOR PLAINTIFF UNITED STATES OF AMERICA (continued):

DAVID B. BARLOW United States Attorney District of Utah

Date: May 15, 2012

we DANIEL D. PRICE

Assistant United States Attorney District of Utah 185 South State Street, Suite 300 Salt Lake City, UT 84111

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FOR PLAINTIFF UNITED STATES OF AMERICA (continued):

MAY 1 4 2012

Date:

ANDREW M. GAYDOSH Assistant Regional Administrator Office of Enforcement, Compliance and Environmental Justice U.S. Environmental Protection Agency 1595 Wynkoop Street Denver, CO 80202 FOR PLAINTIFF UNITED STATES OF AMERICA (continued):

Date: 5/11/12

pthia ill CYNTHIA GILES

Assistant Administrator Office of Enforcement and Compliance Assurance U.S. Environmental Protection Agency FOR PLAINTIFFS-INTERVENORS FRANCES M. POOWEGUP, IRENE C. CUCH, PHILLIP CHIMBURAS AND RON WOPSOCK:

Date: 5

Date: 05/15/12

Frances M. Poowegup

Irene C. Cuch

Date:

Phillip Chimburas

Date: 🖉

on Wopsock

FOR QEP FIELD SERVICES CO., f/k/a QUESTAR GAS MANAGEMENT CO.:

Date: May 15, 2017

5 r ~~~ ^ · N. CHARLES B. STANLEY

V

CHARLES B. STANLEY President and Chief Executive Officer QEP Field Services Co. 1050 17<sup>th</sup> Street; Suite 500 Denver, CO 80265 FOR THE UTE INDIAN TRIBE OF THE UINTAH AND OURAY RESERVATION

Date: 05/15/12

IRENE C. CUCH Chairwoman, Ute Indian Tribe of the Uintah and Ouray Reservation

# EXHIBIT 2

U.S. EPA Region 8, Air Pollution Control Permit to Operate Title V Operating Permit Program at 40 CFR Part 71 (Sep. 10, 2013).



#### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 8 1595 Wynkoop Street Denver, CO 80202-1129 Phone 800-227-8917 http://www.epa.gov/region08

Ref: 8P-AR

SEP 05 2013

#### CERTIFIED MAIL RETURN RECEIPT REQUESTED

Kevin Peretti VP Engineering and Operations QEP Field Services Company 1995 Blairtown Road Rock Springs, Wyoming 82902

> Re: Part 71 Operating Permit Title V Permit #V-UO-000005-2000.00 QEP Field Services Company (QEPFS) Wonsits Valley Compressor Station

Dear Mr. Peretti:

The Environmental Protection Agency, Region 8 (EPA) has completed its review of QEPFS's request to obtain a Title V Permit to Operate pursuant to the Title V Operating Permit Program at 40 CFR Part 71, for the Wonsits Valley Compressor Station.

Based on the information submitted in the company's application and the comments received during the public comment period, the EPA hereby issues the enclosed Title V Permit to Operate. According to 40 CFR 71.11)(i), this permit will become effective 30 days after notice of the final permit action. Therefore, the final permit will become effective on October 10, 2013.

A 30-day public comment period was held from May 30, 2013 to June 30, 2013. The EPA received comments from Ryan Robins, Environmental Air Engineer for QEPFS on July 1, 2013. No other comments were received from the public, affected states, or tribes. The EPA reviewed the comments received and provided responses in Enclosure 1, "Response to Comments Document." These comments resulted in administrative amendments and clarifications to the requirements of the permit for this facility.

Pursuant to 40 CFR 71.11(1), 30 days after the final permit decision has been issued, any person who commented on the specific terms and conditions of the draft permit, may petition the Environmental Appeals Board to review any term or condition of the permit. Any person who failed to comment on the specific terms and conditions of this permit may petition for administrative review only to the extent that the changes from the draft to the final permit or other new grounds were not reasonably ascertainable during the public comment period. The 30-day period within which a person may request review begins with this notice of the final permit decision. If an administrative review of the final permit is requested, the specific terms and conditions of the permit that is the subject of the request for review must be stayed.



If you have any questions concerning the enclosed permit, please contact Kathleen Paser of my staff at (303) 312-6526.

Sincerely

Carl Daly, Director ' Air Program

Enclosures

cc: Manuel Myore, Energy, Minerals, & Air Director, Ute Indian Tribe Bruce Parquets, Air Coordinator, Ute Indian Tribe Ryan Robins, Environmental Air Engineer, QEP Field Services

#### **Enclosure 1- Response to Comments Document**

#### Comments from QEPFS Company on the Draft Title V Permit to Operate

1. Company Acronym: The QEP Field Services Company requested that the EPA use the acronym "QEPFS" to distinguish them from the QEP Energy Company.

EPA Response: The requested change has been made to the final permit.

2. Permit, Section II, National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines – 40 CFR Part 63, Subpart ZZZZ (MACT ZZZZ): The QEPFS Company requested that EPA clarify that the Waukesha 12V-AT27GL engine (C206), with a horsepower rating of 3,100 hp, meets the requirements of MACT ZZZZ by meeting the requirements of the New Source Performance Standards for Spark Ignition Reciprocating Internal Combustion Engines (NSPS JJJJ).

EPA Response: We disagree with this assertion therefore no changes were made to the permit. The Consent Decree Case No. 2:08-CV-00167-TS-PM, states in Section V.E.2:

"RICE with a site rating of 500 hp or greater at the Facilities are subject to 40 C.F.R. Part 63, Subpart ZZZZ-National Emission Standards for Hazardous Air Pollutants from Stationary Reciprocating Internal Combustion Engines (hereinafter "Subpart ZZZZ"). For purposes of Subpart ZZZZ compliance, the Facilities shall become existing affected major sources under Subpart ZZZZ as of the Effective Date of this Consent Decree."

Pursuant to §63.6590(c) of MACT ZZZZ, only the following engines constructed or reconstructed on or after June 12, 2006, and located at a major HAP source shall meet the requirements of MACT ZZZZ by meeting the requirements of MACT JJJJ:

- (a) Limited use engines with a horsepower rating of less than or equal to 500 hp;
- (b) Emergency engines with a horsepower rating of less than or equal to 500 hp;
- (c) Non-emergency compression ignition engines with a horsepower rating of less than or equal to 500 hp; and
- (d) Spark ignition 4-stroke lean-burn combustion engines with a horsepower rating of less than 250 hp.

Engine C206 is a spark ignition 4-stroke lean-burn combustion engines with a horsepower rating of greater than 500 hp and operating at an effected major source as stated in the Consent Decree. As such, engine C206 does not meet one of the four enumerated provisions above ((a) through (d)), and is therefore subject to the requirements of MACT ZZZZ as is stated in the final permit.

 Permit, Section V, Facility-Wide Requirements – The QEPFS Company has requested a change in the submittal date of semi-annual monitoring reports from April 1<sup>st</sup> and October 1<sup>st</sup> of each year to January 31<sup>st</sup> and July 31<sup>st</sup> of each year.

EPA Response: The requested change has been made to the final permit.

4. Permit, Section VI, General Provisions – The QEPFS Company has requested a change in the submittal date of annual compliance certification from April 1<sup>st</sup> to January 31<sup>st</sup> of each year.

#### EPA Response: The requested change has been made to the final permit

- 5. Corrections: The QEPFS Company noted several factual and administrative errors in the draft permit.
  - (a) The EPA incorrectly stated in Table 2 Emission Units and Emission Generating Activities that engine C206 was not equipped with controls. This engine is equipped with an oxidation catalyst.
  - (b) The EPA incorrectly identified equipment leaks, pneumatic pumps and blow down emissions as insignificant emission units or emission generating activities in Table 2 -Emission Units and Emission Generating Activities. Since the potential emissions of each are greater than 2 tons per year, these are not insignificant.
  - (c) There is a typographical error in section II National Emission Standards for Hazardous Air Pollutants From Oil and Natural Gas Production Facilities – 40 CFR Part 63, Subpart HH. Permit condition E.4 should read as follows:

"If compliance with the benzene emission limit specified in 63.765(b)(1)(ii) is elected, the Permittee shall document, to the Administrator's satisfaction, the items in 63.774(c)."

(d) There is a typographical error in section V – Requirements of Consent Decree Case No. 2:08-CV-00167-TS-PMV. Permit condition B.2(a) should read as follows:

"Upon installation of the flare required in Paragraph 15 of the Consent Decree, the Permittee shall comply with all other initial compliance determinations, notification, and reporting requirements of 40 CFR Part 63, Subpart A, and 40 CFR Part 63, Subpart HH within the time set forth in the regulations."

EPA Response: The corrections have been made to the permit conditions and to Table 2 -Emission Units and Emission Generating Activities in the final permit.

# Comments from QEP Field Services Company on Statement of Basis for the Draft Title V Permit to Operate

QEPFS submitted several comments on the contents of the Statement of Basis for the draft permit. The Statement of Basis sets forth the legal and factual basis for the <u>draft</u> permit conditions (including references to the applicable statutory or regulatory provisions). Statements of Basis are not developed for final permits. However, it should be noted that there are several comments about the contents of the document that have been discussed below for the record. These comments did not result in a change to the enclosed final permit.

 Table 3 – Potential-to-Emit With Legally and Practically Enforceable Controls – QEPFS has suggested that the VOC emission from engines C202, C203, C204, C206, and C207 in Table 3-Potential-to-Emit With Legally and Practically Enforceable Controls of the Statement of Basis should be identified as controlled rather than uncontrolled, since VOC emissions are reduced along with CH<sub>2</sub>O emissions due to the applicability of MACT ZZZZ and the regulatory requirement under the rule to control CH<sub>2</sub>O emissions using an oxidation catalyst. EPA Response: The EPA did properly identify the VOC emissions from engines C202, C203, C204, and C206 as being controlled since these engines are subject to NSPS JJJJ which requires that companies limit the potential VOC emissions from these engines.

However there is no permit condition or regulatory requirement for engine C207 for limiting emissions of VOC, monitoring of VOC emissions, and recordkeeping and reporting of the monitoring results to ensure compliance. Engine C207 is not subject to NSPS JJJJ, which would regulate VOC emissions, nor does this engine have requirements in the permit for limiting the VOC emissions. As such, the lower VOC emissions that may be realized due to the use of oxidation catalysts to control  $CH_2O$  as required by MACT ZZZZ are not considered legally and practically enforceable for this engine. Therefore the EPA did properly identify the VOC emissions from C207 as being uncontrolled.

The EPA also misidentified the reason for the enforceable VOC reduction for the dehydration unit, D-1 in the footnotes to Table 3. The VOC reduction for D-1 is not the result of a beneficial reduction due to compliance with the National Emission Standards for Hazardous Air Pollutants From Oil and Natural Gas Production Facilities – 40 CFR Part 63, Subpart HH. (MACT HH). The 95% reduction is a requirement of the Consent Decree Case No. 2:08-CV-00167-TS-PM, in Section V, Paragraph 17.

				Re	egulated	Air Pollut	ants (tpy)				
	NOx	со	voc	PM	SO <sub>2</sub>	CH <sub>2</sub> O	Total HAPs	CO <sub>2</sub>	CH <sub>4</sub> (as CO <sub>2</sub> e)	N <sub>2</sub> O (as CO <sub>2</sub> e)	CO <sub>2</sub> e
C202	32.89	32.89	23.02 <sup>a</sup>	1.12	0.07	1.64	2.68	13,139	5	8	13,152
C203	32.89	32.89	23.02 <sup>ª</sup>	1.12	0.07	1.64	2.68	13,139	5	8	13,152
C204	32.89	32.89	23.02ª	1.12	0.07	1.64	2.68	13,139	5	8	13,152
C206	38.91	29.93	20.95ª	1.00	0.06	2.69	3.62	11,713	5	7	11,724
C207	43.97	43.97	46.87 <sup>b</sup>	1.50	0.09	2.20	3.58	17,498	7	10	17,515
D-1	-	-	26.25°	-	-	-	6.12	53	171	-	185
R-1	0.47	0.39	0.03	0.04	0.003	0.003	0.01	512	0.20	0.3	512
T-1	~	-	3.60	-	-		0.16	2	44	-	46
T-2 – T-9	-	-	1.12	-	-	-	0.07	-	-		9
EL	-	-	4.79	-	-	-	0.43	0.5	303	-	304
FL-1	0.68	0.17	-	-	-	-	-	564	0.22	0.33	565
C-1	0.42	0.11	-	-	-	-	-	352	0.14	0.21	352
C-2	0.004	0.07	-	-	-	-	-	8	0.003	0.005	8
LO	-	-	1.57	-	-	-	-	-	-	-	-
ES	· -	-	0.22	-	-	-	0.01	0.05	32.04	-	32
CB	-	-	6.70	-	-	-	0.32	1.50	961.24	-	963
ESD	-	-	0.07	-	-	-	0.003	0.02	9.61	-	10

Table 3 – Potential-to-Emit With Legally and Practically Enforceable Controls

			a. 19	Re	gulated	Air Pollut	ants (tpy)				
GP	-	-	10.57	-	-	-	0.51	2.37	1,515.69	-	1,518
PG	-		1.26	-	-	1 - 2 h es	0.06	0.28	180.44	-	181
TOTAL TOTAL	183.12	173.31	193.06	5.90	0.35	9.83	22.95	70,125	3,264	41	73,381

a. Based on the enforceable emission limit of 0.7 g/hp-hr limit in the Standards of Performance for Stationary Spark Ignition Internal Combustion Engines (NSPS JJJJ)

b. C207 is not subject to NSPS JJJJ, therefore the VOC emissions from the unit are uncontrolled.

c. Based on the enforceable requirement of a 95% reduction of VOC emissions as specified in the Consent Decree Case No. 2:08-CV-00167-TS-PM, in Section V, Paragraph 17.

 Compliance Assurance Monitoring (CAM) Applicability – It was incorrectly stated by the EPA in the Statement of Basis for the draft Title V permit that the CAM regulations at 40 CFR Part 64 apply to engines at the facility.

EPA Response: As noted by the QEPFS Company, the engines are either subject to MACT ZZZZ and/or NSPS JJJJ. Pursuant to §64.2(b) of the CAM rule, emissions units subject to emission limitations or standards proposed by the EPA after November 15, 1990, pursuant to section 111 or 112 of the Act are exempt from the requirement to comply with CAM. Both MACT ZZZZ and NSPS JJJJ were promulgated after November 15, 1990. Thus, the EPA agrees that these engines are not currently subject to CAM.



United States Environmental Protection Agency Region 8 Air Program 1595 Wynkoop Street Denver, Colorado 80202

#### Air Pollution Control Permit to Operate Title V Operating Permit Program at 40 CFR Part 71

In accordance with the provisions of Title V of the Clean Air Act (CAA) and the Title V Operating Permit Program at 40 CFR Part 71 (Part 71) and applicable rules and regulations,

# QEP Field Services Company (QEPFS) Wonsits Valley Compressor Station

is authorized to operate air emission units and to conduct other air pollutant emitting activities in accordance with the permit conditions listed in this permit.

This source is authorized to operate at the following location:

# Uintah and Ouray Indian Reservation Latitude 40.140792, Longitude -109.494322 Uintah County, Utah

Terms not otherwise defined in this permit have the meaning assigned to them in the referenced regulations. All terms and conditions of the permit are enforceable by the EPA and citizens under the CAA.

Carl Daly, Director Air Program U.S. EPA Region 8

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# Air Pollution Control Permit to Operate Title V Operating Permit Program at 40 CFR Part 71

## QEPFS Wonsits Valley Compressor Station

Permit Number: V-UO-000005-2000.00 Replaces Permit No.: N/A Issue Date: September 10, 2013 Effective Date: October 10, 2013 Expiration Date: October 10, 2018

The permit number cited above should be referenced in future correspondence regarding this source.

 Table 1. Part 71 Permitting History

Date of Action	Permit Number	Type of Action	Description of Action	
September 10, 2013	V-UO-000005-2000.00	Initial Permit	N/A	

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### I. Facility Information and Emission Unit Identification

#### A. Facility Information

Parent Company Name:	QEPFS
Plant Operator & Name:	Wonsits Valley Compressor Station
Plant Location:	Latitude 40.140792, Longitude -109.494322
Region:	8
State:	Utah
County:	Uintah
Reservation:	Uintah and Ouray Indian Reservation
Tribe:	Ute Indian Tribe
Responsible Official:	VP Engineering and Operations – QEPFS
SIC Code:	1311 – Crude Petroleum and Natural Gas

Description:

The Wonsits Valley Compressor Station gathers hydrocarbons (natural gas and natural gas condensate) from surrounding well sites via a gathering pipeline system. The hydrocarbons undergo a natural separation process in the inlet separator that separates the natural gas from the natural gas condensate. The natural gas condensate is routed to a natural gas condensate storage tank. The natural gas is routed to the compression stage where it is compressed from field pressure to approximately 1,000 pound per square inch (psi). The compressed natural gas is routed through a glycol dehydration unit to remove water to meet pipeline specifications. The dehydrated natural gas is routed to the sales gas pipeline. The natural gas condensate is transported off site by tanker trucks.

# B. Facility Emission Points

Unit I.D.	Descriptio	<b>Control Equipment</b>	
	Caterpillar G3612LE; 3,406 hp* 4-Stroke Lean-Burn Reciprocating Inte Natural Gas-Fired	ernal Combustion Engines	
C202	M	stalled: 9/2007 fg*: 10/21/2001 econstructed: 9/2007	Oxidation Catalyst
C203	M	stalled: 9/2007 fg: 10/10/1991 econstructed: 9/2007	Oxidation Catalyst
C204	M Re	stalled: 9/2007 fg: 5/12/1993 econstructed: 9/2007	
206	Waukesha 12V-AT27GL; 3,100 hp 4-Stroke Lean-Burn Reciprocating Inter- Natural Gas-Fired Serial No. C-13271/2	ernal Combustion Engine stalled: 3/2001	Oxidation Catalyst
200	M	fg: 12/7/2000 econstructed: 5/2007	
	Caterpillar G3616LE; 4,554 hp 4-Stroke Lean-Burn Reciprocating Inte Natural Gas-Fired		Oxidation Catalyst
C207		nstalled: 6/2008 1fg: 12/5/1993	
D-1	100 MMscfd* Glycol Dehydrator		Flare (FL-1) Combustor Back-up (C-2
R-1	10 MMBtu* Glycol Reboiler	None (insignificant emission)	
T-1	500 bbl* Condensate Tank 21,900 bbls per year Annual Condensa		Combustor (C-1)
T-2 T-3 T-4 T-5 T-6 T-7 T-8 T-9	Miscellaneous Chemical Storage Tank 100 bbl New Glycol 100 bbl New Oil 100 bbl Used Oil 100 bbl Used Glycol 65 bbl Glycol 100 bbl Water 100 bbl Dehydrator Drip Tank 100 bbl Dehydrator Drip Tank	KS	None (insignificant emission)
LO	Truck Loadout		None (insignificant emission)
EL	Equipment Leaks	None	
GP	Six (6) Gast 6AM-FRV-17B Natural C	None	
PG	Pigging Operations	None (insignificant emission)	
ES	Engine Start-ups	None (insignificant emission)	

Table 2 - Emission Units and Emission Generating Activities

Unit I.D.	Description	Control Equipment
СВ	Compressor Blowdowns	None
ESD	Emergency Shutdowns	None (insignificant emission)
FL-1	Elevated Open-Flame Flare	None
C-1 C-2	Enclosed Combustors	None

\* Mfg = Manufactured; hp = horsepower; bbl = barrel; MMscfd = million standard cubic feet per day; MMBtu = million British thermal units.

# II. <u>National Emission Standards for Hazardous Air Pollutants From Oil and Natural</u> Gas Production Facilities – 40 CFR Part 63, Subpart HH

#### A. Applicability[40 CFR 63.760]

40 CFR Part 63, Subpart HH applies to the 100 MMscfd glycol dehydrator identified as D-1 in Table 2 of this permit. [63.760(b)(1)(i)]

#### B. General Standards [40 CFR 63.764]

- 1. The General Provisions at 40 CFR Part 63, Subpart A apply as specified in Table 2 of 40 CFR Part 63, Subpart HH. Notwithstanding conditions in this permit, the Permittee shall comply with all applicable requirements of 40 CFR Part 63, Subpart A.
- 2. All reports required under 40 CFR Part 63, Subpart A shall be sent to the EPA at the following address as listed in §63.13:

Director, Air and Toxics Technical Enforcement Program, 8ENF-AT Office of Enforcement, Compliance and Environmental Justice 1595 Wynkoop Street, Denver, CO 80202–1129

Reports may be submitted on electronic media.

- 3. Except as specified in §63.764(e), the Permittee shall comply with the following requirements for the glycol dehydrator:
  - (a) The control requirements for glycol dehydrator process vents specified in §63.765;
  - (b) The monitoring requirements specified in §63.773; and
  - (c) The recordkeeping and reporting requirements specified in §§63.774 and 63.775.
- 4. At all times the Permittee must operate and maintain any glycol dehydrator, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and

maintenance procedures are being used will be based on information available to the EPA which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the unit. [40 CFR 63.764(j)]

### C. Glycol Dehydration Unit Process Vent Standards [40 CFR 63.765]

The Permittee shall comply with the control equipment requirements as follows:

- 1. For each cover, the Permittee shall comply with the cover requirements specified in §63.771(b);
- 2. For each closed-vent system, the Permittee shall comply with the closed-vent system requirements specified in §63.771(c);
- 3. For each control device, the Permittee shall comply with the applicable control device requirements specified in §63.771(d) or §63.771(f); and
- 4. For each process modification made to comply with glycol dehydrator process vent standards at §63.765(c)(2), the Permittee shall comply with the process modification standards specified in §63.771(e).

### D. Inspection and Monitoring Requirements [40 CFR 63.773]

- 1. For each closed-vent system or cover required by the Permittee to comply with 40 CFR Part 63, Subpart HH, the Permittee shall comply with the inspection and monitoring requirements specified in §63.773(c).
- 2. For each control device required by the Permittee to comply with 40 CFR Part 63, Subpart HH, the Permittee shall comply with the inspection and monitoring requirements as specified in §63.773(b) or §63.773(d).

#### E. Recordkeeping Requirements [40 CFR 63.774]

- 1. The recordkeeping provisions of 40 CFR Part 63, Subpart A, that apply and those that do not apply to the Permittee are listed in Table 2 of 40 CFR Part 63, Subpart HH.
- 2. The Permittee shall maintain the records specified in §§63.774(b), (c), (d), (e), (g), and (h).
- 3. Except as specified in §§63.774(c), 63.774(d), and 63.774(f), the Permittee shall maintain the records specified in §63.774(b).
- 4. If compliance with the benzene emission limit specified in §63.765(b)(1)(ii) is elected, the Permittee shall document, to the Administrator's satisfaction, the items in §63.774(c).

- 5. For glycol dehydrators operating at the source that meet the exemption criteria in §63.764(e)(1)(i) or §63.764(e)(1)(ii), the Permittee shall maintain records as specified in §63.774(d).
- 6. The Permittee shall keep records of the requirements of §63.774(e) when using a flare to comply with §63.771(d).
- 7. The Permittee shall maintain records, pursuant to §63.774(g), of the occurrence and duration of each malfunction of operation (*i.e.*, process equipment) or the air pollution control equipment and monitoring equipment. The Permittee shall maintain records of actions taken during periods of malfunction to minimize emissions in accordance with § 63.764(j), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.
- 8. The Permittee shall keep records of the requirements of 63.774(h) when using a control device whose model is tested under 63.772(h) to comply with 863.771(d), (e)(3)(ii) and (f)(1).

### F. Reporting Requirements [40 CFR 63.775]

- 1. The reporting provisions of subpart A of this part, that apply and those that do not apply to the Permittee are listed in Table 2 of this subpart.
- 2. The Permittee shall submit the information specified in §63.775(b).
- 3. The Permittee shall submit Notification of Compliance Status Reports as specified in §63.775(d).
- 4. The Permittee shall submit Periodic Reports as specified in §63.775(e).
- 5. The Permittee shall submit notifications of process changes as specified in §63.775(f).
- 6. The Permittee shall comply with any applicable electronic reporting provisions specified at §63.775(g).

# III. <u>National Emission Standards for Hazardous Air Pollutants for Reciprocating</u> Internal Combustion Engines - 40 CFR Part 63, Subpart ZZZZ

# A. Applicability [40 CFR 63.6585]

40 CFR Part 63, Subpart ZZZZ applies to the following emission units:

- 1. Caterpillar G3612LE engine identified as C202 in Table 2 of this permit;
- 2. Caterpillar G3612LE engine identified as C203 in Table 2 of this permit;
- 3. Caterpillar G3612LE engine identified as C204 in Table 2 of this permit;

- 4. Waukesha 12V-AT27GL engine identified as C206 in Table 2 of this permit; and
- 5. Caterpillar G3616LE engine identified as C207 in Table 2 of this permit.

#### B. General Provisions [40 CFR 63.6665]

- 1. The General Provisions at 40 CFR Part 63, Subpart A apply as specified in Table 8 of 40 CFR Part 63, Subpart ZZZZ. Notwithstanding conditions in this permit, the Permittee shall comply with all applicable requirements of 40 CFR Part 63, Subpart A.
- 2. All reports required under 40 CFR Part 63, Subpart A shall be sent to the EPA at the following address as listed in §63.13:

Director, Air and Toxics Technical Enforcement Program, 8ENF-AT Office of Enforcement, Compliance and Environmental Justice 1595 Wynkoop Street, Denver, CO 80202–1129

Reports may be submitted on electronic media.

### C. Emission and Operating Limitations [40 CFR 63.6600 and 63.6605]

- 1. Pursuant to §63.6600, compliance with the numerical emission limitations established in 40 CFR Part 63, Subpart ZZZZ shall be based on the results of testing the average of three 1-hour runs using the testing requirements and procedures in §63.6620 and Table 4 of 40 CFR Part 63, Subpart ZZZZ.
- 2. The Permittee must comply with the emission limitations and operating limitations specified in §63.6600.
- 3. The Permittee must be in compliance with the emission limitations and operating limitations that apply at all times. [40 CFR 63.6605(a)]
- 4. The Permittee must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions at all times. The general duty to minimize emissions does not require the Permittee to make any further efforts to reduce emissions if the required levels have been achieved. Determination of whether such operations and maintenance procedures are being used will be based on information available to the EPA, which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation of the source. [40 CFR 63.6605(b)]

#### D. Testing and Initial Compliance Requirements

[40 CFR 63.6610, 63.6615, 63.6620, and 63.6625]

- 1. The Permittee must conduct the initial performance tests or other compliance demonstrations requirements as specified in §63.6610.
- 2. The Permittee must conduct subsequent performance tests as specified in §63.6615.
- 3. The Permittee must use the performance tests and other procedures specified §63.6620.
- 4. The Permittee must meet the monitoring, installation, collection, operation and maintenance requirements as specified in §63.6625.
- 5. The Permittee must demonstrate initial compliance with the emission limitations, operating limitations, and other requirements that apply as specified in §63.6630.

### E. Continuous Compliance Requirements [40 CFR 63.663 and 63.6640]

- 1. The Permittee must monitor and collect data to demonstrate continuous compliance as specified in §63.6635.
- 2. The Permittee must demonstrate continuous compliance with the emission limitations, operating limitations, and other requirements as specified in §63.6640.

# F. Notifications, Reports, and Records [40 CFR 63.6645, 63.6650, 63.6655, 63.6660]

- 1. The Permittee must submit notifications as specified in §63.6645.
- 2. The Permittee must submit reports as specified in §63.6650.
- 3. The Permittee must keep records as specified in §63.6655.
- 4. The Permittee must keep the records in the format and for the duration as specified in §63.6660.

# IV. <u>Standards of Performance for Stationary Spark Ignition Internal Combustion Engines</u> - 40 CFR Part 60, Subpart JJJJ

A. Applicability [40 CFR 60.4230]

40 CFR Part 60, Subpart JJJJ applies to the following emission units:

- 1. Caterpillar G3612LE engine identified as C202 in Table 2 of this permit;
- 2. Caterpillar G3612LE engine identified as C203 in Table 2 of this permit;

- 3. Caterpillar G3612LE engine identified as C204 in Table 2 of this permit; and
- 4. Waukesha 12V-AT27GL engine identified as C206 in Table 2 of this permit.

### B. General Provisions [40 CFR 60.4246]

- This source is subject to the requirements of 40 CFR Part 60, Subpart A General Provisions as specified in Table 3 of 40 CFR Part 60, Subpart JJJJ. Notwithstanding conditions in this permit, the Permittee shall comply with all applicable requirements of 40 CFR Part 60, Subpart A.
- 2. All reports required under 40 CFR Part 60, Subpart A shall be sent to the EPA at the following address as listed in §60.19:

Director, Air and Toxics Technical Enforcement Program, 8ENF-AT Office of Enforcement, Compliance and Environmental Justice 1595 Wynkoop Street, Denver, CO 80202–1129 8ENF-AT

#### C. Emission Standards [40 CFR 60.4233, 60.4234]

- 1. The Permittee must comply with the emissions standards for each engine as specified in §60.4233.
- 2. The Permittee must operate and maintain the engines subject to the emission standards over the entire life of the engine, as specified in §60.4234.

#### D. Compliance Requirements [40 CFR 60.4243]

The Permittee must meet all of the applicable compliance requirements as specified in §60.4243.

#### E. Testing Requirements [40 CFR 60.4244]

The Permittee must meet the performance testing requirements of §60.4244

#### F. Notification, Reports, and Records [40 CFR 60.4245]

The Permittee must meet all of the applicable notification, reporting, and recordkeeping requirements of §60.4245.

## V. Requirements of Consent Decree Case No. 2:08-CV-00167-TS-PMV

A. This source is subject to the requirements of Consent Decree Case No. 2:08-CV-00167-TS-PMV (Consent Decree), filed and effective on July 3, 2012. Notwithstanding the conditions in this permit, the Permittee shall comply with all applicable provisions of the Consent Decree.

#### B. Requirements for the Glycol Dehydrator

[Consent Decree Case No. 2:08-CV-00167-TS-PMV, Paragraphs 15, 16, and 17]

- 1. Requirements of Consent Decree Case No. 2:08-CV-00167-TS-PMV, Paragraph 15
  - 40 CFR Part 63, Subpart HH National Emission Standards for Hazardous Air Pollutants From Oil and Natural Gas Production Facilities applies to the 100 MMscfd glycol dehydrator, identified as D-1 in Table 2 of this permit.
  - (b) The Permittee shall install and operate a flare connected to the existing dehydrator, identified as D-1 in Table 2 of this permit, to comply with the control device requirements of 40 CFR Part 63, Subpart HH, pursuant to §63.765(b)(1)(i).
  - (c) The Permittee shall design and operate the flare in accordance with the requirements of 40 CFR 63.771(d)(1)(iii) and 40 CFR 63.11(b).
  - (d) The initial notification requirements of §63.9(b)(4) shall be deemed satisfied on the Effective Date of the Consent Decree.
- 2. Requirements of Consent Decree Case No. 2:08-CV-00167-TS-PMV, Paragraph 16
  - (a) Upon installation of the flare required in Paragraph 15 of the Consent Decree, the Permittee shall comply with all other initial compliance determinations, notification, and reporting requirements of 40 CFR Part 63, Subpart A, and 40 CFR Part 63, Subpart HH within the time set forth in the regulations.
  - (b) For purposes of the initial compliance determination, notification, and reporting requirements of §63.775(d), the "compliance date" shall be the Effective Date of the Consent Decree.
- Requirements of Consent Decree Case No. 2:08-CV-00167-TS-PMV, Paragraph 17
  - (a) The flare installed pursuant to Paragraph 15 of the Consent Decree shall achieve a 95% by weight or greater reduction of volatile organic compound (VOC) emissions for the glycol dehydrator process vent stream at all times except during periods of time when the pilot flame at the flare is off, the Permittee shall re-light the pilot flame or route emissions from the glycol dehydrator process vent stream to a back-up combustor as expeditiously as practicable. The back-up combustor shall achieve a 95% by weight or greater reduction of VOC emissions from the glycol dehydrator process vent stream when in use, as determined by the pilot flame on the combustor being on when in use. The time period during which the glycol dehydrator is operated without either: (1) a flare with the pilot flame on; or (2) the back-up combustor with its pilot flame

on shall not exceed 140 hours. Nothing in Paragraph 17 of the Consent Decree shall affect the Permittee's obligation to meet the applicable requirements of 40 CFR Part 63.

(b) Compliance with 40 CFR 63.11(b), and with the associated monitoring and recordkeeping required in 40 CFR 63.773(d)(3)(i)(C), 63.774(b) and 63.774(e) shall be sufficient to determine compliance with the 95% VOC reduction requirement of Paragraph 17 of the Consent Decree.

# C. Requirements for the Condensate Storage Tank

[Consent Decree Case No. 2:08-CV-00167-TS-PMV, Paragraphs 19, and 20]

- 1. Requirements of Consent Decree Case No. 2:08-CV-00167-TS-PMV, Paragraph 19
  - (a) The Permittee shall, within 30 days of the Effective Date of the Consent Decree, connect the condensate storage tank, identified as T-1 in this permit, to an existing or new combustor at the source.
  - (b) The Permittee shall, within 60 days of the Effective Date of the Consent Decree, certify to the EPA that the design of the conveyance systems from the condensate storage tank to the combustor does not, under normal operating conditions, cause or contribute to a release of VOCs from the condensate storage tank through thief hatches or pressure relief valves.
  - (c) The Permittee shall equip the combustor with thermocouples (or other heat sensing monitoring devices) to continuously monitor the presence of a pilot flame.
- 2. Requirements of Consent Decree Case No. 2:08-CV-00167-TS-PMV, Paragraph 20

The Permittee shall monitor and record the presence of a pilot flame with a continuous recording device, such as a chart recorder or similar device.

#### D. Requirements for the Engines

[Consent Decree Case No. 2:08-CV-00167-TS-PMV, Paragraphs 22, and 23]

- 1. Requirements of Consent Decree Case No. 2:08-CV-00167-TS-PMV, Paragraph 22
  - (a) 40 CFR Part 63, Subpart ZZZZ National Emission Standards for Hazardous Air Pollutants From Stationary Reciprocating Internal Combustion engines applies to all reciprocating internal combustion engines with a site rating of 500 hp or greater operating at the source.
  - (b) For purposes of 40 CFR Part 63, Subpart ZZZZ compliance, the source shall become an existing affected major source under 40 CFR Part 63, Subpart ZZZZ as of the Effective Date of the Consent Decree.

- (c) The initial notification requirements of §63.9(b), §63.6645, and any other initial notifications required by 40 CFR Part 63, Subpart ZZZZ for all the existing reciprocating internal combustion engines at the source, shall be deemed satisfied on the Effective Date of the Consent Decree.
- (d) The Permittee shall thereafter comply with all other compliance demonstration, notification, and reporting requirements of 40 CFR Part 63, Subpart A and 40 CFR Part 63, Subpart ZZZZ by the dates set forth in the regulations.
- (e) For the purposes of testing and initial compliance requirements in 40 CFR 63.6610 and the compliance reporting requirements in 40 CFR 63.6650(b), the "compliance date" and "start-up" date shall be the Effective Date of the Consent Decree.
- (f) Performance tests must be conducted at any load condition within plus or minus 10% of 100% load unless the reciprocating internal combustion engine cannot achieve plus or minus 10% of 100% load at the time of the test. Under such circumstances, the reciprocating internal combustion engine shall be tested at maximum achievable load, and the differential pressure across the catalyst shall be monitored and shall be maintained consistent with operating limitations in 40 CFR Part 63, Subpart ZZZZ.
- (g) If the reciprocating internal combustion engine load is increased by 20% or greater averaged over a 30-day period commencing within 60 days of the last test, then the reciprocating internal combustion engine shall be re-tested at the newly achievable maximum load and the corresponding differential pressure established.
- (h) The Permittee shall monitor and record engine load at each reciprocating internal combustion engine.
- 2. Requirements of Consent Decree Case No. 2:08-CV-00167-TS-PMV, Paragraph 23

For lean-burn reciprocating internal combustion engines with a site rating of 500 hp or greater operated at the source, the Permittee shall comply with the requirements specified below:

- (a) Emissions Control
  - (i) The Permittee has installed and is operating an oxidation catalyst control device on each lean burn reciprocating internal combustion engine.
  - (ii) Emissions from the reciprocating internal combustion engines shall not exceed the following:

- (A) Caterpillar G3612LE engine identified as C202 in Table 2 of this permit:
  - (1) NO<sub>X</sub>: 1.0 grams per horsepower hour (g/hp-hr); and
  - (2) CO: 1.0 g/hp-hr;
- (B) Caterpillar G3612LE engine identified as C203 in Table 2 of this permit:
  - (1)  $NO_X$ : 1.0 g/hp-hr) and
  - (2) CO: 1.0 g/hp-hr;
- (C) Caterpillar G3612LE engine identified as C204 in Table 2 of this permit:
  - (1)  $NO_X$ : 1.0 g/hp-hr; and
  - (2) CO: 1.0 g/hp-hr;
- (D) Waukesha 12V-AT27GL engine identified as C206 in Table 2 of this permit:
  - (1)  $NO_X$ : 1.3 g/hp-hr; and
  - (2) CO: 1.0 g/hp-hr;
- (E) Caterpillar G3616LE engine identified as C207 in Table 2 of this permit:
  - (1)  $NO_X$ : 1.0 g/hp-hr; and
  - (2) CO: 1.0 g/hp-hr.
- (b) Emissions Controls Maintenance

Oxygen sensors shall be replaced within 2,000 hours of engine run time.

(c) Performance Testing for NO<sub>X</sub> and CO

Not later than 180 days after the Effective Date of the Consent Decree, the Permittee shall conduct initial performance tests for NOx and CO emissions on each reciprocating internal combustion engine using the test protocols developed from the following specified test methods:

- 40 CFR Part 60, Appendix A, Method 1 or 1A Sampling port location and number of traverse points;
- (ii) 40 CFR Part 60, Appendix A, Method 3, 3A or 3B O<sub>2</sub> concentration at inlet and outlet;
- (iii) 40 CFR Part 60, Appendix A, Method 4 Moisture Content;
- (iv) 40 CFR Part 60, Appendix A, Method 7E Determination of nitrogen oxides emissions; and

- (v) 40 CFR Part 60, Appendix A, Method 10 Determination of carbon monoxide emissions.
- (d) The Permittee shall retest each reciprocating internal combustion engine semi-annually using the test protocols developed from the test methods specified above. The Permittee shall submit to EPA the test results for NO<sub>X</sub> and CO with the semi-annual report required pursuant to 40 CFR Part 63, Subpart ZZZZ.
- (e) Performance tests must be conducted at any load condition within plus or minus 10% of 100% load unless the reciprocating internal combustion engine cannot achieve plus or minus 10% of 100% load at the time of the test. Under such circumstances, the reciprocating internal combustion engine shall be tested at maximum achievable load, and the differential pressure across the catalyst shall be monitored and shall be maintained consistent with operating limitations in 40 CFR Part 63, Subpart ZZZZ.
- (f) If the reciprocating internal combustion engine load is increased by 20% or greater averaged over a 30-day period commencing within 60 days of the last test, then the reciprocating internal combustion engine shall be re-tested at the newly achievable maximum load and the corresponding differential pressure established.
- (g) The Permittee shall monitor and record engine load at each reciprocating internal combustion engine.

#### VI. Facility-Wide Requirements [40 CFR 71.6(a)(1)]

Conditions in this section of this permit apply to all emissions units located at the source, including any units not specifically listed in Table 2 of the Source Emission Points section of this permit.

#### A. Recordkeeping Requirements [40 CFR 71.6(a)(3)(ii)]

The Permittee shall comply with the following generally applicable recordkeeping requirements:

1. If the Permittee determines that his or her stationary source that emits (or has the potential to emit, without considering controls) one or more hazardous air pollutants (HAPs) is not subject to a relevant standard or other requirement established under 40 CFR Part 63, the Permittee shall keep a record of the applicability determination on site at the source for a period of five (5) years after the determination, or until the source changes its operations to become an affected source, whichever comes first. The record of the applicability determination shall include an analysis (or other information) that demonstrates why the Permittee believes the source is unaffected (e.g., because the source is an area source). [40 CFR 63.10(b)(3)] 2. Records shall be kept of off permit changes, as required by the Off Permit Changes section of this permit.

#### B. Reporting Requirements [40 CFR 71.6(a)(3)(iii)]

1. The Permittee shall submit to the EPA Regional Office all reports of any required monitoring under this permit semiannually. The report shall be submitted semi-annually, by January 31<sup>st</sup> and July 31<sup>st</sup> of each year. The report due on January 31<sup>st</sup> shall cover the 6 month period ending on the last day of December before the report is due. The report due on July 31<sup>st</sup> shall cover the 6 month period ending on the last day of Iune before the report is due. All instances of deviations from permit requirements shall be clearly identified in such reports. All required reports shall be certified by a responsible official consistent with the Submissions section of this permit.

[Explanatory note: To help Part 71 Permittees meet reporting responsibilities, EPA has developed a form "SIXMON" for 6 month monitoring reports. The form may be found on EPA's website at: <u>http://www.epa.gov/air/oaqps/permits/p71forms.html</u>]

- 2. "Deviation" means any situation in which an emissions unit fails to meet a permit term or condition. A deviation is not always a violation. A deviation can be determined by observation or through review of data obtained from any testing, monitoring, or recordkeeping established in accordance with §71.6(a)(3)(i) and (a)(3)(ii). For a situation lasting more than 24 hours which constitutes a deviation, each 24 hour period is considered a separate deviation. Included in the meaning of deviation are any of the following:
  - (a) A situation where emissions exceed an emission limitation or standard;
  - (b) A situation where process or emissions control device parameter values indicate that an emission limitation or standard has not been met; or
  - (c) A situation in which observations or data collected demonstrate noncompliance with an emission limitation or standard or any work practice or operating condition required by the permit.
- 3. The Permittee shall promptly report to EPA deviations from permit requirements, including those attributable to upset conditions as defined in this permit, the probable cause of such deviations, and any corrective actions or preventive measures taken. "Prompt" is defined as follows:
  - (a) Any definition of "prompt" or a specific time frame for reporting deviations provided in an underlying applicable requirement as identified in this permit;
  - (b) Where the underlying applicable requirement fails to address the time frame for reporting deviations, reports of deviations will be submitted based on the following schedule:

- (i) For emissions of a HAP or a toxic air pollutant (as identified in the applicable regulation) that continue for more than an hour in excess of permit requirements, the report must be made within 24 hours of the occurrence.
- (ii) For emissions of any regulated air pollutant, excluding a HAP or a toxic air pollutant that continues for more than two (2) hours in excess of permit requirements, the report must be made within 48 hours.
- (iii) For all other deviations from permit requirements, the report shall be submitted with the semi-annual monitoring report.
- (c) If any of the conditions in (i) or (ii) of paragraph (b) above are met, the Permittee must notify EPA by telephone (1-800-227-6312), facsimile (303-312-6409), or by email to <u>r8airreportenforcement@epa.gov</u> based on the timetables listed above. [Notification must specify that this notification is a deviation report for a Part 71 permit]. A written notice, certified consistent with the Submissions section of this permit must be submitted within ten (10) working days of the occurrence. All deviations reported under this section must also be identified in the 6month report required under Condition 1 in this section of this permit.

[Explanatory note: To help Part 71 Permittees meet reporting responsibilities, EPA has developed a form "PDR" for prompt deviation reporting. The form may be found on EPA's website at: http://www.epa.gov/air/oaqps/permits/p71forms.html]

### C. Permit Shield [40 CFR 71.6(f)(3)]

Nothing in this permit shall alter or affect the following:

- 1. The liability of a Permittee for any violation of applicable requirements prior to or at the time of permit issuance;
- 2. The ability of the EPA to obtain information under Section 114 of the CAA; or
- 3. The provisions of Section 303 of the CAA (emergency orders), including the authority of the Administrator under that section.

#### VII. General Provisions

#### A. Annual Fee Payment [40 CFR 71.9]

- 1. The Permittee shall pay an annual permit fee in accordance with the procedures outlined below.
- 2. The Permittee shall pay the annual permit fee each year no later than April 1<sup>st</sup>. The fee shall cover the previous calendar year.

- 3. The fee payment shall be in United States currency and shall be paid by money order, bank draft, certified check, corporate check, or electronic funds transfer payable to the order of the U.S. Environmental Protection Agency.
- 4. The Permittee shall send fee payment and a completed fee filing form to:

For <u>regular U.S. Postal Service mail</u> express mail	For non-U.S. Postal Service
express man	(FedEx, Airborne, DHL, and UPS)
U.S. Environmental Protection Agency FOIA and Miscellaneous Payments Cincinnati Finance Center P.O. Box 979078 St. Louis, MO 63197-9000	U.S. Bank Government Lockbox 979078 U.S. EPA FOIA & Misc. Payments 1005 Convention Plaza SL-MO-C2-GL St. Louis, MO 63101

5. The Permittee shall send an updated fee calculation worksheet form and a photocopy of each fee payment check (or other confirmation of actual fee paid) submitted annually by the same deadline as required for fee payment to the address listed in the Submissions section of this permit.

[Explanatory note: The fee filing form "FF" and the fee calculation worksheet form "FEE" may be found on EPA website at: http://www.epa.gov/air/oaqps/permits/p71forms.html]

- 6. Basis for calculating annual fee:
  - (a) The annual emissions fee shall be calculated by multiplying the total tons of actual emissions of all "regulated pollutants (for fee calculation)" emitted from the source by the presumptive emissions fee (in dollars per ton) in effect at the time of calculation.
    - (i) "Actual emissions" means the actual rate of emissions in tpy of any regulated pollutant (for fee calculation) emitted from a Part 71 source over the preceding calendar year. Actual emissions shall be calculated using each emissions unit's actual operating hours, production rates, in-place control equipment, and types of materials processed, stored, or combusted during the preceding calendar year.
    - Actual emissions shall be computed using methods required by the permit for determining compliance, such as monitoring or source testing data.
    - (iii) If actual emissions cannot be determined using the compliance methods in the permit, the Permittee shall use other federally recognized procedures.

[Explanatory note: The presumptive fee amount is revised each calendar year to account for inflation, and it is available from EPA prior to the start of each calendar year.]

- (b) The Permittee shall exclude the following emissions from the calculation of fees:
  - (i) The amount of actual emissions of each regulated pollutant (for fee calculation) that the source emits in excess of 4,000 tpy;
  - (ii) Actual emissions of any regulated pollutant (for fee calculation) already included in the fee calculation; and
  - (iii) The quantity of actual emissions (for fee calculation) of insignificant activities [defined in §71.5(c)(11)(i)] or of insignificant emissions levels from emissions at the source identified in the Permittee's application pursuant to §71.5(c)(11)(ii).
- 7. Fee calculation worksheets shall be certified as to truth, accuracy, and completeness by a responsible official.

[Explanatory note: The fee calculation worksheet form already incorporates a section to help you meet this responsibility.]

- 8. The Permittee shall retain fee calculation worksheets and other emissionsrelated data used to determine fee payment for five (5) years following submittal of fee payment. [Emission-related data include, for example, emissions-related forms provided by EPA and used by the Permittee for fee calculation purposes, emissions-related spreadsheets, and emissions-related data, such as records of emissions monitoring data and related support information required to be kept in accordance with §71.6(a)(3)(ii).]
- 9. Failure of the Permittee to pay fees in a timely manner shall subject the Permittee to assessment of penalties and interest in accordance with §71.9(1).
- 10. When notified by EPA of underpayment of fees, the Permittee shall remit full payment within 30 days of receipt of notification.
- 11. A Permittee who thinks an EPA assessed fee is in error and who wishes to challenge such fee, shall provide a written explanation of the alleged error to EPA along with full payment of the EPA assessed fee.

# B. Annual Emissions Inventory [40 CFR 71.9(h)(1)and (2)]

1. The Permittee shall submit an annual emissions report of its actual emissions for both criteria pollutants and regulated HAPs for this source for the preceding calendar year for fee assessment purposes. The annual emissions report shall be certified by a responsible official and shall be submitted each year to EPA by April 1<sup>st</sup>.

2. The annual emissions report shall be submitted to EPA at the address listed in the Submissions section of this permit.

[Explanatory note: An annual emissions report, required at the same time as the fee calculation worksheet by  $\S71.9(h)$ , has been incorporated into the fee calculation worksheet form as a convenience.]

- C. Compliance Requirements [40 CFR 71.6(a)(6), Section 113(a) and 113(e)(1) of the CAA, and 40 CFR 51.212, 52.12, 52.33, 60.11(g), 61.12 ]
  - 1. Compliance with the Permit
    - (a) The Permittee must comply with all conditions of this Part 71 permit. Any permit noncompliance constitutes a violation of the CAA and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.
    - (b) It shall not be a defense for a Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
    - (c) For the purpose of submitting compliance certifications in accordance with §71.6(c)(5), or establishing whether or not a person has violated or is in violation of any requirement of this permit, nothing shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed.
  - 2. Compliance Schedule [40 CFR 71.5(c)(8)(iii)]
    - (a) For applicable requirements with which the source is in compliance, the source will continue to comply with such requirements.
    - (b) For applicable requirements that will become effective during the permit term, the source shall meet such requirements on a timely basis.
  - 3. Compliance Certifications [40 CFR 71.6(c)(5)]
    - (a) The Permittee shall submit to EPA a certification of compliance with permit terms and conditions, including emission limitations, standards, or work practices annually by January 31<sup>st</sup>, and shall cover the same 12month period as the two consecutive semi-annual monitoring reports.

[Explanatory note: To help Part 71 Permittees meet reporting responsibilities, EPA has developed a reporting form for annual compliance certifications. The form may be found on EPA website at: <u>http://www.epa.gov/air/oaqps/permits/p71forms.html</u>]

- (b) The compliance certification shall be certified as to truth, accuracy, and completeness by a responsible official consistent with §71.5(d).
- (c) The certification shall include the following:
  - (i) Identification of each permit term or condition that is the basis of the certification;
  - (ii) The identification of the method(s) or other means used for determining the compliance status of each term and condition during the certification period, and whether such methods or other means provide continuous or intermittent data. Such methods and other means shall include, at a minimum, the methods and means required in this permit. If necessary, the Permittee also shall identify any other material information that must be included in the certification to comply with Section 113(c)(2) of the CAA, which prohibits knowingly making a false certification or omitting material information;
  - (iii) The status of compliance with each term and condition of the permit for the period covered by the certification based on the method or means designated in (ii) above. The certification shall identify each deviation and take it into account in the compliance certification;
  - (iv) Such other facts as the EPA may require to determine the compliance status of the source; and
  - (v) Whether compliance with each permit term was continuous or intermittent.

#### D. Duty to Provide and Supplement Information [40 CFR 71.6(a)(6)(v), 71.5(a)(3), and 71.5(b)]

- 1. The Permittee shall furnish to EPA, within a reasonable time, any information that EPA may request in writing to determine whether cause exists for modifying, revoking, and reissuing, or terminating the permit, or to determine compliance with the permit. Upon request, the Permittee shall also furnish to the EPA copies of records that are required to be kept pursuant to the terms of the permit, including information claimed to be confidential. Information claimed to be confidential must be accompanied by a claim of confidentiality according to the provisions of 40 CFR Part 2, Subpart B.
- 2. The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information. In addition, a Permittee shall provide additional information as necessary to address any requirements that become applicable after the date a complete application is filed, but prior to release of a draft permit.

## E. Submissions [40 CFR 71.5(d), 71.6(c)(1) and 71.9(h)(2)]

1. Any document (application form, report, compliance certification, etc.) required to be submitted under this permit shall be certified by a responsible official as to truth, accuracy, and completeness. Such certifications shall state that based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

[Explanatory note: EPA has developed a reporting form "CTAC" for certifying truth, accuracy and completeness of Part 71 submissions. The form may be found on EPA website at: http://www.epa.gov/air/oaqps/permits/p71forms.html]

2. All fee calculation worksheets and applications for renewals and permit modifications shall be submitted to:

Part 71 Permit Contact Air Program, 8P-AR U.S. Environmental Protection Agency, 1595 Wynkoop Street Denver, Colorado 80202

3. Except where otherwise specified, all reports, test data, monitoring data, notifications, and compliance certifications shall be submitted to:

Director, Air Toxics and Technical Enforcement Program, 8ENF-AT U.S. Environmental Protection Agency, 1595 Wynkoop Street Denver, Colorado 80202

## F. Severability Clause [40 CFR 71.6(a)(5)]

The provisions of this permit are severable, and in the event of any challenge to any portion of this permit, or if any portion is held invalid, the remaining permit conditions shall remain valid and in force.

## G. Permit Actions [40 CFR 71.6(a)(6)(iii)]

This permit may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of a request by the Permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.

## H. Administrative Permit Amendments [40 CFR 71.7(d)]

The Permittee may request the use of administrative permit amendment procedures for a permit revision that:

1. Corrects typographical errors;

- 2. Identifies a change in the name, address, or phone number of any person identified in the permit, or provides a similar minor administrative change at the source;
- 3. Requires more frequent monitoring or reporting by the Permittee;
- 4. Allows for a change in ownership or operational control of a source where the EPA determines that no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the current and new Permittee has been submitted to the EPA;
- 5. Incorporates into the Part 71 permit the requirements from preconstruction review permits authorized under an EPA-approved program, provided that such a program meets procedural requirements substantially equivalent to the requirements of §§71.7 and 71.8 that would be applicable to the change if it were subject to review as a permit modification, and compliance requirements substantially equivalent to those contained in §71.6; or
- 6. Incorporates any other type of change which EPA has determined to be similar to those listed in (1) through (5) above.

[Note to Permittee: If 1 through 5 above do not apply, please contact EPA for a determination of similarity prior to submitting your request for an administrative permit amendment under this provision.]

## I. Minor Permit Modifications [40 CFR 71.7(e)(1)]

- 1. The Permittee may request the use of minor permit modification procedures only for those modifications that:
  - (a) Do not violate any applicable requirement;
  - (b) Do not involve significant changes to existing monitoring, reporting, or recordkeeping requirements in the permit;
  - (c) Do not require or change a case-by-case determination of an emission limitation or other standard, or a source-specific determination for temporary sources of ambient impacts, or a visibility or increment analysis;
  - (d) Do not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed to avoid an applicable requirement to which the source would otherwise be subject. Such terms and conditions include:
    - A federally enforceable emissions cap assumed to avoid classification as a modification under any provision of Title I; and

- (ii) An alternative emissions limit approved pursuant to regulations promulgated under Section 112(i)(5) of the CAA;
- (e) Are not modifications under any provision of Title I of the CAA; and
- (f) Are not required to be processed as a significant modification.
- 2. Notwithstanding the list of changes ineligible for minor permit modification procedures in 1 above, minor permit modification procedures may be used for permit modifications involving the use of economic incentives, marketable permits, emissions trading, and other similar approaches, to the extent that such minor permit modification procedures are explicitly provided for in an applicable implementation plan or in applicable requirements promulgated by EPA.
- 3. An application requesting the use of minor permit modification procedures shall meet the requirements of §71.5(c) and shall include the following:
  - (a) A description of the change, the emissions resulting from the change, and any new applicable requirements that will apply if the change occurs;
  - (b) The source's suggested draft permit;
  - (c) Certification by a responsible official, consistent with §71.5(d), that the proposed modification meets the criteria for use of minor permit modification procedures and a request that such procedures be used; and
  - (d) Completed forms for the permitting authority to use to notify affected States as required under §71.8.
- 4. The source may make the change proposed in its minor permit modification application immediately after it files such application. After the source makes the change allowed by the preceding sentence, and until the permitting authority takes any of the actions authorized by §71.7(e)(1)(iv)(A) through (C), the source must comply with both the applicable requirements governing the change and the proposed permit terms and conditions. During this time period, the source need not comply with the existing permit terms and conditions it seeks to modify. However, if the source fails to comply with its proposed permit terms and conditions during this time period, the existing permit terms and conditions it seeks to modify may be enforced against it.
- 5. The permit shield under §71.6(f) may not extend to minor permit modifications.

J. Significant Permit Modifications [40 CFR 71.7(e)(3), 71.8(d), and 71.5(a)(2)]

1. The Permittee must request the use of significant permit modification procedures for those modifications that:

- (a) Do not qualify as minor permit modifications or as administrative amendments;
- (b) Are significant changes in existing monitoring permit terms or conditions; or
- (c) Are relaxations of reporting or recordkeeping permit terms or conditions.
- 2. Nothing herein shall be construed to preclude the Permittee from making changes consistent with Part 71 that would render existing permit compliance terms and conditions irrelevant.
- 3. Permittees must meet all requirements of Part 71 for applications, public participation, and review by affected states and tribes for significant permit modifications. For the application to be determined complete, the Permittee must supply all information that is required by §71.5(c) for permit issuance and renewal, but only that information that is related to the proposed change.

## K. Reopening for Cause [40 CFR 71.7(f)]

The permit may be reopened and revised prior to expiration under any of the following circumstances:

- Additional applicable requirements under the CAA become applicable to a major Part 71 source with a remaining permit term of three (3) or more years. Such a reopening shall be completed no later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions have been extended pursuant to §71.7(c)(3);
- 2. Additional requirements (including excess emissions requirements) become applicable to an affected source under the acid rain program. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit;
- 3. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit; or
- 4. EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements.

## L. **Property Rights** [40 CFR 71.6(a)(6)(iv)]

This permit does not convey any property rights of any sort, or any exclusive privilege.

## M. Inspection and Entry [40 CFR 71.6(c)(2)]

- 1. Upon presentation of credentials and other documents as may be required by law, the Permittee shall allow EPA or an authorized representative to perform the following:
- 2. Enter upon the Permittee's premises where a Part 71 source is located or emissions-related activity is conducted, or where records must be kept under the conditions of the permit;
- 3. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;
- 4. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
- 5. As authorized by the CAA, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

## N. Emergency Provisions [40 CFR 71.6(g)]

- 1. In addition to any emergency or upset provision contained in any applicable requirement, the Permittee may seek to establish that noncompliance with a technology-based emission limitation under this permit was due to an emergency. To do so, the Permittee shall demonstrate the affirmative defense of emergency through properly signed, contemporaneous operating logs, or other relevant evidence that:
  - (a) An emergency occurred and that the Permittee can identify the cause(s) of the emergency;
  - (b) The permitted source was at the time being properly operated;
  - (c) During the period of the emergency the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards, or other requirements in this permit; and
  - (d) The Permittee submitted notice of the emergency to EPA within two (2) working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken. This notice fulfills the requirements for prompt notification of deviations.
- 2. In any enforcement proceedings the Permittee attempting to establish the occurrence of an emergency has the burden of proof.

3. An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation, or operator error.

## **O.** Transfer of Ownership or Operation [40 CFR 71.7(d)(1)(iv)]

A change in ownership or operational control of this source may be treated as an administrative permit amendment if the EPA determines no other change in this permit is necessary and provided that a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the current and new Permittee has been submitted to EPA.

## P. Off Permit Changes [40 CFR 71.6(a)(12) and 40 CFR 71.6(a)(3)(ii)]

The Permittee is allowed to make certain changes without a permit revision, provided that the following requirements are met, and that all records required by this section are kept for a period of five (5) years:

- 1. Each change is not addressed or prohibited by this permit;
- 2. Each change shall meet with all applicable requirements and shall not violate any existing permit term or condition;
- 3. Changes under this provision may not include changes subject to any requirement of 40 CFR Parts 72 through 78 or modifications under any provision of Title I of the CAA;
- 4. The Permittee must provide contemporaneous written notice to EPA of each change, except for changes that qualify as insignificant activities under §71.5(c)(11). The written notice must describe each change, the date of the change, any change in emissions, pollutants emitted, and any applicable requirements that would apply as a result of the change;
- 5. The permit shield does not apply to changes made under this provision;
- 6. The Permittee must keep a record describing all changes that result in emissions of any regulated air pollutant subject to any applicable requirement not otherwise regulated under this permit, and the emissions resulting from those changes;
- 7. The notice shall be kept on site and made available to EPA on request, in accordance with the general recordkeeping provision of this permit; and
- 8. Submittal of the written notice required above shall not constitute a waiver, exemption, or shield from applicability of any applicable standard or PSD

permitting requirements under 40 CFR 52.21 that would be triggered by the change.

- **Q.** Permit Expiration and Renewal [40 CFR 71.5(a)(1)(iii), 71.5(a)(2), 71.5(c)(5), 71.6(a)(11), 71.7(b), 71.7(c)(1), and 71.7(c)(3)]
  - 1. This permit shall expire upon the earlier occurrence of the following events:
    - (a) Five (5) years elapse from the date of issuance; or
    - (b) The source is issued a Part 70 or Part 71 permit under an EPA approved or delegated permit program.
  - 2. Expiration of this permit terminates the Permittee's right to operate unless a timely and complete permit renewal application has been submitted at least 6 months but not more than 18 months prior to the date of expiration of this permit.
  - 3. If the Permittee submits a timely and complete permit application for renewal, consistent with §71.5(a)(2), but EPA has failed to issue or deny the renewal permit, then all the terms and conditions of the permit, including any permit shield granted pursuant to §71.6(f) shall remain in effect until the renewal permit has been issued or denied.
  - 4. The Permittee's failure to have a Part 71 permit is not a violation of this part until EPA takes final action on the permit renewal application. This protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit any additional information identified as being needed to process the application by the deadline specified in writing by EPA.
  - 5. Renewal of this permit is subject to the same procedural requirements that apply to initial permit issuance, including those for public participation, affected State, and tribal review.
  - 6. The application for renewal shall include the current permit number, description of permit revisions and off permit changes that occurred during the permit term, any applicable requirements that were promulgated and not incorporated into the permit during the permit term, and other information required by the application form.

#### VIII. Appendix - Consent Decree Case No. 2:08-CV-00167-TS-PMV

## IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF UTAH, CENTRAL DIVISION

## UNITED STATES OF AMERICA,

Plaintiff,

UTE INDIAN TRIBE OF THE UINTAH AND OURAY RESERVATION, FRANCES M. POOWEGUP, IRENE C. CUCH, PHILLIP CHIMBURAS, and RON WOPSOCK,

Plaintiffs-Intervenors

QUESTAR GAS MANAGEMENT COMPANY,

Defendant.

## CONSENT DECREE

Case No. 2:08-CV-00167-TS-PMW

District Judge TED STEWART

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XXI. INTEGRATION
XXII. FINAL JUDGMENT

WHEREAS, Plaintiff United States of America, (the "United States") on behalf of the United States Environmental Protection Agency ("EPA"), filed a complaint in this action on February 29, 2008, alleging that Defendant QEP Field Services Company ("QEPFS"), formerly known as Questar Gas Management Company, violated Section 112 of the Clean Air Act ("Act"), 42 U.S.C. § 7412, Part C, Title 1 of the Act, 42 U.S.C. §§ 7470-7479, and Title V of the Act, 42 U.S.C. §§ 7661-7661f, at its Coyote Wash, Chapita, Island, Wonsits Valley, and River Bend compressor stations (the "Facilities").

WHEREAS, EPA administers the Act's programs for National Emission Standards for Hazardous Air Pollutants ("NESHAP"), Prevention of Significant Deterioration ("PSD"), and federal operating permits under Title V of the Act with respect to the Facilities located on Indian country land in Utah.

WHEREAS, the Complaint alleges, <u>inter alia</u>, QEPFS's Coyote Wash, Chapita, Island, Wonsits Valley, and River Bend compressor stations are all major sources of HAP emissions under Section 112(a)(1) of the Act, 42 U.S.C. § 7412(a)(1), are subject to HH requirements pursuant to 40 C.F.R. §§ 63.760(b)(1) & 63.765(a), and that QEPFS failed to comply with numerous HH requirements concerning the Facilities.

WHEREAS, the Complaint alleges, <u>inter alia</u>, QEPFS's Coyote Wash, Chapita, Island, Wonsits Valley, and River Bend compressor stations are major sources of HAP emissions, their RICE units are subject to ZZZZ regulations pursuant to 40 C.F.R. § 63.6590(a), and QEPFS failed to comply with numerous ZZZZ requirements regarding the Facilities.

WHEREAS, the Complaint alleges, <u>inter alia</u>, QEPFS's Coyote Wash, Chapita, Island, Wonsits Valley, and River Bend compressor stations are each a "major emitting facility" as

defined by Section 169(1) of the Act, 42 U.S.C. § 7479(1), a "major stationary source" as defined by 40 C.F.R. § 52.21(b)(1)(i)(b), and that QEPFS failed to comply with permit requirements concerning the facilities pursuant to Section 165(a) of the Act, 42 U.S.C. § 7475(a), and 40 C.F.R. §§ 52.21(a)(2)(iii), and (j) - (q) (2007).

WHEREAS, the Complaint alleges, <u>inter alia</u>, QEPFS's Coyote Wash, Chapita, Island, Wonsits Valley, and River Bend compressor stations are each a "Part 71 Source" within the meaning of 40 C.F.R. §§ 71.1 and 71.3, subject to the Title V operating permit program set forth in Title V of the Act at 42 U.S.C. § 7661 - 7661f, and that QEPFS failed to file applications for Part 71 federal operating permits within 12 months after the Chapita and Island Facilities became Part 71 sources and failed to comply with numerous 40 C.F.R. § 71.9 requirements concerning the facilities.

WHEREAS, on October 7, 2010, the Court granted the motion to intervene of Frances M. Poowegup, Irene C. Cuch, Phillip Chimburas, Curtis Cesspooch, and Richard Jenks, Jr., on May 15, 2012 granted the motion to intervene of Ron Wopsock, and on May 15, 2012 granted the motion to dismiss the claims of Curtis Cesspooch and Richard Jenks, Jr., with prejudice.

WHEREAS, Defendant QEPFS has denied and continues to deny the allegations in the Complaint and Complaint-in-Intervention and maintains that it has been and remains in compliance with the Act, is not liable for civil penalties or injunctive relief, and that it is agreeing to the obligations imposed by this Consent Decree solely to avoid further costs and uncertainty of litigation.

WHEREAS, the United States, QEPFS, and Plaintiff-Intervenors recognize, and the Court by entering this Consent Decree finds, that this Consent Decree has been negotiated by the

Parties in good faith and will avoid litigation between the Parties and that this Consent Decree is fair, reasonable, and in the public interest.

NOW, THEREFORE, before the taking of any testimony, without the adjudication or admission of any issue of fact or law except as provided in Section I, and with the consent of the Parties, IT IS HEREBY ADJUDGED, ORDERED, AND DECREED as follows:

### I. JURISDICTION AND VENUE

1. This Court has jurisdiction over the subject matter of this action, pursuant to 28 U.S.C. §§ 1331, 1345, and 1355, and Section 113(b) of the Act, 42 U.S.C. § 7413(b), and over the Parties. Venue lies in this District pursuant to Section 113(b) of the Act, 42 U.S.C. § 7413(b), and 28 U.S.C. § 1391(c) and 1395(a), because the violations alleged in the Complaint are alleged to have occurred in, and Defendant conducts business in, this judicial district. For purposes of this Decree, or any action to enforce this Decree, Defendant consents to the Court<sup>±</sup>s jurisdiction over this Decree and any such action and over Defendant and consents to venue in this judicial district.

2. For purposes of this Consent Decree, Defendant agrees that the Complaint states claims upon which relief may be granted pursuant to Section(s) 112 of the Clean Air Act ("Act"), 42 U.S.C. § 7412; Part C, Title 1 of the Act, 42 U.S.C. §§ 7470-7479; and Title V of the Act, 42 U.S.C. §§ 7661-7661f.

## II. <u>APPLICABILITY</u>

3. The obligations of this Consent Decree apply to and are binding upon the United States, Plaintiff-Intervenors, and Defendant, and upon any successors, assigns, or other entities or persons otherwise bound by law.

4. QEPFS will condition any transfer, in whole or in part, of ownership of, operation of, or other interest (exclusive of any non-controlling non-operational shareholder or security interest) in, any of the Facilities upon the execution by the transferee of a modification to the Consent Decree which makes the terms and conditions of the Consent Decree apply to such Facility applicable to the transferee. As soon as possible prior to the transfer, QEPFS shall notify the United States of the proposed transfer and of the specific Consent Decree provisions that the transferee is assuming. Within a reasonable time thereafter, QEPFS shall provide a certification from the transferee that the transferee has the financial and technical ability to assume the obligations and liabilities under this Consent Decree that are related to the transfer. By no later than sixty (60) days after the transferee executes a document agreeing to substitute itself for QEPFS for all terms and conditions of this Consent Decree that apply to the Facility that is being transferred, the United States, QEPFS, and the transferee shall jointly file with the Court a motion requesting the Court to substitute the transferee as the Defendant for those terms and conditions of this Consent Decree that apply to the Facility that is being transferred (if the United States concurs). If QEPFS does not secure the agreement of the United States to a Joint Motion within sixty (60) days, then QEPFS and the transferee may file a motion without the agreement of the United States. The United States thereafter may file an opposition to the motion. QEPFS will not be released from the obligations and liabilities of any provision of this Consent Decree unless and until the Court grants the motion substituting the transferee as the Defendant to those provisions.

5. Defendant shall provide a copy of this Consent Decree to all officers, employees, and agents whose duties include compliance with any provision of this Decree.

### III. <u>DEFINITIONS</u>

6. Terms used in this Consent Decree that are defined in the Act or in regulations promulgated pursuant to the Act shall have the meanings assigned to them in the Act or such regulations, unless otherwise provided in this Decree. Whenever the terms set forth below are used in this Consent Decree, the following definitions shall apply:

a. "Complaint" shall mean the complaint filed by the United States in this action;

b. "Complaint in Intervention" shall mean the complaint, and amendments thereto, filed by the Plaintiff-Intervenors in this action;

c "Consent Decree" or "Decree" shall mean this Decree;

d. "Day" shall mean a calendar day unless expressly stated to be a business day. In computing any period of time under this Consent Decree, where the last day would fall on a Saturday, Sunday, or federal holiday, the period shall run until the close of business of the next business day;

e. "Defendant" shall mean QEP Field Services Company ("QEPFS"), successor by name change to Questar Gas Management Company;

 f. "EPA" shall mean the United States Environmental Protection Agency and any of its successor departments or agencies;

g. "Effective Date" shall have the definition provided in Section XIV.

h. "Facilities" (or, individually, "Facility") shall mean Defendant<sup>-</sup>s Coyote Wash, Chapita, Island, Wonsits Valley, and River Bend compressor stations in Uintah County, Utah. Provided, however, that references to the "Facilities" in Section V (Compliance Requirements) shall not include the River Bend Facility, as that Facility shall be closed in accordance with the terms of this Consent Decree.

i. "Paragraph" shall mean a portion of this Decree identified by an arabic numeral;

j. "Parties" shall mean the United States, Defendant, Plaintiff-Intervenors, and the Tribe (the latter of which is a party to this action and this Consent Decree to the limited extent that it was granted intervention under the Court's January 13, 2010 Order (Docket No. 142) solely for sovereign jurisdictional issues raised by the claims and defenses in this case, and also for the purpose of Paragraphs 27 and 77 hereof regarding creation by it of an entity to administer the Tribal Clean Air Trust Fund);

k. "Plaintiff-Intervenors" shall mean Frances M. Poowegup, Irene C. Cuch, Phillip Chimburas, and Ron Wopsock;

1. "Section" shall mean a portion of this Decree identified by a roman numeral;

m. "Tribe" shall mean the Ute Indian Tribe of the Uintah and Ouray Reservation; and

n. "United States" shall mean the United States of America, acting on behalf of EPA.

## IV. <u>CIVIL PENALTY</u>

7. Not later than 30 Days after the Effective Date of this Consent Decree, Defendant shall pay the sum of \$3,650,000 to the United States as a civil penalty, together with interest accruing thirty (30) days after the Effective Date, if the Civil Penalty is not timely paid at the rate specified in 28 U.S.C. § 1961 as of the date of lodging.

8. Defendant shall pay the civil penalty due by FedWire Electronic Funds Transfer ("EFT") to the U.S. Department of Justice in accordance with written instructions to be timely provided to Defendant, following lodging of the Consent Decree, by the Financial Litigation Unit of the U.S. Attorney's Office for the District of Utah. At the time of payment, Defendant shall send a copy of the EFT authorization form and the EFT transaction record, together with a

transmittal letter, which shall state that the payment is for the civil penalty owed pursuant to the Consent Decree in United States v. Questar Gas Management Co., and shall reference the civil action number and DOJ case number 90-5-2-1-08432, to the United States in accordance with Section XIII of this Decree (Notices); by email to <u>acctsreceivable.CINWD@epa.gov;</u> and by mail to:

EPA Cincinnati Finance Office 26 Martin Luther King Drive Cincinnati, Ohio 45268

9. Defendant shall not deduct any penalties paid under this Decree pursuant to this Section or Section VIII (Stipulated Penalties) in calculating its federal income tax.

## V. COMPLIANCE REQUIREMENTS

## A. <u>River Bend Compressor Facility</u>

10. Within 60 days of the effective date of this Consent Decree, QEPFS shall permanently shut-down the River Bend Compressor Facility by taking all equipment out of service and blind-flanging the inlet and outlet piping of the Facility, and withdrawing its March 2006 Part 71 permit application for the Facility.

### B. <u>Equipment Removal Requirements</u>

11. Not later than the Effective Date of this Consent Decree, QEPFS shall remove the glycol dehydration unit reboilers from the Chapita and Coyote Wash Facilities.

12. Not later than 30 days after the Effective Date of this Consent Decree, QEPFS shall place its order for all equipment necessary to remove the TK-200 and TK-300 condensate storage tanks, as identified in QEPFS' October 2006, Title V permit application, from the Coyote Wash Facility. QEPFS shall physically remove such tanks not later than 120 days after receipt of such equipment.

13. Not later than 60 days after the Effective Date of this Consent Decree, QEPFS shall blind flange one rich burn engine from both the Island and Coyote Wash Compressor Facilities (leaving each facility with no more than one rich burn engine), so as to remove such engines from service. Not later than 90 days after the Effective Date of this Consent Decree, QEPFS shall move such engines to the adjacent yard or to another location off site.

14. Not later than 30 days after completing the requirements of Paragraphs 11 - 13 of this Consent Decree, QEPFS shall certify to EPA that it has completed such requirements and shall identify the dates each action was completed.

## C. Dehydrator Requirements

15. The dehydrators located at the Wonsits Valley and Island Facilities are subject to "major source" standards under 40 C.F.R. Part 63, Subpart HH – NESHAPs for oil and natural gas facilities (hereinafter "Subpart HH"). To comply with the control device requirements of Subpart HH, Defendant shall install and operate, within 60 days of the Effective Date of this Consent Decree, flares connected to the existing dehydrators at the Wonsits Valley and Island Facilities pursuant to the requirements of 40 C.F.R. § 63.765(b)(1)(i). Pursuant to 40 C.F.R. § 63.771(d)(1)(iii), the flares shall be designed and operated in accordance with the requirements of 40 C.F.R. § 63.11(b). The initial notification requirements of 40 C.F.R. § 63.9(b)(4) shall be deemed satisfied on the Effective Date of this Consent Decree.

16. After the installation of the flares required by Paragraph 15, QEPFS shall comply with all other initial compliance determination, notification, and reporting requirements in 40 C.F.R. Part 63, Subparts A and HH within the time set forth in the regulations. For purposes of the initial compliance determination, notification, and reporting requirements of 40 C.F.R. § 63.775(d), the "compliance date" shall be the Effective Date of this Consent Decree.

17. The flares installed pursuant to Paragraph 15 shall achieve a 95percent by weight or greater reduction of VOC emissions from the dehydrator process vent stream at all times except as provided in Paragraph 17(b).

a. Compliance with 40 C.F.R. § 63.11(b), and with the associated monitoring and recordkeeping required in 40 C.F.R. §§ 63.773(d)(3)(i)(C) and 63.774(b) and (e), shall be sufficient to determine compliance with this 95percent VOC reduction requirement of this Paragraph.

b. During periods of time when the pilot flame at the flares is off, QEPFS shall re-light the pilot flame or route emissions from the dehydrator process vent stream to a back-up combustor as expeditiously as practicable. The back-up combustors shall achieve a 95percent by weight or greater reduction of VOC emissions from the dehydrator process vent stream when in use, determined by the pilot flame on the combustor being on when in use. The time period during which the glycol dehydrator is operated without either (1) a flare with the pilot flame on

or (2) the back-up combustor with its pilot flame on shall not exceed 140 hours at the Wonsits Valley Facility and 500 hours at the Island Facility. Nothing in this Paragraph shall affect QEPFS's obligation to meet applicable requirements of 40 C.F.R. Part 63.

18. Not later than 90 days after the Effective Date of this Consent Decree, QEPFS shall certify to EPA that the actions required in Paragraph 15 have been completed and the date on which they were completed.

D. Condensate Tanks

19. QEPFS shall, within 30 days of the Effective Date of this Consent Decree, connect the condensate storage tanks at the Chapita (TO-1, TO-2), Island (TO-1, TO-2) and Wonsits Valley Facilities (T-1) to an existing or new combustor at those Facilities. Within 60 Days of the Effective Date of this Consent Decree, QEPFS shall certify to EPA that the design of

the conveyance systems from these condensate storage tanks to the combustors does not, under normal operating conditions, cause or contribute to a release of volatile organic compounds from the storage tanks through thief hatches or pressure relief valves. QEPFS shall equip the combustors with thermocouples (or other heat sensing monitoring devices) to continuously monitor the presence of the pilot flame. QEPFS shall comply with the provisions of this Paragraph at the Coyote Wash Compressor Station (TK-200 and TK-300) until the tanks are removed pursuant to Paragraph 12.

20. QEPFS shall monitor and record the presence of a pilot flame with a continuous recording device, such as a chart recorder or similar device.

21. Not later than 60 days after the Effective Date of this Consent Decree, QEPFS shall certify to EPA that the actions required in Paragraph 19 have been completed and identify the dates on which they were completed.

## E. <u>RICE Requirements</u>

22. RICE with a site rating of 500 hp or greater at the Facilities are subject to 40 C.F.R. Part 63, Subpart ZZZZ-National Emission Standards for Hazardous Air Pollutants from Stationary Reciprocating Internal Combustion Engines (hereinafter "Subpart ZZZZ"). For purposes of Subpart ZZZZ compliance, the Facilities shall become existing affected major sources under Subpart ZZZZ as of the Effective Date of this Consent Decree. The initial notification requirements of 40 C.F.R. § 63.9(b), 40 C.F.R. § 63.6645, and any other initial notifications required by ZZZZ for all existing RICE at the Facilities, shall be deemed satisfied on the Effective Date of this Consent Decree. QEPFS shall thereafter comply with all other compliance demonstration, notification, and reporting requirements of 40 C.F.R. Part 63, Subparts A and ZZZZ by the date set forth in the regulations. For purposes of the testing and

initial compliance requirements in 40 C.F.R. § 63.6610 and the compliance reporting requirements in 40 C.F.R. § 63.6650(b), the "compliance date" and "start up" date shall be the Effective Date of this Consent Decree. Performance tests must be conducted at any load condition within plus or minus 10 percent of 100 percent load unless the engine cannot achieve plus or minus 10 percent of 100 percent load at the time of the test. Under such circumstances, the engine shall be tested at maximum achievable load, and the differential pressure across the catalyst shall be monitored and shall be maintained consistent with operating limitations in Subpart ZZZZ. If the engine load is increased by 20 percent or greater averaged over a 30 day period commencing within 60 days of the last test, then the engine shall be re-tested at the newly achievable maximum load and the corresponding differential pressure established. For the purposes of this provision regarding engine load during and after performance testing, QEPFS shall monitor and record load at each engine.

23. For RICE with a site rating of 500 hp or greater operated at the Facilities, QEPFS shall comply with the requirements specified below:

a. <u>Emissions Control</u>

(1) <u>Rich burn engines</u>. QEPFS has installed and is operating a nonselective catalytic reduction (NSCR) control device and an air-fuel ratio (AFR) device on the rich-burn RICE at the Island and Coyote Wash Facilities. The rich burn RICE at Coyote Wash shall not exceed emission limits of 1.0 gram per horse power hour (g/hp-hr) for NOx and 1.0 g/hp-hr for CO. The rich burn RICE at Island shall not exceed emission limits of 8.0 g/hp-hr for NOx and 5.0 g/hp-hr for CO.

(2) <u>Lean burn engines</u>. QEPFS has installed and is operating an oxidation catalyst control device on each lean burn RICE. All lean burn RICE at the Coyote

Wash and Wonsits Valley Facilities shall not exceed an emission limit of 1.0 g/hp-hr for NOx and 1.0 g/hp-hr for CO, except that engine C206 (Waukesha A27; serial number C-13271/2) at the Wonsits Valley Facility shall not exceed an emission limit of 1.30 g/hp-hr for NOx. The three existing lean burn RICE at the Chapita Facility shall not exceed 2.50 g/hp-hr for NOx and 1.0 g/hp-hr for CO.

b. <u>Emissions Controls Maintenance</u>. Oxygen sensors shall be replaced within 2000 hours of engine run time.

c. <u>Performance Testing for NOx and CO</u>.

(1) Not later than 180 days after the Effective Date of the Consent Decree, QEPFS shall conduct initial performance tests for NOx and CO emissions on each RICE using the test protocol selected from the list below.

(2) QEPFS shall retest each RICE semi-annually using the test protocol selected from the list below. QEPFS shall submit to EPA the test results for NOx and CO with the semi-annual report required pursuant to Subpart ZZZZ.

(3) The test must be conducted at any load condition within plus or minus 10 percent of 100 percent load unless the engine cannot achieve plus or minus 10 percent of 100 percent load at the time of the test. Under such circumstances, the engine shall be tested at maximum achievable load, and the differential pressure across the catalyst shall be monitored and shall be maintained consistent with operating limitations in Subpart ZZZZ. If the engine load is increased by 20 percent or greater averaged over a 30 day period commencing within 60 days of the last test, then the engine shall be re-tested at the newly achievable maximum load and the corresponding differential pressure established. For the purposes of this provision regarding

engine load during and after performance testing, QEPFS shall monitor and record load at each engine.

(4) QEPFS shall select among the following test methods: 40 C.F.R.
Part 60, Appendix A, Method 1 or 1A - Sampling port location and number of traverse points;
40 C.F.R. Part 60, Appendix A, Method 3, 3A or 3B - O2 concentration at inlet and outlet; 40
C.F.R. Part 60, Appendix A, Method 4 - Moisture Content; 40 C.F.R. Part 60, Appendix A,
Method 7E – Determination of nitrogen oxides emissions; 40 C.F.R. Part 60, Appendix A,
Method 10 – Determination of carbon monoxide emissions.

### F. 40 C.F.R. Part 71 (Clean Air Act Title V) Operating Permit Requirements

24. The Coyote Wash, Chapita, Island, and Wonsits Valley Facilities are each subject to the requirements of 40 C.F.R. Part 71. Not later than 180 days after the Effective Date of this Consent Decree, QEPFS shall submit updated Part 71 permit applications for the Wonsits Valley, Coyote Wash, Chapita, and Island Compressor Facilities that reflect current operations. Not later than 60 days after receipt of the Part 71 permit applications, EPA shall notify QEPFS whether the Part 71 permit applications are complete. EPA shall not unreasonably delay its determination that the applications are complete. EPA agrees to propose as Part 71 permit conditions, the specific emission limits, operating parameters, monitoring requirements, and recordkeeping requirements set forth in Paragraphs 15, 16, 17, 19, 20, 22, and 23 in the Part 71 permits that it proposes for public comment. QEPFS may contest any permit conditions inconsistent with this Consent Decree in the proposed Part 71 permits in accordance with the provisions of 40 C.F.R. Part 71.11. The requirements under Paragraphs 15, 16, 17, 19, 20, 22, and 23 are deemed "applicable requirements" under Part 71 and Title V of the Clean Air Act. EPA shall propose for public comment draft Part 71 permits for two of the Facilities within 90

days after each application is deemed complete; EPA shall propose for public comment draft Part 71 permits for the remaining two Facilities within 180 days after each application is deemed complete. The United States agrees that the provisions of Paragraphs 15, 16, 17, 19, 20, 22, and 23 of this Consent Decree include adequate monitoring to assure that the Facilities meet the limits, standards, and requirements set forth in this Decree.

## G. Limits on Emissions

25. The emission limits and control requirements set forth in Paragraphs 15, 16, 17, 22, and 23 of this Consent Decree are "federally enforceable" and "legally enforceable" for purposes of calculating the potential to emit of HAPs, VOCs, NOx, and CO emissions at the Coyote Wash, Chapita, Wonsits Valley, and Island Facilities under the Clean Air Act and any implementing regulations, including PSD/NSR applicability. In addition, the monitoring, reporting, and recordkeeping requirements provided for in this Consent Decree ensure that the emission limits and control requirements are enforceable as a practical matter, which is sometimes referred to as "practicably enforceable."

## VI. ADDITIONAL INJUNCTIVE RELIEF/TRIBAL CLEAN AIR MITIGATION PROJECT

26. Not later than 180 days after the Effective Date of this Consent Decree, QEPFS shall convert all natural gas powered pneumatic instrument control systems at the Facilities to compressed instrument air systems. Not later than 30 days after completing this project, QEPFS shall submit a report to EPA with a description of the work completed.

27. Not later than 60 Days after the Effective Date of this Consent Decree, Plaintiff-Intervenors shall form a non-profit corporation (referred to herein as the "Tribal Clean Air Trust Fund") in accordance with applicable Utah or tribal law and this Paragraph of the Decree, including the filing of bylaws and articles of incorporation, to fund beneficial environmental

projects on the Uintah and Ouray Reservation of Northern Utah, including projects to reduce emissions of air pollution on the Reservation, mitigate the impacts of air pollution on tribal members, screen for air pollution related health impacts among tribal members, or educate tribal members about the deleterious impacts of air pollution on public health and the environment. Creation of the Tribal Clean Air Trust Fund under tribal law is contingent on the creation of a non-profit corporation for the purposes set forth in this Consent Decree, including the provisions in this Paragraph concerning the uses of and limitations on assets of the Tribal Clean Air Trust Fund, that was subject to timely review and consent of the Parties prior to its creation.

a. The assets of the Tribal Clean Air Trust Fund shall not be commingled with property of the Ute Indian Tribe of the Uintah and Ouray Reservation, and grants from the Tribal Clean Air Trust Fund shall not be made to or for the benefit of any Party to this action. Assets of the Tribal Clean Air Trust Fund shall not be used to enforce this Consent Decree directly or indirectly or to pursue any claim, action, demand, or proceeding against QEPFS or its employees, affiliates, successors, or assigns, including but not limited to claims under the Clean Air Act, and the bylaws and/or articles of incorporation of the Tribal Charitable Trust Fund shall expressly state this limitation on the use of its assets.

b. In satisfaction of the claims of Plaintiff-Intervenors, not later than 90 Days after the Effective Date of this Consent Decree, or such later date as provided in Paragraph 27.c, below, Defendant shall pay \$350,000 to the Tribal Clean Air Trust Fund, payable in accordance with written instructions that shall be provided to Defendant by the Tribal Clean Air Trust Fund.

c. In the event bylaws and articles of incorporation governing the administration of the Tribal Clean Air Trust Fund as required in Paragraph 27, above, have not been timely filed with the State of Utah or pursuant to tribal law, or if the Tribal Clean Air Trust

Fund has not provided payment instructions as required in Paragraph 27.b, Defendant shall not make the payment required in Paragraph 27.b. In that event Defendant shall make the payment required within 30 Days of receiving the bylaws, articles of incorporation, and payment instructions; except that if the Plaintiff-Intervenors (or the Board of Directors of the Tribal Clean Air Trust Fund) do not establish and provide the bylaws or articles of incorporation within 120 Days of the Effective Date of this Consent Decree, QEPFS's obligation to make the payment required in Paragraph 27.b shall terminate.

d. Plaintiff-Intervenors' right to enforce QEPFS's obligations under this Consent Decree, whether through dispute resolution, an action in court, or any other means shall be limited to a claim or dispute with respect to QEPFS's obligation to make the payment required under this Paragraph 27.

#### VII. <u>REPORTING REQUIREMENTS</u>

28. On the date QEPFS submits its annual or other periodic reports pursuant to 40 C.F.R. Subparts HH or ZZZZ or, if no such reports are submitted during a calendar year, not later than January 31 of the succeeding calendar year, Defendant shall submit a report for the preceding year that shall include a description of any non-compliance with the requirements of this Consent Decree and an explanation of the violation's likely cause and of the remedial steps taken, or to be taken, to prevent or minimize such violation. If the cause of a violation cannot be fully explained at the time the report is due, Defendant shall so state in the report. Defendant shall thereafter investigate the cause of the violation and shall then submit an amendment to the report, including a full explanation of the cause of the violation, within 30 Days of the Day Defendant becomes aware of the cause of the violation. Nothing in this Paragraph or the

following Paragraph relieves Defendant of its obligation to provide the notice required by Section IX of this Consent Decree (Force Majeure).

29. Whenever any violation of this Consent Decree, or any other event affecting Defendant's performance under this Decree poses an immediate threat to the public health or welfare or the environment, Defendant shall notify EPA orally or by electronic or facsimile transmission as soon as possible, but no later than 24 hours after Defendant first knew of the violation or event. This procedure is in addition to the requirements set forth in the preceding Paragraph.

30. All reports shall be submitted to the EPA official designated in Section XIII of this Consent Decree (Notices).

31. Each report submitted by Defendant under this Section shall be signed by an official of the submitting party and include the following certification:

I certify that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

This certification requirement does not apply to emergency or similar notifications where compliance would be impractical.

32. The reporting requirements of this Consent Decree do not relieve Defendant of any reporting obligations required by the Clean Air Act or implementing regulations, or by any other federal, state, or local law, regulation, permit, or other requirement.

33. Any information provided pursuant to this Consent Decree may be used by the United States in any proceeding to enforce the provisions of this Consent Decree and as otherwise permitted by law.

## VIII. STIPULATED PENALTIES

34. Defendant shall be liable for stipulated penalties to the United States for violations of this Consent Decree as specified below, unless excused under Section IX (Force Majeure) or Section X (Dispute Resolution). Only as specified below, a violation includes failing to perform any obligation required by the terms of this Decree, including any work plan or schedule approved under this Decree, according to all applicable requirements of this Decree and within the specified time schedules established by or approved under this Decree.

35. <u>Late Payment of Civil Penalty</u>. If Defendant fails to pay the civil penalty required to be paid under Section IV of this Decree (Civil Penalty) when due, Defendant shall pay a stipulated penalty of \$1000 per Day for each Day that the payment is late.

36. <u>Stipulated Penalty Amounts:</u>

## a. Dehydrators

	Violation	Stipulated Penalty
1.	For failure to install and operate flares and	For each unit: \$1,000 per day for the first
	combustors as specified in Paragraph 15	30 days of noncompliance, \$1,500 per day
	and 17.	from the 31 <sup>st</sup> to 60 <sup>th</sup> day of noncompliance, and
		\$2,000 per day thereafter.

## b. Condensate Tanks

	Violation	Stipulated Penalty
1.	For failure to comply with the obligations specified in Paragraph 19.	For each unit: \$1,000 per day for the first 30 days of noncompliance, \$1,500 per day from the 31 <sup>st</sup> to 60 <sup>th</sup> day of noncompliance, and \$2,000 per day thereafter.
2.	For failure to remove condensate tanks as specified in Paragraph 12.	For each unit: \$1,000 per day for the first 30 days of noncompliance, \$1,500 per day from the 31 <sup>st</sup> to 60 <sup>th</sup> day of noncompliance, and \$2,000 per day thereafter.

# c. Compressor Engines

	Violation	Stipulated Penalty
1.	For failure to blind flange engines as specified in Paragraph 13.	For each unit: \$1,000 per day for the first 30 days of noncompliance, \$1,500 per day from the 31 <sup>st</sup> to 60 <sup>th</sup> day of noncompliance, and \$2,000 per day thereafter.
2.	For failure remove engines as specified in Paragraph 13.	For each unit: \$500 per day for the first 30 days of noncompliance, \$1,000 per day from the 31 <sup>st</sup> to 60 <sup>th</sup> day of noncompliance, and \$1,500 per day thereafter.
3.	For failure to conduct tests on the RICE emission controls as required by Paragraph 23(c).	For each unit: \$500 per day for the first 30 days of noncompliance, \$1,000 per day from the 31 <sup>st</sup> to 60 <sup>th</sup> day of noncompliance, and \$1,500 per day thereafter.
4.	For failure to meet the emissions limits in Paragraph 23(a).	For each unit: \$500 per day for the first 30 days of noncompliance, \$1,000 per day from the 31 <sup>st</sup> to 60 <sup>th</sup> day of noncompliance, and \$1,500 per day thereafter.
5.	For failure to meet the requirements of Paragraph 23(b).	For each unit: \$500 per day for the first 30 days of noncompliance, \$1,000 per day from the 31 <sup>st</sup> to 60 <sup>th</sup> day of noncompliance, and \$1,500 per day thereafter.

## d. Pneumatic Controllers

	Violation	Stipulated Penalty
1.	For failure to convert natural gas powered	For each unit: \$200 per day for the first
	pneumatic instrument control systems to	30 days of noncompliance, \$500 per day from
	compressed instrument air systems as	the 31 <sup>st</sup> to 60 <sup>th</sup> day of noncompliance, and
	specified in Paragraph 26.	\$1,000 per day thereafter.

## e. General Recordkeeping/Reporting Requirements

	Violation	Stipulated Penalty
1.	For failure to maintain records or submit	For each violation: \$200 per day for the first
	reports as required by Paragraphs 14, 17, 18, 20, 21, 22, 23(c)(3), and 28.	30 days of noncompliance, \$500 per day from the 31 <sup>st</sup> to 60 <sup>th</sup> day of noncompliance, and
	18, 20, 21, 22, 23(C)(5), and 28.	\$1,000 per day thereafter.

37. Except as provided in Paragraph 40 and its subparts below, stipulated penalties under this Section shall begin to accrue on the Day after performance is due or on the Day a violation occurs, whichever is applicable, and shall continue to accrue until performance is satisfactorily completed or until the violation ceases. Stipulated penalties shall accrue simultaneously for separate violations of this Consent Decree.

38. QEPFS shall pay stipulated penalties upon written demand by the United States no later than sixty (60) days after QEPFS receives such demand. A demand for the payment of stipulated penalties shall identify the particular violation(s) to which the stipulated penalty relates, the stipulated penalty amount that the United States is demanding for each violation (as best can be estimated), the calculation method underlying the demand, and the grounds upon which the demand is based.

39. The United States may in the unreviewable exercise of its discretion, reduce or waive stipulated penalties otherwise due it under this Consent Decree.

40. Stipulated penalties shall not accrue and need not be paid during any Dispute Resolution, as provided below:

a. In the event of a dispute over stipulated penalties, stipulated penalties will not accrue commencing upon the date that QEPFS notifies the United States of a dispute in accordance with Paragraph 55 if QEPFS has placed the disputed amount demanded in a commercial escrow account with interest.

b. If the dispute is resolved by agreement or by a decision of the United States that is not appealed to the Court, Defendant shall pay the escrowed amount of penalties or other amount determined to be owing, together with interest, to the United States within 30 Days of the Effective Date of the agreement or the receipt of EPAss decision or order.

c. If the dispute is appealed to the Court and thereafter is resolved in QEPFS' favor, the escrowed amount plus accrued interest will be returned to QEPFS; otherwise, EPA will be entitled to the amount that was determined to be due by the Court, plus the interest that has accrued in the escrow account on such amount.

41. Defendant shall pay stipulated penalties owing to the United States in the manner set forth and with the confirmation notices required by Paragraph 8 unless the United States provides alternate payment instructions, except that the transmittal letter shall state that the payment is for stipulated penalties and shall state for which violation(s) the penalties are being paid.

42. If Defendant fails to pay stipulated penalties according to the terms of this Consent Decree, Defendant shall be liable for interest on such penalties, as provided for in 28 U.S.C. § 1961, accruing as of the date payment became due. Nothing in this Paragraph shall be construed to limit the United States from seeking any remedy otherwise provided by law for Defendant's failure to pay any stipulated penalties.

43. Subject to the provisions of Section XII of this Consent Decree (Effect of Settlement/Reservation of Rights), the stipulated penalties provided for in this Consent Decree shall be in addition to any other rights, remedies, or sanctions available to the United States for Defendant's violation of this Consent Decree or applicable law. Where a violation of this Consent Decree is also a violation of the Clean Air Act, 43 U.S.C. § 7401, et seq., or its implementing regulations, Plaintiff may seek stipulated penalties or statutory penalties for the violation, but not both.

## IX. FORCE MAJEURE

44. If any event occurs or fails to occur which causes a delay or impediment to performance in complying with any provision of this Consent Decree that QEPFS believes to be a force majeure, QEPFS shall notify the EPA official specified in Section XIII (Notice) of its force majeure claim in writing as soon as practicable, but in any event within twenty (20) business days of the date when QEPFS first knew of the event or should have known of the event by the exercise of due diligence. In this notice, QEPFS shall specifically reference this Paragraph and describe the anticipated length of time the delay may persist, the cause or causes of the delay, and the measures taken or to be taken by QEPFS to prevent or minimize the delay and the schedule by which those measures will be implemented. QEPFS shall take all reasonable steps to avoid or minimize such delays. The notice required by this part will be effective upon the mailing of the same by overnight mail or by certified mail, return receipt requested, to EPA as specified in Section XIII (Notices).

45. Failure by QEPFS to substantially comply with the notice requirements of Paragraph 44 shall render this Section IX (Force Majeure) voidable by the United States as to the

specific event for which QEPES has failed to comply with such notice requirement, and, if voided, is of no effect as to the particular event involved.

46. The United States shall notify QEPFS in writing regarding its claim of a delay or impediment to performance within forty-five (45) days of receipt of the force majeure notice provided under Paragraph 44.

47. If the United States agrees that the delay or impediment to performance has been or shall be caused by circumstances beyond the control of QEPFS including any entity controlled by QEPFS and that QEPFS could not have prevented the delay by the exercise of due diligence, the United States and QEPFS shall stipulate in writing to an extension of the required deadline(s) for all requirement(s) affected by the delay by a period equivalent to the delay actually caused by such circumstances. Such stipulation shall be treated as a non-material change to the Consent Decree pursuant to Paragraph 77, and therefore shall not need to be approved by the Court. QEPFS will not be liable for stipulated penalties for the period of any such delay.

48. If the United States does not accept QEPFS's claim of a delay or impediment to performance, QEPFS must submit the matter to the Court for resolution to avoid payment of stipulated penalties, by filing a petition for determination with the Court by no later than 60 Days after receipt of the notice in Paragraph 46. Once QEPFS has submitted this matter to the Court, the United States shall have 60 Days to file its response to the petition. If the Court determines that the delay or impediment to performance has been or shall be caused by circumstances beyond the control of QEPFS including any entity controlled by QEPFS and that the delay could not have been prevented by QEPFS by the exercise of due diligence, QEPFS shall be excused as to that event(s) and delay (including stipulated penalties), for a period of time equivalent to the delay caused by such circumstances.

49. QEPFS shall bear the burden of proving that any delay of any requirement(s) of this Consent Decree was caused by or will be caused by circumstances beyond its/their control, including any entity controlled by it, and that it could not have prevented the delay by the exercise of due diligence. QEPFS shall also bear the burden of proving the duration and extent of any delay(s) attributable to such circumstances. An extension of one compliance date based on a particular event may, but will not necessarily, result in an extension of a subsequent compliance date or dates.

50. Unanticipated or increased costs or expenses associated with the performance of QEPFS's obligations under this Consent Decree shall not constitute circumstances beyond its control or serve as the basis for an extension of time under this Section IX.

51. Notwithstanding any other provision of this Consent Decree, the Parties do not intend that QEPFS's serving of a force majeure notice or the Parties' inability to reach agreement shall cause this Court to draw any inferences nor establish any presumptions adverse to any Party.

52. As part of the resolution of any matter submitted to this Court under this Section IX, the United States and QEPFS by agreement, or the Court, by order, may in appropriate circumstances extend or modify the schedule for completion of work under the Consent Decree to account for the delay in the work that occurred as a result of any delay or impediment to performance agreed to by the United States or approved by this Court. QEPFS shall be liable for stipulated penalties for their failure thereafter to complete the work in accordance with the extended or modified schedule.

### X. DISPUTE RESOLUTION

53. This Court shall retain jurisdiction of this matter for the purposes of implementing and enforcing the terms and conditions of the Consent Decree and for the purpose of adjudicating all disputes that may arise under the provisions of the Consent Decree, until the Consent Decree terminates in accordance with Section XVII of this Consent Decree (Termination).

54. The dispute resolution procedure set forth in this Section X will be available to resolve any and all disputes arising under this Consent Decree, provided that the Party making such application has made a good faith attempt to resolve the matter with the other Parties.

55. The dispute resolution procedure required herein will be invoked upon the giving of written notice by one of the Parties to this Consent Decree to another advising the other appropriate Party(ies) of a dispute pursuant to this Section X. The notice will describe the nature of the dispute, and will state the noticing Party's position with regard to such dispute. The Party or Parties receiving such notice will acknowledge receipt of the notice and the Parties will expeditiously schedule a meeting to discuss the dispute informally.

56. Disputes submitted to dispute resolution will, in the first instance, be the subject of informal negotiations between the Parties. Such period of informal negotiations will not extend beyond 90 Days from the date of the first meeting between representatives of the Parties, unless the Parties agree in writing that this period should be extended. Failure by the Parties to extend the informal negotiation period in writing will not terminate the informal negotiation period provided that the Parties are continuing to negotiate in good faith. Informal negotiations may include the exchange of written summaries of the Parties' positions.

57. In the event that the Parties are unable to reach agreement during such informal negotiation period as provided in Paragraph 56, the United States shall provide QEPFS, within 90 Days after the end of the informal negotiation period, with a written summary of its position regarding the dispute. QEPFS shall have 30 Days to respond in writing. The position advanced by the United States shall be considered binding unless, within 45 Days of QEPFS's receipt of the written summary of the United States' position, QEPFS files with the Court a petition which describes the nature of the dispute. The United States shall respond to the petition within 45 Days of filing. In resolving the dispute between the Parties, the position of the United States shall be upheld unless QEPFS demonstrates by a preponderance of the evidence in the administrative record that the United States' position was incorrect.

58. Where the nature of the dispute is such that a more timely resolution of the issue is required, a Party may seek shorter time periods than those set forth in this Section X.

59. The Parties do not intend that the invocation of this Section X by a Party shall cause the Court to draw any inferences or establish any presumptions adverse to either Party.

60. As part of the resolution of any dispute submitted to dispute resolution, the Parties, by agreement, or this Court, by order, may, in appropriate circumstances, extend or modify the schedule for completion of work under this Consent Decree to account for the delay in the work that occurred as a result of dispute resolution. QEPFS shall be liable for stipulated penalties for its failure thereafter to complete the work in accordance with the extended or modified schedule

# XI. INFORMATION COLLECTION AND RETENTION

61. The United States and its representatives, including attorneys, contractors, and consultants, shall have the right of entry into any Facility covered by this Consent Decree, at all reasonable times, upon presentation of credentials, to:

a. monitor the progress of activities required under this Consent Decree;

b. verify any data or information submitted to the United States in accordance with the terms of this Consent Decree;

c. obtain samples and, upon request, splits of any samples taken by Defendant or its representatives, contractors, or consultants;

d. obtain documentary evidence, including photographs, video, and similar data; and

e. assess Defendant's compliance with this Consent Decree.

62. Upon request, Defendant shall provide EPA or its authorized representatives splits of any samples taken by Defendant. Upon request, EPA shall provide Defendant splits of any samples taken by EPA.

63. Until five years after the termination of this Consent Decree, Defendant shall retain, and shall instruct its contractors and agents to preserve, all non-identical copies of all documents, records, or other information (including documents, records, or other information in electronic form) in its or its contractors<sup>2</sup> or agents<sup>2</sup> possession or control, or that come into its or its contractors<sup>2</sup> or agents<sup>2</sup> possession or control, or that come into its or its contractors<sup>2</sup> or agents<sup>2</sup> possession or control, and that relate in any manner to Defendant<sup>2</sup>s performance of its obligations under this Consent Decree. This information-retention requirement shall apply regardless of any contrary corporate or institutional policies or procedures. At any time during this information-retention period, upon request by the United

States, Defendant shall provide copies of any documents, records, or other information required to be maintained under this Paragraph.

64. At the conclusion of the information-retention period provided in the preceding Paragraph, Defendant shall notify the United States at least 90 Days prior to the destruction of any documents, records, or other information subject to the requirements of the preceding Paragraph and, upon request by the United States, Defendant shall deliver any such documents, records, or other information to EPA. Defendant may assert that certain documents, records, or other information is privileged under the attorney-client privilege or any other privilege recognized by federal law. If Defendant asserts such a privilege, it shall provide the following: (1) the title of the document, record, or information; (2) the date of the document, record, or information; (3) the name and title of each author of the document, record, or information; (4) the name and title of each addressee and recipient; (5) a description of the subject of the document, record, or information; and (6) the privilege asserted by Defendant. However, no documents, records, or other information required under this Consent Decree shall be withheld on grounds of privilege.

65. Defendant may also assert that information required to be provided under this Section is protected as Confidential Business Information ("CBI") under 40 C.F.R. Part 2. As to any information that Defendant seeks to protect as CBI, Defendant shall follow the procedures set forth in 40 C.F.R. Part 2.

66. This Consent Decree in no way limits or affects any right of entry and inspection, or any right to obtain information, held by the United States pursuant to applicable federal laws, regulations, or permits, nor does it limit or affect any rights, duties, or obligations of Defendant

regarding entry and inspection or to maintain documents, records, or other information imposed by applicable federal or state laws, regulations, or permits.

#### XII. EFFECT OF SETTLEMENT/RESERVATION OF RIGHTS

67. This Consent Decree resolves:

a. The civil and administrative claims of the United States for the violations alleged in the Complaint filed in this action through the date of lodging and all civil and administrative liability of Defendant for violations at the Facilities through the date of lodging of the following statutory or regulatory provisions: (a) PSD requirements at Part C of Subchapter I of the Act, 42 U.S.C. § 7475, and the regulations promulgated thereunder at 40 C.F.R. § 52.21, insofar as they result from initial construction or modification of the Facilities that resulted in a significant net increase of NOx, VOC and/or CO, and commenced and ceased before the Date of Lodging of the Consent Decree; (b) National Emissions Standards for Hazardous Air Pollutants, 40 C.F.R. Part 63, Subparts A, HH, and ZZZZ; (c) Title V of the Clean Air Act, 42 U.S.C. § 7661; and (d) Section 114 of the Clean Air Act, 42 U.S.C. § 7414.

b. The civil claims of Plaintiff-Intervenors for the violations alleged in the Complaint in Intervention filed in this action through the date of lodging and all civil liability of Defendant to Plaintiff-Intervenors for violations at the Facilities through the date of lodging of the following statutory or regulatory provisions: (a) PSD requirements at Part C of Subchapter I of the Act, 42 U.S.C. § 7475, and the regulations promulgated thereunder at 40 C.F.R. § 52.21, insofar as they result from initial construction or modification of the Facilities that resulted in a significant net increase of NOx, VOC and/or CO, and commenced and ceased before the Date of Lodging of the Consent Decree; (b) National Emissions Standards for Hazardous Air Pollutants,

40 C.F.R. Part 63, Subparts A, HH, and ZZZZ; (c) Title V of the Clean Air Act, 42 U.S.C. § 7661; and (d) Section 114 of the Clean Air Act, 42 U.S.C. § 7414.

c. All claims of the Tribe arising out of the limited grant of intervention under the Court's January 13, 2010 Order (Docket No. 142).

68. The United States reserves all legal and equitable remedies available to enforce the provisions of this Consent Decree, except as expressly stated in Paragraph 67, above. This Consent Decree shall not be construed to limit the rights of the United States to obtain penalties or injunctive relief under the Act or implementing regulations, or under other federal laws, regulations, or permit conditions, except as expressly specified in Paragraph 67. The United States further reserves all legal and equitable remedies to address any imminent and substantial endangerment to the public health or welfare or the environment arising at, or posed by, Defendant's Facilities.

69. In any subsequent administrative or judicial proceeding initiated by the United States for injunctive relief, civil penalties, other appropriate relief relating to the Facilities or Defendant<sup>\*</sup>s violations, Defendant shall not assert, and may not maintain, any defense or claim based upon the principles of waiver, res judicata, collateral estoppel, issue preclusion, claim preclusion, claim-splitting, or other defenses based upon any contention that the claims raised by the United States in the subsequent proceeding were or should have been brought in the instant case, except with respect to claims that have been specifically resolved pursuant to Paragraph 67 of this Section.

70. This Consent Decree is not a permit, or a modification of any permit, under any federal, State, or local laws or regulations. Defendant is responsible for achieving and maintaining complete compliance with all applicable federal, State, and local laws, regulations.

and permits; and Defendant<sup>±</sup>s compliance with this Consent Decree shall be no defense to any action commenced pursuant to any such laws, regulations, or permits, except as set forth herein. The United States does not, by its consent to the entry of this Consent Decree, warrant or aver in any manner that Defendant<sup>±</sup>s compliance with any aspect of this Consent Decree will result in compliance with provisions of the Act, 42 U.S.C. § 7401, et seq., or with any other provisions of federal, State, or local laws, regulations, or permits. Provided, however, that no provision of this Consent Decree requires QEPFS to apply for or obtain a permit under the Federal Minor Source Review Program in Indian Country, 40 C.F.R. §§ 49.151-161; any such requirement shall be governed solely by 40 C.F.R. §§ 49.151-161.

71. This Consent Decree shall not be construed to create rights in, or grant any cause of action to, any third party not party to this Consent Decree.

# XIII. NOTICES

72. Unless otherwise specified herein, whenever notifications, submissions, or communications are required by this Consent Decree, they shall be made in writing and addressed as follows:

Notification to the United States:

Chief, Environmental Enforcement Section Environment and Natural Resources Division U.S. Department of Justice Box 7611 Ben Franklin Station Washington, D.C. 20044-7611 Re: DOJ No. 90-5-2-1-08432

and

Director, Air & Toxics Technical Enforcement Program Office of Enforcement, Compliance and Environmental Justice U.S. Environmental Protection Agency; Region 8 1595 Wynkoop Street Denver, CO 80202

#### Notification to EPA:

Director, Air & Toxics Technical Enforcement Program Office of Enforcement, Compliance and Environmental Justice U.S. Environmental Protection Agency Region 8 1595 Wynkoop Street Denver, CO 80202

Notification to Defendant:

Perry H. Richards Senior Vice-President, QEP Resources Inc. 1050 17<sup>th</sup> Street; Suite 500 Denver, CO 80265

# Notification to the Plaintiff-Intervenors:

Secretary, Business Committee Ute Indian Tribe of the Uintah and Ouray Reservation PO Box 190 Fort Duchesne, UT 84026

Plaintiff-Intervenors agree that notice to the Secretary of the Business Committee of the Ute

Indian Tribe of the Uintah and Ouray Reservation shall constitute notice to each Plaintiff-

Intervenor.

73. Any Party may, by written notice to the other Parties, change its designated notice

recipient or notice address provided above.

74. Notices submitted pursuant to this Section shall be deemed submitted upon

mailing, unless otherwise provided in this Consent Decree or by mutual agreement of the Parties in writing.

# XIV. EFFECTIVE DATE

75. The Effective Date of this Consent Decree shall be the date upon which this Consent Decree is entered by the Court or a motion to enter the Consent Decree is granted, whichever occurs first, as recorded on the Court=s docket.

# XV. RETENTION OF JURISDICTION

76. The Court shall retain jurisdiction over this case until termination of this Consent Decree, for the purpose of resolving disputes arising under this Decree or entering orders modifying this Decree, pursuant to Sections X and XVI, or effectuating or enforcing compliance with the terms of this Decree. The Plaintiff-Intervenors and the Tribe, by virtue of their participation in this litigation and this Consent Decree, have expressly and unequivocally waived sovereign immunity from suit in the federal district court of Utah for the limited purpose of effectuating and enforcing this Consent Decree, including Paragraph 27. The Plaintiff-Intervenors and the Tribe agree that the entity created pursuant to Paragraph 27 (the Tribal Clean Air Trust Fund) shall be considered and deemed an arm of the Tribe and as such also has waived any and all sovereign immunity from suit in the federal district court of Utah for the limited purpose of effectuating and enforcing this Consent Decree, including Paragraph 27.

# XVI. MODIFICATION

77. This Consent Decree contains the entire agreement of the Parties and shall not be modified by any prior oral or written agreement, representation, or understanding. With the exception of Paragraph 27, which may be modified only by the written agreement of all the Parties, the other terms of this Consent Decree may be modified by a subsequent written agreement signed only by the United States and QEPFS. The United States may consult with the Ute Indian Tribe of the Uintah and Ouray Reservation regarding any modification to this

Consent Decree. Where a modification constitutes a material change to this Decree, it shall be effective only upon approval by the Court.

78. Any disputes concerning modification of this Decree shall be resolved pursuant to Section X of this Decree (Dispute Resolution), provided, however, that, instead of the burden of proof provided by Paragraph 57, the Party seeking the modification bears the burden of demonstrating that it is entitled to the requested modification in accordance with Federal Rule of Civil Procedure 60(b).

# XVII. TERMINATION

79. If QEPFS has completed the requirements of Section V (Compliance Requirements) of this Decree, has thereafter maintained substantial compliance with this Consent Decree for a period of 18 months and has paid the civil penalty and any accrued stipulated penalties as required by this Consent Decree, Defendant may serve upon the United States a Notice of Termination, stating that Defendant has satisfied those requirements, together with all necessary supporting documentation. The Notice of Termination shall not include Paragraphs 17, 19, 20, and 23, which shall survive this Consent Decree.

80. Unless the Plaintiff objects in writing with specific reasons within sixty (60) days of receipt of the certification, the Court shall order that this Consent Decree be terminated on QEPFS's motion. If the Plaintiff objects to QEPFS's certification, then the matter shall be submitted to the Court for resolution under Section X (Dispute Resolution) of this Consent Decree.

81. Termination of this Consent Decree will end the Parties' obligations under this Decree, including obligations under Section V (Compliance Requirements) and Section VIII (Stipulated Penalties), with the exception of the obligations referenced in Paragraphs 17, 19, 20,

and 23, which shall expressly survive termination of this Decree. The obligations referenced in Paragraphs 17, 19, 20, and 23 shall continue for each Facility until such time as QEPFS ceases operation of the Facility; obtains a federal minor source preconstruction permits for the Facility that include emissions limits for the units and pollutants covered in Paragraphs 17, 19, 20, and 23; obtains a PSD permit for the Facility that include emissions limits for the units and pollutants covered in Paragraphs 17, 19, 20, and 23; or some combination thereof for each Facility.

82. Upon Termination of this Consent Decree pursuant to Paragraph 80, if Title V permits have been issued containing the applicable requirements contained in Paragraphs 17, 19, 20, and 23, Plaintiff shall enforce such applicable requirements through the Title V permits and the Act.

83. Upon Termination of this Consent Decree pursuant to Paragraph 80, if Title V permits have not been issued or have been issued and expired:

a. For violations of "applicable requirements" contained in Section V other than Paragraphs 17, 19, 20, and 23, Plaintiff shall enforce such "applicable requirements" through Section 113 of the CAA, and not through this Consent Decree.

b. For violations of "applicable requirements" contained in Paragraphs 17,
19, 20, and 23, Plaintiff shall enforce such "applicable requirements" through this Consent
Decree pursuant to motion to the Court.

# XVIII. COSTS

84. The Parties shall bear their own costs in this action, including attorneys' fees.

#### XIX. PUBLIC PARTICIPATION

85. This Consent Decree shall be lodged with the Court for a period of not less than30 Days for public notice and comment in accordance with 28 C.F.R. § 50.7. The United States

reserves the right to withdraw or withhold its consent if the comments regarding the Consent Decree disclose facts or considerations indicating that the Consent Decree is inappropriate, improper, or inadequate. Defendant consents to entry of this Consent Decree without further notice and agrees not to withdraw from or oppose entry of this Consent Decree by the Court or to challenge any provision of the Decree, unless the United States has notified Defendant in writing that it no longer supports entry of the Decree.

# XX. SIGNATORIES/SERVICE

86. Each undersigned representative of Defendant and the Assistant Attorney General for the Environment and Natural Resources Division of the Department of Justice certifies that he or she is fully authorized to enter into the terms and conditions of this Consent Decree and to execute and legally bind the Party he or she represents to this document.

87. This Consent Decree may be signed in counterparts, and its validity shall not be challenged on that basis. Each Party agrees to accept service of process by mail with respect to all matters arising under or relating to this Consent Decree and to waive the formal service requirements set forth in Rules 4 and 5 of the Federal Rules of Civil Procedure and any applicable Local Rules of this Court including, but not limited to, service of a summons.

### XXI. <u>INTEGRATION</u>

88. This Consent Decree constitutes the final, complete, and exclusive agreement and understanding among the Parties with respect to the settlement embodied in the Decree and supercedes all prior agreements and understandings, whether oral or written. No other document, nor any representation, inducement, agreement, understanding, or promise, constitutes any part of this Decree or the settlement it represents, nor shall it be used in construing the terms of this Decree.

# XXII. FINAL JUDGMENT

89. Upon approval and entry of this Consent Decree by the Court, this Consent Decree shall constitute a final judgment of the Court as to the United States, the Tribe, Plaintiff-Intervenors, and Defendant.

Dated and entered this 3<sup>rd</sup> day of July, 2012

# EXHIBIT 3

U.S. EPA Region 8, Notice of Violation Pursuant to 42 U.S.C. §7413(a) to MPLX LP (Nov. 22, 2019).

GRH /



# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 8 1595 Wynkoop Street Denver, CO 80202-1129 Phone 800-227-8917 www.epa.gov/region08

Ref: 8ENF-AT

NOV 2 2 2019

# <u>CERTIFIED MAIL NO.</u> <u>RETURN RECEIPT REQUESTED</u>

Mr. Gary R. Heminger, CEO, Chairman MPLX LP 200 E. Hardin St. Findlay, OH 45840-4963

The Corporation Trust Company, Registered Agent for MPLX LP Corporation Trust Center 1209 Orange St. Wilmington, DE 19801

Re: Notice of Violation Pursuant to 42 U.S.C. § 7413(a) to MPLX LP

Dear Mr. Heminger:

The U.S. Environmental Protection Agency is issuing the enclosed Notice of Violation (NOV) to MPLX LP (MPLX) for alleged violations arising under the Clean Air Act (the Act) Section 112(d), 42 U.S.C. § 7412(d), and its implementing regulations for the National Emission Standards for Hazardous Air Pollutants, at 40 C.F.R. Part 63. Also, for violations arising under Section 111 of the Act, 42 U.S.C. § 7111, and its implementing regulations for New Source Performance Standards at 40 C.F.R. Part 60. Finally, for alleged violations arising under Section 502(b) of the Act, 42 U.S.C. §§ 7661-7661f, and its implementing regulations for Title V Permits at 40 C.F.R. Part 71. Violations of the Act and the regulations are alleged with specificity in the NOV at the following MPLX oil and gas production facilities on the Uintah and Ouray Reservation in Utah: Chapita Compressor Station, Coyote Wash Compressor Station, Island Compressor Station, and Wonsits Valley Compressor Station. These facilities were formerly owned and operated by Andeavor Logistics LP.

Section 113(a) of the Clean Air Act provides that whenever, based on any information available to the Administrator of the EPA, the Administrator finds that any person has violated, or is in violation of an applicable implementation plan, the Administrator may issue an administrative compliance order, issue an administrative penalty order, or bring a civil judicial action.

DEC 0 2 2019

Gary R. Heminger

DEC - 3 2019 Sue Gagle This NOV provides MPLX with an opportunity to schedule a meeting to discuss these alleged violations. Please have counsel contact Lauren Hammond, Sr. Assistant Regional Counsel, at (303) 312-7081 or Hammond.lauren@epa.gov, within 30 days of receipt of this NOV if MPLX would like to schedule a meeting.

Sužanne J. Bohan, Director Enforcement and Compliance Assurance Division

 cc: The Honorable Luke Duncan, Chairman, Ute Indian Tribe Tony Small, Ute Indian Tribe Vice-Chairman Shaun Chapoose, Ute Indian Tribe Councilman Edred Secakuku, Ute Indian Tribe Councilman Ronald Wopsock, Ute Indian Tribe Councilman Sal Wopsock, Ute Indian Tribe Councilman Bruce Pargeets, Director, Ute Indian Tribe Energy & Minerals Department Mike Natchees, Acting Air Coordinator, Ute Tribe Energy & Minerals Department Marie Kaufusi, Air Emissions Specialist, Ute Indian Tribe Energy & Minerals Department Jeremy Patterson, Tribal Attorney, Fredericks Peebles & Morgan LLP cc addresses: The Honorable Luke Duncan Chairman, Ute Indian Tribe PO Box 190 Ft. Duchesne, UT 84026-0190 (also email to: luked@utetribe.com)

Tony Small, Ute Indian Tribe Vice-Chairman (tonys@utetribe.com) Shaun Chapoose, Ute Indian Tribe Councilman (shaunc@utetribe.com) Edred Secakuku, Ute Indian Tribe Councilman (edreds@utetribe.com) Ronald Wopsock, Ute Indian Tribe Councilman (ronaldw@utetribe.com) Sal Wopsock, Ute Indian Tribe Councilman (salw@utetribe.com) Bruce Pargeets, Director, Ute Indian Tribe Energy & Minerals Department (bpargeets@utetribe.com) Mike Natchees, Acting Air Coordinator, Ute Tribe Energy & Minerals Department (miken@utetribe.com) Marie Kaufusi, Air Emissions Specialist, Ute Indian Tribe Energy & Minerals Department (mariek@utetribe.com) Jeremy Patterson, Tribal Attorney, Fredericks Peebles & Morgan LLP (jpatterson@ndnlaw.com

ecc: Sara Loiacono, EPA Lauren Hammond, EPA Jason Deardorff, EPA

# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 8 2019 NOV 22 AM 9:58

IN THE MATTER OF:

MPLX LP (formerly Andeavor Logistics) )200 East Hardin Street)Findlay, Ohio 458404963

FILED NOTICE OF VIOLATION VIII HEARING OLERY

Docket No. CAA-08-2020-0002

Proceedings Pursuant to Section 113(a)(1) of the Clean Air Act, 42 U.S.C. § 7413(a)(1)

The United States Environmental Protection Agency (EPA) is issuing this Notice Of Violation (NOV) pursuant to Section 113(a)(1) of the Clean Air Act (the Act), 42 U.S.C. § 7413(a)(1), to notify MPLX LP (MPLX), formerly Andeavor Logistics LP (Andeavor), that MPLX has violated and is in violation of the Act at the Chapita Compressor Station (Chapita C.S.), Coyote Wash Compressor Station (Coyote Wash C.S.), Island Compressor Station (Island C.S.), and Wonsits Valley Compressor Station (Wonsits Valley C.S.), which are part of MPLX's oil and gas production operations on the Uintah and Ouray Reservation in Utah.

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# I. STATUTORY AND REGULATORY BACKGROUND

1. For the promotion of the public health, welfare and productive capacity of the U.S. population, the Act's purpose is to protect and enhance the quality of the nation's air. 42 U.S.C. § 7401(b)(1).

# National Emission Standards for Hazardous Air Pollutants

2. Section 112(d)(1) of the Act, 42 U.S.C. § 7412(d)(1), requires EPA to promulgate emission standards for sources of hazardous air pollutants (HAPs), including oil and natural gas production facilities, to achieve the maximum emission reduction of HAPs possible for each source category.

3. The HAPs, listed at Section 112(b)(1) of the Act, 42 U.S.C. § 7412(b)(1), emitted by oil and gas production facilities include, but are not limited to, benzene, ethyl benzene, toluene, and xylenes, collectively referred to as BTEX. Each of the HAPs emitted from oil and natural gas production facilities can cause adverse health effects.

4. Pursuant to Section 112(d) of the Act, 42 U.S.C. § 7412(d), EPA promulgated the National Emission Standards for Hazardous Air Pollutants (NESHAP) General Provisions, at 40 C.F.R. Part 63, Subpart A, which contain general provisions that apply as specified in the relevant NESHAP, 40 C.F.R. § 63.1(a)(4)(i).

5. Pursuant to Section 112(d) of the Act, 42 U.S.C. § 7412(d), on June 17, 1999, EPA promulgated the NESHAP for Oil and Natural Gas Production Facilities at 40 C.F.R. Part 63, Subpart HH (MACT HH). *See* 64 Fed. Reg. 32628.

6. Pursuant to Section 112(d) of the Act, 42 U.S.C. § 7412(d), on June 15, 2004, EPA promulgated the NESHAP for Stationary Reciprocating Internal Combustion Engines (RICE) at 40 C.F.R. Part 63, Subpart ZZZZ (MACT ZZZZ). *See* 69 Fed. Reg. 33506.

7. The NESHAP General Provisions that apply to MACT ZZZZ are specified in 40 C.F.R. Part 63, Subpart ZZZZ, Table 8, and include the performance test reporting requirements in 40 C.F.R. § 63.7(g).

8. Pursuant to 40 C.F.R. §§ 63.761, 63.6675 and 63.2, a major source of HAP emissions means any facility (as defined at 40 C.F.R. §§ 63.761 and 63.1271), that has the potential to emit considering controls, in the aggregate, 10 tons per year (tpy) or more of any single HAP or 25 tpy or more of any combination of HAP. For production field facilities (facilities located prior to the point of custody transfer), only HAP emissions from glycol dehydration units and storage vessels shall be aggregated for a major source determination.

# New Source Performance Standards

9. Section 111 of the Act, 42 U.S.C. § 7411, requires EPA to promulgate performance standards for new stationary sources, including stationary spark ignition (SI) internal combustion engines (ICE), to achieve the maximum emission reductions possible for each source category.

10. Pursuant to Section 111 of the Act, 42 U.S.C. § 7411, EPA promulgated the NSPS General Provisions, at 40 C.F.R. Part 60, Subpart A, which contain general provisions that apply to the owner or operator of any stationary source that contains an affected facility, the construction or modification of which is commenced after the date of publication of any NSPS standard applicable to the facility. 40 C.F.R. § 60.1(a).

11. Pursuant to Section 111 of the Act, 42 U.S.C. § 7411, on January 18, 2008, EPA promulgated the NSPS for Stationary SI ICE at 40 C.F.R. Part 60, Subpart JJJJ (NSPS JJJJ). *See* 73 Fed. Reg. 3591.

12. NSPS JJJJ requires owners and operators of new stationary SI ICE to meet, among other requirements, certain volatile organic compound (VOC) emissions standards and testing and reporting requirements.

13. The NSPS General Provisions that apply to NSPS JJJJ are specified in 40 C.F.R. Part 60, Subpart JJJJ, Table 3, and include, among other requirements, the performance test requirements in 40 C.F.R. § 60.8 and the standards and maintenance compliance requirements in 40 C.F.R. § 60.11.

### Title V

14. Title V of the Act, 42 U.S.C. §§ 7661-7661f, establishes an operating permit program for sources of air pollution.

15. In accordance with Section 502(b) of the Act, 42 U.S.C. § 7661a(b), EPA promulgated regulations implementing Title V of the Act. *See* 61 Fed. Reg. 34228 (July 1, 1996). Those regulations for federal air quality operating permit programs are codified at 40 C.F.R. Part 71.

16. Section 502(a) of the Act, 42 U.S.C. § 7661a(a) and 40 C.F.R. § 71.4(b) require that the Administrator administer and enforce an operating permit program in Indian country, as defined in 40 C.F.R. § 71.2. The effective date of the part 71 program in Indian country was March 22, 1999.

17. Section 502(a) of the Act, 42 U.S.C. § 7661a(a), and 40 C.F.R. § 71.7(b) provide that, after the effective date of any permit program approved or promulgated under Title V of the Act, no source subject to Title V may operate except in compliance with a Title V operating permit (Title V permit).

18. On September 10, 2013, EPA issued a Title V operating permit (V-UO-000012-2006.00) to QEP Field Services Company (QEPFS) (a predecessor of Andeavor) for the Chapita C.S. The permit became effective on October 10, 2013.

19. On March 19, 2019, EPA issued a renewal Title V operating permit (V-UO-000012-2018.00) to Andeavor for the Chapita C.S. The permit became effective on April 18, 2019.

20. On December 2, 2013, EPA issued a Title V operating permit (V-UO-000015-2006.00) to QEPFS for the Coyote Wash C.S. The permit became effective on January 1, 2014.

21. On December 2, 2013, EPA issued a Title V operating permit (V-UO-000011-2006.00) to QEPFS for the Island C.S. The permit became effective on January 1, 2014.

22. On September 10, 2013, EPA issued a Title V operating permit (V-UO-000005-2000.00) to QEPFS for the Wonsits Valley C.S. The permit became effective on October 10, 2013.

#### II. FACTUAL BACKGROUND & FINDINGS OF VIOLATION

#### Factual Background

23. Questar Gas Management Company, a predecessor of Andeavor, entered into a consent decree with the United States (Case No. 2:08-CV-00167-TS-PMW) (hereinafter referred to as "the federal consent decree") on July 3, 2012, to resolve alleged violations of several MACT HH and MACT ZZZZ requirements at the Coyote Wash, Chapita, Island, River Bend, and Wonsits Valley Compressor Stations.

24. The federal consent decree was terminated on June 4, 2014, but several requirements from the decree survived termination and are memorialized in Title V permits for facilities that were subject to the decree and some of which are at issue in this NOV.

25. On August 16, 2017, EPA conducted a full compliance evaluation of the Wonsits Valley C.S. (hereinafter referred to as "2017 Wonsits Valley compliance evaluation").

26. On July 31, 2018, EPA conducted a full compliance evaluation of the Island C.S (hereinafter referred to as "2018 Island compliance evaluation").

27. On March 12, 2019, EPA conducted a full compliance evaluation of the Coyote Wash C.S (hereinafter referred to as "2019 Coyote Wash compliance evaluation").

28. On March 12, 2019, EPA conducted a full compliance evaluation of the Wonsits Valley C.S. (hereinafter referred to as "2019 Wonsits Valley compliance evaluation").

29. At all times relevant to this NOV, Andeavor owned and operated several compressor stations on the Uintah and Ouray Indian Reservation in Utah. Among those facilities are the Chapita C.S., Coyote Wash C.S., Island C.S., and Wonsits Valley C.S.

30. On July 30, 2019, MPLX merged with Andeavor.

31. MPLX is a publicly-traded company midstream oil and gas company. MPLX is incorporated in Delaware and maintains its principal executive offices in Findlay, Ohio.

32. MPLX is a "person" as defined by Section 302(e) of the Act, 42 U.S.C. § 7602(e).

# <u>Findings of Violation—MACT HH: Failure to Comply with Regulations for Enclosed</u> Combustors at Island C.S. and Wonsits Valley C.S.

33. At the Island C.S., Andeavor operated and MPLX operates, a 15 million standard cubic feet per day (MMscfd) glycol dehydrator (D-1). At all times relevant to this NOV, the actual annual average benzene emissions from the glycol dehydrator (D-1) at the Island C.S were equal to or greater than 0.90 megagrams per year (Mg/yr).

34. Under MACT HH, a "large glycol dehydration unit" is defined as a "glycol dehydration unit with an actual annual average natural gas flowrate equal to or greater than 85 thousand standard cubic meters per day and actual annual average benzene emissions equal to or greater than 0.90 Mg/yr, determined according to [40 C.F.R.] § 63.772(b). A glycol dehydration unit complying with the 0.9 Mg/yr control option under [40 C.F.R.] § 63.765(b)(1)(ii) is considered to be a large dehydrator." 40 C.F.R. § 63.761.

35. The glycol dehydrator at the Island C.S. (D-1) is considered a "large glycol dehydration unit" under MACT HH.

36. Emissions from the glycol dehydrator (D-1) at the Island C.S. are controlled by a flare (FL-1).

37. At the Wonsits Valley C.S., Andeavor operated and MPLX operates, a 100 MMscfd glycol dehydrator (D-1). At all times relevant to this NOV, the actual annual average benzene emissions from the glycol dehydrator (D-1) at the Wonsits Valley C.S. were equal to or greater than 0.90 megagrams per year (Mg/yr).

38. The glycol dehydrator at the Wonsits Valley C.S. (D-1) is considered a "large glycol dehydration unit" under MACT HH.

39. Emissions from the glycol dehydrator (D-1) at the Wonsits Valley C.S. are controlled by a flare (FL-1).

40. The Island C.S. and the Wonsits Valley C.S. are major sources of HAPs under MACT HH.

41. Pursuant to Paragraph IV.B.3(a) of the Title V operating permit for the Island C.S., during periods when the flare is down, emissions from the dehydrator at the Island C.S. are to be routed to a Process Fabrication & Equipment, Inc. TH-42 enclosed combustor (C-1).

42. Pursuant to Paragraph V.B.3(a) of the Title V operating permit for the Wonsits Valley C.S., during periods when the flare is down, emissions from the dehydrator at the Wonsits Valley C.S. are to be routed to a Pyrohelix enclosed combustor (C-2).

43. C-1 and C-2 are used for recovering or oxidizing HAP or VOC vapors, and are, therefore, considered control devices under MACT HH.

44. Paragraph II.C.3 of the Title V operating permit for the Island C.S. and the Title V operating permit for the Wonsits Valley C.S. require that Andeavor and MPLX shall comply with the applicable control device requirements specified in § 63.771(d) or § 63.771(f).

45. 40 C.F.R. § 63.771(d)(1)(i) requires enclosed combustion devices to reduce either TOC or total HAP in waste gas routed to the control device, as demonstrated through performance testing in accordance with the requirements of 40 C.F.R. § 63.772(e).

46. Pursuant to 40 C.F.R. § 63.772(e)(3)(vi), an initial performance test and periodic performance tests are required for enclosed combustors, unless the control device is tested under, and meets the criteria of, 40 C.F.R. § 63.772(h), or the combustion control device demonstrates during the performance test that combustion zone temperature is an indicator of destruction efficiency and operates at a minimum temperature of 760 °C.

47. Paragraph II.D. of the Title V operating permit for the Island C.S. requires that Andeavor and MPLX shall determine compliance with the requirements of MACT HH using the applicable test methods and compliance procedures specified in § 63.772.

48. In a telephone conversation with EPA on October 22, 2018, Andeavor indicated that the enclosed combustors C-1 and C-2 were not tested according to 40 C.F.R. § 63.772(h); therefore, the testing exemption does not apply.

49. According to information provided to EPA by Andeavor as part of the 2018 Island compliance evaluation, as of the date of the 2018 Island compliance evaluation, no performance test had been conducted on C-1.

50. According to information provided to EPA by Andeavor as part of the 2017 Wonsits Valley compliance evaluation, a performance test was conducted on C-2 on April 8, 2009.

51. According to information provided to EPA by Andeavor as part of the 2019 Wonsits Valley compliance evaluation, as of the date of the 2019 Wonsits Valley compliance evaluation, no subsequent (periodic) performance tests had been conducted on C-2.

52. EPA advised Andeavor representatives that combustors C-1 and C-2 at the Island C.S. and the Wonsits Valley C.S., respectively, are to comply with the performance testing and control efficiency requirements of MACT HH by phone between September 20, 2018 and November 20, 2018, by email on multiple dates between October 23, 2018, and December 3, 2018, and in-person during the 2019 Wonsits Valley compliance evaluation.

53. By failing to conduct periodic performance tests on combustor C-1 at the Island C.S., Andeavor violated and MPLX continues to violate the MACT HH testing requirements at 40 C.F.R. § 63.772(e)(3)(vi) and the requirements of Paragraph II.D of the Title V operating permit for the Island C.S.

54. By failing to conduct periodic performance tests on combustor C-2 at the Wonsits Valley C.S., Andeavor violated and MPLX continues to violate the MACT HH testing requirements at 40 C.F.R. § 63.772(e)(3)(vi).

55. Paragraph II.E.2. of the Title V operating permit for the Island C.S. and Paragraph II.D.2. of the Title V operating permit for the Wonsits Valley C.S. require that each control device required to comply with MACT HH shall comply with the monitoring requirements as specified in § 63.773(b) or § 63.773(d).

56. Pursuant to 40 C.F.R. § 63.772(f), an owner or operator shall demonstrate compliance with the control device performance requirements at 40 C.F.R. § 63.771(d)(1)(i) by establishing a site-specific maximum or minimum monitoring parameter value according to the requirements of 40 C.F.R. § 63.773(d)(5)(i), which requires that operating parameter values be established through performance testing.

57. By failing to conduct performance tests on combustor C-1 at the Island C.S. and combustor C-2 at the Wonsits Valley C.S., Andeavor failed and MPLX continues to fail to demonstrate compliance with the control device performance requirements at 40 C.F.R. § 63.771(d)(1)(i), in violation of 40 C.F.R. §§ 63.772(f) and 63.773(d)(5)(i) and the

facilities' Title V operating permits.

# MACT HH: Failure to Continuously Operate a Control Device During Operation of Dehydrator at Wonsits Valley C.S.

58. In its semi-annual periodic MACT HH reports, Andeavor reported downtime for the control devices (flare (F-1) and combustor (C-2)) at the Wonsits Valley C.S. During approximately 55 hours from January 1, 2015 through June 30, 2019, SCADA data indicates that the glycol dehydrator (D-1) was operating but neither the flare (FL-1) nor the backup combustor (C-2) was operating. See Table 1, below, for details.

Reporting Period	Total Flare (FL-1) Downtime (hrs)	FL-1 Downtime (D- 1 Operating) (hrs)		FL-1 Downtime (D-1 Down)
		C-2 ON	C-2 OFF	(hrs)
1/1/2015 -				
6/30/2015	199.0	168.0	31.0	0.0
7/1/2015 -				
12/31/2015	23.8	15.3	1.0	7.5
1/1/2016 -				
6/30/2016	46.0	38.2	3.8	4.0
7/1/2016 -				
12/31/2016	56.0	48.0	8.0	0.0
1/1/2017 -				
6/30/2017	14.0	14.0	0.0	0.0
7/1/2017 -				
12/31/2017	52.0	52.0	0.0	0.0
1/1/2018 -				
6/30/2018	14.0	4.0	9.0	1.0
7/1/2018 -				
12/31/2018	89.0	82.4	2.6	4.0
1/1/2019 -				
6/30/2019	183.0	174.0	0.0	9.0

Table 1: Control Device Downtime at the Wonsits Valley C.S.

59. According to information provided by Andeavor to EPA on April 8, 2019, if both the flare (F-1) and backup combustor (C-2) are down and the dehydration unit (D-1) is still operating, emissions from D-1 are vented to the atmosphere and a timer tracks the duration of the bypass event.

60. MACT HH requires that control devices be operating at all times that emissions from the glycol dehydrator are routed to them (see 40 C.F.R. § 63.771(d)(4)(i)), and if a bypass

line is present, an excursion is deemed to have occurred when the emission stream is diverted away from the control device to the atmosphere (40 C.F.R. § 63.773(d)(6)(v)(A)).

61. Pursuant to 40 C.F.R. § 63.773(d)(7), "for each excursion, the owner or operator shall be deemed to have failed to have applied control in a manner that achieves the required operating parameter limits. Failure to achieve the required operating parameter limits is a violation of this standard."

62. During periods when D-1 was operating but neither the flare (FL-1) nor backup combustor (C-2) were operating, Andeavor failed to apply controls in a manner that achieved the required operating parameter limits, in violation of 40 C.F.R. §§ 63.773(d)(6)(v)(A) and 63.773(d)(7).

63. Pursuant to Paragraph II.B.4. of the Title V operating permit for the Wonsits Valley C.S. and 40 C.F.R. § 63.764(j), "the owner or operator must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions."

64. By not operating the flare or backup combustor at all times while the gylcol dehydrator (D-1) was operating, Andeavor failed and MPLX continues to fail to maintain good air pollution control practices to adequately control emissions from the glycol dehydrator and minimize emissions of HAPs to the atmosphere, in violation of the requirements at 40 C.F.R. § 63.764(j) and the facility's Title V operating permit.

# MACT ZZZZ: Exceedances of CO Emission Standard at Chapita C.S.

65. Pursuant to Paragraph 15 of the federal consent decree, the Chapita C.S. is considered a major source of HAPs under MACT ZZZZ.

66. At the Chapita C.S., Andeavor operated and MPLX operates a Caterpillar G3606TALE 4SLB, natural gas-fired stationary reciprocating internal combustion engine (RICE) (Engine C200). Engine C200 is a 1,775 hp engine that was constructed after December 19, 2002. Pursuant to 40 C.F.R. § 63.6585, Engine C200 is subject to the requirements of MACT ZZZZ.

67. Pursuant to Paragraph III.C.2 of Title V operating permit (V-UO-000012-2018.00) for the Chapita C.S. and 40 C.F.R. § 63.6600(b), Engine C200 is subject to the emission limitations in Table 2a (#2) to MACT ZZZZ, which requires either: (1) CO emissions to be reduced by 93 percent or more; or (2) formaldehyde concentrations in the RICE exhaust to be 14 parts per million by volume, dry basis (ppmvd) or less at 15 percent O<sub>2</sub>. Andeavor elected and MPLX elects to comply with MACT ZZZZ by using the CO reduction limitation option.

68. Andeavor used and MPLX uses oxidation catalysts to control CO emissions from Engine C200.

69. According to information provided by MPLX in a letter dated September 26,

2019, the catalyst on Engine C200 was replaced on July 18, 2019.

70. Pursuant to 40 C.F.R. § 63.6640(b), a performance test must be conducted to reestablish operating parameters following each catalyst replacement, and the re-test must also demonstrate that the applicable emission limitation is being met.

71. A performance test to demonstrate compliance with MACT ZZZZ was conducted by MPLX on Engine C200 on August 13, 2019. Results of the test indicated a CO reduction efficiency of 32 percent.

72. According to information provided by MPLX in a September 26, 2019 letter, the catalyst in Engine C200 was replaced and re-tested on September 24, 2019. The results of the performance test have not yet been received by EPA.

73. By failing to reduce CO emissions by 93 percent or more from Engine C200, MPLX violated and continues to violate the emission standards for CO in MACT ZZZZ and the provisions of Paragraph III.C.2 of Title V operating permit (V-UO-000012-2018.00) at the Chapita C.S.

# MACT ZZZZ: Failure to Conduct Performance Tests after Catalyst Replacements at Wonsits Valley C.S. and Coyote Wash C.S.

74. Pursuant to Paragraph 15 of the federal consent decree, the Wonsits Valley C.S. is considered a major source of HAPs under MACT ZZZZ.

75. The Coyote Wash C.S. has the potential to emit 10 tpy or more of formaldehyde so is considered a major source of HAPs under MACT ZZZZ.

76. At the Wonsits Valley C.S., Andeavor operated and MPLX operates a Caterpillar G3616LE 4SLB, natural gas-fired, stationary RICE (Engine C207). Engine C207 is a 4,554 hp engine that was reconstructed in January 2014.

77. At the Coyote Wash C.S., Andeavor operated and MPLX operates a Caterpillar G3616LE 4SLB, natural gas-fired, stationary RICE (Engine C300). Engine C300 is a 4,588 hp engine that was constructed after December 19, 2002.

78. Paragraph III.C.2 of the Title V operating permit for the Wonsits Valley C.S. and Paragraph II.C.1 of the Title V operating permit for the Coyote Wash C.S. require that Engine C207 and Engine C300 comply with the emission limitations and operating limitations specified in § 63.6600.

79. Pursuant to 40 C.F.R. § 63.6600(b), Engine C207 and Engine C300 are subject to the emission limitations in Table 2a (#2) to MACT ZZZZ, which requires either: (1) CO emissions to be reduced by 93 percent or more; or (2) formaldehyde concentrations in the RICE exhaust to be 14 parts per million by volume, dry basis (ppmvd) or less at 15 percent O<sub>2</sub>. Andeavor elected and MPLX elects to comply with MACT ZZZZ by using the CO reduction

limitation option.

80. Andeavor used and MPLX uses oxidation catalysts to control CO emissions from Engine C207 and Engine C300.

81. Pursuant to 40 C.F.R. § 63.6600(b), Engine C207 and Engine C300 are subject to the operating limitations in Table 2b (#1) to MACT ZZZZ, which requires: (1) the catalyst inlet temperature to be maintained at greater than or equal to 450 °F and less than or equal to 1,350 °F; and (2) the pressure drop across the catalyst to be maintained within plus or minus 2 inches of water at 100 percent load plus or minus 10 percent from the pressure drop across the catalyst that was measured during the initial performance test.

82. Pursuant to 40 C.F.R. § 63.6640(b), a performance test must be conducted to reestablish operating parameters following each catalyst replacement, and the re-test must also demonstrate that the applicable emission limitation is being met. MACT ZZZZ does not prescribe a deadline for conducting the test, but tests are expected to be conducted as soon as possible.<sup>1</sup>

83. Pursuant to Paragraph III.E.2 of the Title V operating permit for the Wonsits Valley C.S. and Paragraph II.E.2 of the Title V operating permit for the Coyote Wash C.S., Andeavor and MPLX must demonstrate continuous compliance with the requirements at § 63.6640.

84. On November 28, 2018, the catalyst on Engine C207 at the Wonsits Valley C.S. was replaced.

85. On December 7, 2018, a performance test was conducted on Engine C207. The test did not include a re-test of CO reduction efficiency to meet the testing requirements of MACT ZZZZ.

86. According to information provided by MPLX in a letter dated July 11, 2019, the catalyst on Engine C207 was replaced again on May 14, 2019.

87. On May 21, 2019 a performance test was conducted on Engine C207 to demonstrate compliance with MACT ZZZZ CO reduction efficiency requirements and to reestablish operating parameters. Results of the performance test were submitted to EPA on July 11, 2019, and indicated a CO reduction efficiency for Engine C207 of 97.7 percent.

88. On September 24, 2018, the catalyst on Engine C300 at the Coyote Wash C.S. was replaced.

<sup>&</sup>lt;sup>1</sup> See the answer to Question #22 on p. 7 of the "Implementation Question and Answer Document for National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines and New Source Performance Standards for Stationary Compression Ignition and Spark Ignition Internal Combustion Engines" (April 2, 2013).

89. On September 25, 2018, a performance test was conducted on Engine C300. The test did not include a re-test of CO reduction efficiency to meet the testing requirements of MACT ZZZZ.

90. On March 28, 2019, a performance test was conducted on Engine C300 to demonstrate compliance with MACT ZZZZ CO reduction efficiency requirements and to reestablish operating parameters. Results of the performance test were submitted to EPA on May 23, 2019 and indicated a CO reduction efficiency for Engine C300 of 96.6 percent.

91. By failing to conduct a performance test that met the testing requirements of MACT ZZZZ following the November 2018 catalyst replacement on Engine C207, Andeavor violated the MACT ZZZZ testing requirements at 40 C.F.R. § 63.6640(b), the MACT ZZZZ emissions limitations and operating limitations at 40 C.F.R. § 63.6600(b), and the requirements of Paragraphs III.C.2 and III.E.2 of the facility's Title V operating permit for the Wonsits Valley C.S.

92. By failing to conduct a performance test that met the testing requirements of MACT ZZZZ as soon as possible following the September 2018 catalyst replacement on Engine C300, Andeavor violated the MACT ZZZZ testing requirements at 40 C.F.R. § 63.6640(b), the MACT ZZZZ emissions limitations and operating limitations at 40 C.F.R. § 63.6600(b), and the requirements of Paragraphs II.C.1 and II.E.2 of the facility's Title V operating permit for the Coyote Wash C.S.

# MACT ZZZZ: Failure to Timely Submit Performance Test Results for Engines at Wonsits Valley C.S, Coyote Wash C.S., Chapita C.S., and Island C.S.

93. Engines C202, C203, and C204 at the Wonsits Valley C.S. are 3,406 hp Caterpillar G3612LE 4SLB natural gas-fired RICE. Engine C206 at the Wonsits Valley C.S. is a 3,100 hp Waukesha 12V-AT27GL 4SLB natural gas-fired RICE. Engine C207 at the Wonsits Valley C.S. is a 4,554 hp Caterpillar G3616LE 4SLB natural gas-fired RICE. Pursuant to 40 C.F.R. § 63.6585, Engines C202, C203, C204, C206, and C207 are subject to the requirements of MACT ZZZZ.

94. Engines C100 and C200 at the Coyote Wash C.S. are 2,146 hp Caterpillar G3608LE 4SLB natural gas-fired RICE. Engines C300, C400, and C500 at the Coyote Wash C.S. are 4,588 hp Caterpillar G3616LE 4SLB natural gas-fired RICE. Pursuant to 40 C.F.R. § 63.6585, Engines C100, C200, C300, C400, and C500 are subject to the requirements of MACT ZZZZ.

95. Engines C100 and C200 at the Chapita C.S. are 1,775 hp Caterpillar G3606TALE 4SLB natural gas-fired RICE. Pursuant to 40 C.F.R. § 63.6585, Engines C100 and C200 are subject to the requirements of MACT ZZZZ.

96. Engine C100 at the Island C.S. is a 1,480 hp Waukesha L7042GSI 4-stroke richburn (4SRB) natural gas-fired RICE. Pursuant to § 63.6585, Engine C100 is subject to the requirements of MACT ZZZZ. 97. Pursuant to 40 C.F.R. § 63.7(g)(1), results of performance tests shall be submitted to the Administrator within 60 days of completion of the test.

98. Table 2, below, depicts the dates that Andeavor completed performance tests of Engines C202, C203, C204, C206, and C207 at the Wonsits Valley C.S., and the dates that the results of the performance tests were submitted to EPA:

Table 2. Wonsits Valley C.S. MACT ZZZZ Engine Performance Test and Submittal Dates

Engine ID	Date Performance Test Completed	Date Performance Test Submitted to EPA
C202	October 3, 2016	January 31, 2017
C202	November 29, 2017	January 29, 2018
C202	November 12, 2018	January 30, 2019
C203	October 5, 2016	January 31, 2017
C203	November 29, 2017	January 29, 2018
C203	November 13, 2018	January 30, 2019
C204	October 6, 2016	January 31, 2017
C204	November 27, 2017	January 29, 2018
C204	November 13, 2018	January 30, 2019
C206	October 5, 2016	January 31, 2017
C207	October 4, 2016	January 31, 2017
C207	November 28, 2017	January 29, 2018
C207	November 14, 2018	January 30, 2019

99. Table 3, below, depicts the dates that Andeavor completed performance tests of Engines C100, C200, C300, C400, and C500 at the Coyote Wash C.S., and the dates that the results of the performance tests were submitted to EPA:

Engine ID	Date Performance Test Completed	Date Performance Test Submitted to EPA
C100	August 9, 2016	January 31, 2017
C100	July 25, 2018	January 31, 2019
C200	August 9, 2016	January 31, 2017
C200	July 25, 2018	January 31, 2019
C300	August 8, 2016	January 31, 2017
C300	September 12, 2017	January 31, 2018
C300	March 27, 2018	August 1, 2018
C400	August 10, 2016	January 31, 2017
C400	September 13, 2017	January 31, 2018
C400	March 29, 2018	August 1, 2018
C500	August 8, 2016	January 31, 2017
C500	September 14, 2017	January 31, 2018
C500	March 28, 2018	August 1, 2018

Table 3: Coyote Wash C.S. MACT ZZZZ Engine Performance Test and Submittal Dates

100. Table 4, below, depicts the dates that Andeavor completed performance tests of Engines C100 and C200 at the Chapita C.S., and the dates that the results of the performance tests were submitted to EPA:

Table 4: Chapita C.S. MACT ZZZZ Engine Performance Test and Submittal Dates

Engine ID	Date Performance Test Completed	Date Performance Test Submitted to EPA
C100	October 26, 2016	January 24, 2017
C100	July 24, 2018	January 31, 2019
C200	October 25, 2016	January 24, 2017
C200	July 28, 2018	January 31, 2019

101. On November 2, 2018, Andeavor completed a performance test on Engine C100 at the Island C.S. On January 30, 2019, Andeavor submitted results of the November 2, 2018 performance test on Engine C100 to EPA.

102. As provided in Tables 2 through 4 and Paragraph 93, above, Andeavor failed to submit the results of the October 2016, November 2017, and November 2018 MACT ZZZZ performance tests at the Wonsits Valley C.S., the August 2016, September 2017, March 2018, and July 2018 MACT ZZZZ performance tests at the Coyote Wash C.S., the October 2016 and July 2018 MACT ZZZZ performance tests at the Chapita C.S., and the November 2018 MACT ZZZZ performance test at the Island C.S. within 60 days of completion of the tests; therefore, Andeavor violated the reporting requirements at 40 C.F.R. § 63.7(g)(1).

#### NSPS JJJJ: Exceedances of VOC Emission Standard at Wonsits Valley C.S.

103. Engine C207 at the Wonsits Valley C.S. is a spark ignition (SI), internal combustion engine (ICE) that was reconstructed in January 2014 and has a maximum engine power greater than or equal to 500 hp.

104. Pursuant to 40 C.F.R. § 60.4230(a)(5), Engine C207 is subject to NSPS JJJJ.

105. Pursuant to Paragraph IV.C.1 of the Title V operating permit for the Wonsits Valley C.S. and 40 C.F.R. §§ 60.4233(f)(4) and (e), Engine C207 is subject to the emission standards in Table 1 to NSPS JJJJ for non-emergency SI natural gas engines with greater than or equal to 500 hp, which were manufactured on or after July 1, 2010. Those emission standards are: 1.0 grams per horsepower hour (g/hp-hr) NO<sub>X</sub>, 2.0 g/hp-hr CO, and 0.7 g/hp-hr VOC.

106. Pursuant to 40 C.F.R. §§ 60.4244(c) and 60.8(f), performance tests shall consist of three separate test runs.

107. A performance test to demonstrate compliance with NSPS JJJJ was conducted by Andeavor on Engine C207 on November 14, 2018. Results of the first test run indicated VOC emissions of 1.14 g/hp-hr, in excess of the NSPS JJJJ VOC emission standards, and the test was stopped after one test run.

108. Since only one test run was conducted during the November 14, 2018 testing, the performance test did not meet the requirements for performance tests at 40 C.F.R. §§ 60.4244(c) and 60.8(f).

109. Pursuant to 40 C.F.R. § 60.11(g), "for purposes of establishing whether or not a person has violated or is in violation of any standard in this part, nothing in this part shall preclude the use, including exclusive use, of any credible evidence or information, relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test...had been performed."

110. For purposes of determining compliance with the NSPS JJJJ VOC emission standards, the results of the test run performed on Engine C207 on November 14, 2018 are credible evidence.

111. A performance test to demonstrate compliance with NSPS JJJJ was conducted by Andeavor on Engine C207 on November 21, 2018. Results of the test indicated VOC emissions of 1.10 g/hp-hr, in excess of the NSPS JJJJ VOC emission standards.

112. A performance test to demonstrate compliance with NSPS JJJJ was conducted by Andeavor on Engine C207 on December 7, 2018. Results of the test indicated VOC emissions of 0.41 g/hp-hr, in compliance with the NSPS JJJJ VOC emission standards.

113. By emitting VOC from Engine C207 in excess of 0.7 g/hp-hr, Andeavor violated the emission standards for VOC in NSPS JJJJ and the provisions of Paragraph IV.C.2 of Title V

operating permit at the Wonsits Valley C.S.

# <u>NSPS JJJJ: Failure to Timely Submit Performance Test Results at Coyote Wash C.S. and</u> <u>Wonsits Valley C.S.</u>

114. At the Coyote Wash C.S., Andeavor operated and MPLX operates a Caterpillar G3616LE 4SLB, natural gas-fired, SI ICE (Engine C500). Engine C500 is a 4,588 hp engine that was constructed after June 12, 2006 and manufactured after July 1, 2007.

115. Pursuant to 40 C.F.R. § 60.4230(a)(4)(i), Engine C500 at the Coyote Wash C.S. is subject to NSPS JJJJ.

116. At the Wonsits Valley C.S., Andeavor operated and MPLX operates engines C202, C203, C204, C206, and C207, which are spark ignition (SI), internal combustion engines (ICE). Engines C202, C203, C204, C206, and C207 were reconstructed after June 12, 2006.

117. Pursuant to 40 C.F.R. § 60.4230(a)(5), Engines C202, C203, C204, C206, and C207 at the Wonsits Valley C.S. are subject to NSPS JJJJ.

118. Pursuant to 40 C.F.R. § 60.4245(d), results of performance tests shall be submitted to the Administrator within 60 days of completion of the test.

119. Table 5, below, depicts the dates that Andeavor completed performance tests of Engine C500 at the Coyote Wash C.S., and the dates that the results of the performance tests were submitted to EPA:

Table 5: Coyote Wash C.S. NSPS JJJJ Engine Performance Test and Submittal Dates

Engine ID	Date Performance Test Completed	Date Performance Test Submitted to EPA
C500	August 8, 2016	January 31, 2017
C500	September 14, 2017	January 29, 2018

120. Table 6, below, depicts the dates that Andeavor completed performance tests of Engines C202, C203, C204, C206, and C207 at the Wonsits Valley C.S., and the dates that the results of the performance tests were submitted to EPA:

Engine ID	Date Performance Test Completed	Date Performance Test Submitted to EPA
C202	May 6, 2016	July 20, 2016
C202	May 17, 2017	July 28, 2017
C202	May 22, 2018	August 2, 2018
C203	April 25, 2016	July 20, 2016
C203	May 17, 2017	July 28, 2017
C203	May 21, 2018	August 2, 2018
C204	April 25, 2016	July 20, 2016
C204	May 15, 2017	July 28, 2017
C204	May 22, 2018	August 2, 2018
C206	April 27, 2016	July 20, 2016
C206	May 15, 2017	July 28, 2017
C207	April 26, 2016	July 20, 2016
C207	May 16, 2017	July 28, 2017
C207	November 14, 2018	January 30, 2019
C207	November 21, 2018	February 21, 2019

Table 6: Wonsits Valley C.S. NSPS JJJJ Engine Performance Test and Submittal Dates

121. As provided in Tables 5 and 6, above, Andeavor failed to submit the results of the August 2016 and September 2017 NSPS JJJJ performance tests at the Coyote Wash C.S. and the April 2016, May 2016, May 2017, May 2018, and November 2018 NSPS JJJJ performance tests at the Wonsits Valley C.S. within 60 days of completion of the tests; therefore, Andeavor violated the reporting requirements at 40 C.F.R. § 60.4245(d).

#### Title V: Exceedance of NOx Emission Limit at Coyote Wash C.S.

122. On December 2, 2013, EPA issued a Title V permit (V-UO-000015-2006.00) to QEPFS (a predecessor of Andeavor) for the Coyote Wash C.S. The permit was effective at all times relevant to this NOV. Section IV.B.2(b)(ii)(D)(1) of the Title V permit for the Coyote Wash C.S. requires Engine C400 to meet a nitrogen oxide (NO<sub>X</sub>) emission limit of 1.0 g/hp-hr, as demonstrated through semi-annual performance testing.

123. On January 29, 2018, Andeavor submitted to EPA the results of a September 13, 2017 performance test on Engine C400. Engine C400 has a dual exhaust stack, and results of the performance test were reported separately for each exhaust bank ("Left Exhaust Bank" and "Right Exhaust Bank").

124. Results of the September 13, 2017, performance test on Engine C400 indicated combined stack emissions of 1.1 g/hp-hr NO<sub>X</sub> (0.570 g/hp-hr from the "Left Exhaust Bank" and 0.513 g/hp-hr from the "Right Exhaust Bank"), which exceeds the permit limit of 1.0 g/hp-hr.

125. By emitting NO<sub>X</sub> in excess of 1.0 g/hp-hr from Engine 400, Andeavor violated the emission limits set forth for Engine C400 in the Title V permit for the Coyote Wash C.S.

# III. ENVIRONMENTAL IMPACT OF VIOLATIONS

126. These violations have caused excess emissions of volatile organic compounds and nitrogen oxides. Volatile organic compounds and nitrogen oxides contribute to ozone formation which can result in adverse effects to human health and vegetation. Ozone can penetrate different regions of the respiratory tract and be absorbed through the respiratory system. Repeated exposure may permanently scar lung tissue.

127. These violations have caused or can cause excess emissions of hazardous air pollutants. Hazardous air pollutant emissions can lead to adverse health effects such as cancer, respiratory irritation, and damage to the nervous system.

#### IV. ENFORCEMENT

128. Pursuant to Section 113(b) of the Act, 42 U.S.C. § 7413(b), MPLX may be liable for injunctive relief and civil penalties of up to \$37,500 per day for each violation occurring between January 13, 2009, and November 2, 2015, and up to \$99,681 per day for each violation occurring on or after November 3, 2015, and assessed on or after February 6, 2019. *See* 40 C.F.R. § 19.4; 84 Fed. Reg. 2056 (Feb. 6, 2019).

11/21/19 Date Issued:

Suzanne J. Bohan, Director Enforcement and Compliance Assurance Division



# **EXHIBIT 4**

U.S. EPA Region 8, Air Pollution Control Permit to Operate Title V Operating Permit Program at 40 CFR Part 71 (Apr. 13, 2020).



United States Environmental Protection Agency Region 8 Air and Radiation Division 1595 Wynkoop Street Denver, Colorado 80202

# Air Pollution Control Permit to Operate Title V Operating Permit Program at 40 CFR Part 71

In accordance with the provisions of Title V of the Clean Air Act (CAA) and the Title V Operating Permit Program at 40 CFR part 71 (Part 71) and applicable rules and regulations,

# Andeavor Field Services, LLC (Operated by MPLX) Wonsits Valley Compressor Station

is authorized to operate air emission units and to conduct other air pollutant emitting activities in accordance with the permit conditions listed in this permit.

This source is authorized to operate at the following location on Indian country lands within the Uintah and Ouray Indian Reservation:

# Latitude 40.140792, Longitude -109.494322 SE/NE Sec. 12, T8S, R21E, Uintah County, Utah

Terms not otherwise defined in this permit have the meaning assigned to them in the referenced regulations. All terms and conditions of the permit are enforceable by the EPA and citizens under the CAA.

4/13/2020

X Debra Thomas

Signed by: DEBRA THOMAS Debra Thomas Deputy Regional Administrator PAGE INTENTIONALLY LEFT BLANK

# Air Pollution Control Permit to Operate Title V Operating Permit Program at 40 CFR Part 71

#### MPLX Wonsits Valley Compressor Station

Permit Number: V-UO-000005-2018.00 Replaces Permit No.: V-UO-000005-2000.00 Issue Date: April 13, 2020 Effective Date: May 13, 2020 Expiration Date: May 13, 2025

The permit number cited above should be referenced in future correspondence regarding this source.

Table 1- Part 71 Permitting History

Date of Action	Permit Number	Type of Action	Description of Action
September 10, 2013	V-UO-000005-2000.00	Initial Permit	N/A
May 13, 2020	V-UO-000005-2018.00	Renewal Permit	N/A

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# APPENDIX A – CONSENT DECREE CASE NO. 2:08-CV-00167-TS-PMV

## I. Facility Information and Emission Unit Identification

# A. Facility Information

Owner Name:	Andeavor Field Services, LLC
Operator Name:	MPLX
Plant Name:	Wonsits Valley Compressor Station
Plant Location:	Latitude 40.140792, Longitude -109.494322
Region:	8
State:	Utah
County:	Uintah
Reservation:	Uintah and Ouray Indian Reservation
Tribe:	Ute Indian Tribe
Responsible Official:	Operations Senior Director
SIC Code:	1311 – Crude Petroleum and Natural Gas

# **Description:**

Wonsits Valley gathers natural gas, natural gas condensate and produced water from surrounding well sites via a gathering pipeline system. The comingled stream enters the station and is routed to a slug catcher where the liquids and natural gas are separated. From the slug catcher, the liquids are routed to a 3-phase separator, where the natural gas, condensate and produced water are separated.

The condensate is routed to the station discharge and then off site to a gas plant. The produced water is temporarily stored in the slop tank (emissions unit T-1 in Table 2 below) and the emissions are controlled with the combustor unit (emissions unit C-1 in Table 2 below). Liquids from T-1 are gravity fed offsite.

The natural gas exits the slug catcher and 3-phase separator as mentioned in the first paragraph, where it is routed to an inlet scrubber; condensate and produced water that are removed during this process are also routed to T-1.

The natural gas is then compressed from field pressure to approximately 1,200 pounds per square inch gauge (psig) from five reciprocating internal combustion engines (RICE) that are also located onsite. The compressed natural gas enters the dehydration unit, emissions unit D-1, and is bubbled up through lean triethylene glycol (TEG) in a process vessel called a contactor. During this process, water vapor is removed from the gas to a concentration determined by a sales contract. The pipeline quality natural gas then exits the contactor, is metered and then routed off site. Natural gas used to fuel equipment at Wonsits Valley is pulled from the discharge after the dehydrator where it is filtered and separated.

The rich TEG exits the contactor, is depressurized in a TEG flash tank, and is regenerated using heat in a vessel known as a reboiler (emissions unit R-1 in Table 2 below). The rich TEG is heated in R-1 to a set temperature that boils the impurities out of the TEG. The vapors from the reboiler are routed to the BTEX condenser to remove liquids that drain into the distillate tank. BTEX vapors from the distillate storage tank and flash gas from the flash tank are routed to emission control devices: a flare (emissions unit FL-1 in Table 2 below) or a backup enclosed combustor (emissions unit C-2 in Table 2 below). The depressurized TEG is routed to a vessel called a glycol reboiler and regenerated using heat. The regenerated lean TEG is circulated back to the contactor.

There are fugitive emissions associated with the potential seeping of gas from connections, seals, flanges and valves. Instrument air is used on site for energizing pneumatic equipment.

# **B.** Facility Emission Points

Unit I.D.	Descripti	on	<b>Control Equipment</b>
	Caterpillar G3612LE Compressor Engi Natural Gas-Fired		
C202	Ma	talled: 9/2007 nufactured: 10/21/2001 constructed: 9/2007	
C203	Ma	talled: 9/2007 nufactured: 10/10/1991 constructed:9/2007	Selective Catalytic Oxidation
C204	Ma	talled: 9/2007 nufactured: 5/12/1993 constructed: 9/2007	
	Waukesha 12V-AT27GL Compressor I Natural Gas-Fired	Engine; 3,100 hp, 4SLB RICE,	
C206	Ma	talled: 3/2001 nufactured: 12/7/2000 constructed: 6/2007	Selective Catalytic Oxidation
	Caterpillar G3616LE Compressor Engi Natural Gas-Fired	ne; 4,554 hp, 4SLB RICE,	
C207	Ma	stalled: 6/2008 anufactured: 12/5/1993 constructed: 1/2014	Selective Catalytic Oxidation
D-1	100 MMscfd* Triethylene Glycol Dehy	ydrator	Flare (FL-1) Combustor (C-2)
R-1	1.0 MMBtu* Glycol Reboiler		None (IEU)
T-1	500 bbl* Slop Tank, referred to as the O Decree <u>No. 2:08-CV-00167-TS-PMV</u> 21,900 bbls per year Annual Condensat		Combustor (C-1) (IEU)

Table 2 - Emission Units and Emission Generator Activities

Unit I.D.	Description	Control Equipment
	Miscellaneous Chemical Storage Tanks	
T-2	100 bbl New Glycol	
T-3	100 bbl New Lube Oil	
T-4	100 bbl Used Lube Oil	None
T-5	100 bbl Used Glycol	(IEU)
T-6	65 bbl Glycol	
T-7	100 bbl Produced Water	
T-8	100 bbl Dehydrator Drip Tank	
T-9	100 bbl Dehydrator Drip Tank	
EL	Fugitive Equipment Leaks	None
		None
PG	Pigging Operations	(IEU)
		None
ES	Engine Start-ups	(insignificant emission unit)
CB	Compressor Blowdowns	None
		None
ESD	Emergency Shutdowns	(IEU)
		Dehydrator (D-1)
FL-1	Elevated Open-Flame Flare	(IEU)
C-1	Cimarron 30" Standard Tank Vapor ECD*	
C-1	Cimarion 50 Standard Fank Vapor LCD	Slop Tank (T-1)
		(IEU)
C-2	ECD	
		Backup Combustor for D-1
		(IEU)

\* IEU = Insignificant Emission Unit; 4SLB = 4 Stroke Lean Burn; RICE = Reciprocating Internal Combustion Engines; hp = horsepower; bbl = barrel; MMscfd = million standard cubic feet per day; MMBtu/hr = million British thermal units per hour; ECD = Enclosed Combustors.

## II. <u>Standards of Performance for Stationary Spark Ignition Internal Combustion Engines - 40 CFR</u> Part 60, Subpart JJJJ

- **A. Applicability** [40 CFR 60.4230 (a)(5)]
- 1. 40 CFR part 60, subpart JJJJ applies to the following emission units:
  - (a) Caterpillar G3612LE engine identified as C202 in Table 2 of this permit;
  - (b) Caterpillar G3612LE engine identified as C203 in Table 2 of this permit;
  - (c) Caterpillar G3612LE engine identified as C204 in Table 2 of this permit;
  - (d) Waukesha 12V-AT27GL engine identified as C206 in Table 2 of this permit; and
  - (e) Caterpillar G3616LE engine identified as C207 in Table 2 of this permit.
- 2. Notwithstanding conditions in this permit, the Permittee shall comply with all applicable requirements of 40 CFR part 60, subpart JJJJ (Subpart JJJJ).

# **B.** General Provisions [40 CFR 60.4246]

- 1. The Facility is subject to the requirements of 40 CFR part 60, subpart A General Provisions as specified in Table 3 of Subpart JJJJ. Notwithstanding conditions in this permit, the Permittee shall comply with all applicable requirements of 40 CFR part 60, subpart A.
- 2. All reports required under 40 CFR part 60, subpart A shall be sent to the EPA at the following address as listed in §60.19:

Branch Chief, Air and Toxics Enforcement Branch, 8ENF-AT Enforcement and Compliance Assurance Division U.S. Environmental Protection Agency, Region 8 1595 Wynkoop Street Denver, Colorado 80202-1129

Reports may be submitted on electronic media or via email to: <u>r8airreportenforcement@epa.gov</u>.

- **C. Emission Standards** [40 CFR 60.4233 (f)(4) and Table 1, 60.4234]
- 1. The Permittee shall comply with the emissions standards for non-emergency, spark ignition (SI) internal combustion engines (ICE) greater than 1,350 hp that are modified or reconstructed after June 12, 2006 for C202, C203, C204, C206 and C207 as specified in §60.4233(f)(4) and Table 1 to Subpart JJJJ.
- 2. The Permittee must operate and maintain the stationary SI ICE subject to the emission standards as required in §60.4233 over the entire life of the engine as specified in §60.4234.

## **D.** Compliance Requirements [40 CFR 60.4243 (c)]

The Permittee, as the owner and operator of stationary SI ICE that must comply with the emission standards specified in Section II.C. of this permit, shall demonstrate compliance according to one of the methods specified in paragraphs 1 or 2 of this section as applicable:

- 1. Purchasing an engine certified according to the procedures specified in Subpart JJJJ for the same model year and demonstrating compliance according to one of the methods specified in paragraphs 1. (a) or (b) of this section:
  - (a) If the Permittee operates and maintains the certified stationary SI ICE and control device according to the manufacture's emission-related written instructions, the Permittee shall keep records of conducted maintenance to demonstrate compliance, but no performance testing is required. The Permittee shall also meet requirements as specified in 40 CFR 1068 subparts A through D, as applicable. If the Permittee adjusts engine settings according to and consistent with the manufacturer's instructions, the stationary SI ICE will not be considered out of compliance; or
  - (b) If the Permittee does not operate and maintain the certified stationary SI ICE and control device according to the manufactures emission-related written instructions, the engine will be considered a non-certified engine and the Permittee shall demonstrate compliance according to §§60.4243(a)(2)(i) through(iii) as appropriate; or

2. Purchasing a non-certified engine and demonstrating compliance with the emission standards specified in Section II.C. of this permit and according to the test methods and other procedures specified in §60.4244, and according to the following:

As an owner or operator of a stationary SI ICE greater than 500 hp, the Permittee shall keep a maintenance plan and records of conducted maintenance and shall, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, the Permittee shall conduct an initial performance test and conduct subsequent performance testing every 8,760 hours or for 3 years, whichever comes first, to demonstrate compliance.

Note to Permittee: The initial performance testing has been satisfied for the engines currently operating at this facility. The requirements for initial performance testing are retained in this permit in the case of new construction, installation or modification of an affected source under this subpart.

# E. Testing Requirements [40 CFR 60.4244 (a)-(f)]

The Permittee shall comply with the performance testing requirements for the non-emergency, SI ICE greater than 1,350 hp as specified in §60.4244 (a)-(f) for emissions units C202, C203, C204, C206 and C207.

## F. Notification, Reports and Records [40 CFR 60.4245]

The Permittee shall comply with all the applicable notification, reporting, and recordkeeping requirements for non-emergency SI ICE greater than 1,350 hp, as specified in §60.4245, for emissions units C202, C203, C204, C206 and C207, except that reports of required performance tests shall be submitted with the respective semiannual report required in Section VI.B.1. of this permit that corresponds with the reporting period within which the test was conducted.

## III. <u>National Emission Standards for Hazardous Air Pollutants From Oil and Natural Gas</u> <u>Production Facilities – 40 CFR Part 63, Subpart HH</u>

## **A. Applicability**[40 CFR 63.760 (a)-(b)]

40 CFR part 63, subpart HH applies to the 100 MMscfd TEG dehydrator identified as D-1, and control devices FL-1 and C-2 in Table 2 of this permit.

Notwithstanding conditions in this permit, the Permittee shall comply with all applicable requirements of 40 CFR part 63, subpart HH for affected sources located at a major source of HAP (Hazardous Air Pollutants).

## B. General Standards [40 CFR 63.764]

1. The General Provisions at 40 CFR part 63, subpart A apply as specified in Table 2 of 40 CFR part 63, subpart HH. Notwithstanding conditions in this permit, the Permittee shall comply with all applicable requirements of 40 CFR part 63, subpart A.

2. All reports required under 40 CFR part 63, subpart A shall be sent to the EPA at the following address as listed in §63.13:

Branch Chief, Air and Toxics Enforcement Branch, 8ENF-AT Enforcement and Compliance Assurance Division U.S. Environmental Protection Agency, Region 8 1595 Wynkoop Street Denver, Colorado 80202-1129

Reports may be submitted on electronic media or via email to: <u>r8airreportenforcement@epa.gov</u>.

- 3. The Permittee shall comply with the following requirements for the large glycol dehydrator at a major source as specified in §63.764(c):
  - (a) The control requirements for glycol dehydrator process vents specified in §63.765;
  - (b) The monitoring requirements specified in §63.773; and
  - (c) The recordkeeping and reporting requirements specified in §§63.774 and 63.775.
- 4. At all times, the Permittee shall operate and maintain any glycol dehydration unit, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the EPA which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records and inspection of the unit.

## C. Glycol Dehydration Unit Process Vent Standards [40 CFR 63.765(b)]

The Permittee shall comply with the control equipment requirements as follows:

- 1. Except as specified in §63.765(c), the Permittee shall comply with the applicable requirements for large glycol dehydration unit process vents at major sources of HAP specified in §63.765(b)(1) and (2):
  - (a) For each large glycol dehydration process vent, the Permittee shall control air emissions by either paragraph (b)(1)(i) or (ii) of §63.765.
    - (i) The Permittee shall connect the process vent to a control device or combination of control devices through a closed-vent system, the closed-vent system shall be designed and operated in accordance with the requirements of §63.771(c). The closed-vent system shall be designed and operated in accordance with the requirements of §63.771(d); or
    - (ii) The permittee shall connect the process vent to a control device or combination of control devices through a closed-vent system and the outlet benzene emissions from the control device(s) shall be reduced to a level less than 0.90 megagrams per year. The closed-vent system shall be designed and operated in accordance with the requirements of §63.771(c). The control device shall be designed and

operated in accordance with the requirements of 63.771(d), except that the performance levels specified in 63.771(d)(1)(i) and (ii) do not apply; and

(b) One or more safety devices that vent directly to the atmosphere may be used on the air emission control equipment installed to comply with paragraph (b)(1) of §63.765.

# **D. Control Equipment Requirements** [40 CFR 63.771(b)-(d)]

- 1. For each cover, the Permittee shall comply with the cover requirements specified in §63.771(b).
- 2. The Permittee shall comply with the closed-vent system requirements specified in §63.771(c).
- 3. For each control device, FL-1 and C-2, the Permittee shall comply with the applicable control device requirements to reduce HAP emissions as specified in §63.771(d).
- **E. Test Methods, Compliance Procedures and Compliance Determination Requirements** [40 CFR 63.772 (b)-(c), and (e)-(f)]

The Permittee shall determine compliance with the requirements of 40 CFR part 63, subpart HH using the applicable test methods and compliance procedures for large glycol dehydration units specified in §63.772.

- 1. The Permittee shall determine the glycol dehydration unit flowrate, benzene emissions or BTEX emissions as specified in §63.772(b).
- 2. The Permittee shall comply with the test procedures for no detectable emissions in accordance with Method 21, 40 CFR part 60, appendix A, as specified in §63.772(c).
- 3. The Permittee shall comply with the test procedures for control device performance for FL-1 and C-2 as specified in §63.772(e).
- 4. The Permittee shall comply with the compliance demonstration for control device performance requirements for FL-1 and C-2 as specified in §63.772(f).
- F. Inspection and Monitoring Requirements [40 CFR 63.773 (c) and (d)]
- 1. For each closed-vent system or cover required by the Permittee to comply with 40 CFR part 63, subpart HH, the Permittee shall comply with the inspection and monitoring requirements specified in §63.773(c).
- 2. For each control device, FL-1 and C-2, required by the Permittee to comply with 40 CFR part 63, subpart HH, the Permittee shall comply with the inspection and monitoring requirements as specified in §63.773(d).

# G. Recordkeeping Requirements [40 CFR 63.774]

1. The recordkeeping provisions of 40 CFR part 63, subpart A, that apply and those that do not apply to the Permittee are listed in Table 2 of 40 CFR part 63, subpart HH.

- 2. The Permittee shall maintain the records specified in §§63.774(b), (c), (e) and (g).
- 3. Except as specified in §§63.774(c), the Permittee shall maintain the records specified in §63.774(b).
- 4. If compliance with the benzene emission limit specified in §63.765(b)(1)(ii) is elected, the Permittee shall document, to the Administrator's satisfaction, the items in §63.774(c).
- 5. The Permittee shall keep records of the requirements of §63.774(e) when using a flare to comply with §63.771(d).
- 6. The Permittee shall maintain records, pursuant to §63.774(g), of the occurrence and duration of each malfunction of operation (*i.e.*, process equipment) or the air pollution control equipment and monitoring equipment. The Permittee shall maintain records of actions taken during periods of malfunction to minimize emissions in accordance with § 63.764(j), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

# H. Reporting Requirements [40 CFR 63.775]

- 1. The reporting provisions of subpart A of this part, that apply and those that do not apply to the Permittee are listed in Table 2 of this subpart.
- 2. The Permittee shall submit the information specified in §63.775(b).
- 3. The Permittee shall submit Notification of Compliance Status Reports as specified in §63.775(d).
- 4. The Permittee shall submit Periodic Reports as specified in §63.775(e).
- 5. The Permittee shall submit notifications of process changes as specified in §63.775(f).
- 6. The Permittee shall comply with any applicable electronic reporting provisions specified at §63.775(g).

## IV. <u>National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal</u> <u>Combustion Engines - 40 CFR Part 63, Subpart ZZZZ</u>

## **A. Applicability** [40 CFR 63.6585(a)]

40 CFR part 63, subpart ZZZZ applies to the following emission units:

- 1. Caterpillar G3612LE engine identified as C202 in Table 2 of this permit;
- 2. Caterpillar G3612LE engine identified as C203 in Table 2 of this permit;
- 3. Caterpillar G3612LE engine identified as C204 in Table 2 of this permit;
- 4. Waukesha 12V-AT27GL engine identified as C206 in Table 2 of this permit; and

5. Caterpillar G3616LE engine identified as C207 in Table 2 of this permit.

# **B.** General Provisions [40 CFR 63.6665]

- 1. The General Provisions at 40 CFR part 63, subpart A apply as specified in Table 8 of 40 CFR part 63, subpart ZZZZ. Notwithstanding conditions in this permit, the Permittee shall comply with all applicable requirements of 40 CFR part 63, Subpart A.
- 2. All reports required under 40 CFR part 63, subpart A shall be sent to the EPA at the following address as listed in §63.13:

Branch Chief, Air and Toxics Enforcement Branch, 8ENF-AT Enforcement and Compliance Assurance Division U.S. Environmental Protection Agency, Region 8 1595 Wynkoop Street Denver, Colorado 80202-1129

Reports may be submitted on electronic media or via email to: <u>r8airreportenforcement@epa.gov</u>.

# C. Emission and Operating Limitations [40 CFR 63.6600and 63.6605]

- 1. The Permittee shall comply with the emissions limitations and operating limitations for stationary 4SLB RICE with a site rating of more than 500 brake hp located at a major source of HAP emissions, specified in §63.6600(b) for engines C202, C203, C204, C206 and C207.
- 2. The Permittee shall demonstrate compliance with general requirements for engines C202, C203, C204, C206 and C207 according to §63.6605.
- 3. Pursuant to \$63.6600, compliance with the numerical emissions limitations for stationary 4SLB RICE with a site rating of more than 500 brake hp located at a major source of HAP emissions established in 40 CFR part 63, subpart ZZZZ for engines C202, C203, C204, C206 and C207, shall be based on the results of testing the average of three 1-hour runs using the testing requirements and procedures in \$63.6620 and Table 4 to 40 CFR part 63, subpart ZZZZ.

# D. Testing and Initial Compliance Requirements

[40 CFR 63.6610, 63.6615, 63.6620, 63.6625, and 63.6630]

1. The Permittee shall conduct the initial performance tests and other compliance demonstrations requirements for stationary 4SLB RICE with a site rating of more than 500 brake hp located at a major source of HAP emissions, as specified in §63.6610, for engines C202, C203, C204, C206 and C207.

Note to Permittee: The initial performance testing has been satisfied for the engines currently operating at this facility. The requirements for initial performance testing are retained in this permit in the case of new construction, installation or modification of an affected source under this subpart.

2. The Permittee shall conduct subsequent performance tests for stationary 4SLB RICE with a site rating of more than 500 brake hp located at a major source of HAP emissions, as specified in

§63.6615, for engines C202, C203, C204, C206 and C207.

- 3. The Permittee shall use the performance tests and other procedures for stationary 4SLB RICE with a site rating of more than 500 brake hp located at a major source of HAP emissions, as specified §63.6620 for engines C202, C203, C204, C206 and C207.
- 4. The Permittee shall comply with the monitoring, installation, collection, operation and maintenance requirements for stationary 4SLB RICE with a site rating of more than 500 brake hp located at a major source of HAP emissions, as specified in §63.6625, for engines C202, C203, C204, C206 and C207.
- 5. The Permittee shall demonstrate initial compliance with the emission limitations, operating limitations, and other requirements that apply to stationary 4SLB RICE with a site rating of more than 500 brake hp located at a major source of HAP emissions, as specified in §63.6630, for engines C202, C203, C204, C206 and C207.

Note to Permittee: The initial compliance has been satisfied for the engines currently operating at this facility. The requirements for initial compliance are retained in this permit in the case of new construction, installation or modification of an affected source under this subpart.

- E. Continuous Compliance Requirements [40 CFR 63.6635 and 63.6640 (a)(e)]
- 1. The Permittee shall monitor and collect data to demonstrate continuous compliance for stationary 4SLB RICE with a site rating of more than 500 brake hp located at a major source of HAP emissions, as specified in §63.6635, for engines C202, C203, C204, C206 and C207.
- 2. The Permittee shall demonstrate continuous compliance with the emission limitations, operating limitations, and other requirements for stationary 4SLB RICE with a site rating of more than 500 brake hp located at a major source of HAP emissions, as specified in §63.6640, for engines C202, C203, C204, C206 and C207.
- **F.** Notifications, Reports and Records [40 CFR 63.6645, 63.6650 and Table 7, 63.6655, and 63.6660]
- 1. The Permittee shall submit notifications as specified for stationary 4SLB RICE with a site rating of more than 500 brake hp located at a major source of HAP emissions in §63.6645 for engines C202, C203, C204, C206 and C207.
- 2. The Permittee shall submit reports as specified for stationary 4SLB RICE with a site rating of more than 500 brake hp located at a major source of HAP emissions in §63.6650 and Table 7 for engines C202, C203, C204, C206 and C207. Reports of required performance tests shall be submitted with the respective semiannual report required in Section VI.B.1. of this permit that corresponds with the reporting period within which the test was conducted.
- 3. The Permittee shall keep records as specified in §63.6655 for engines C202, C203, C204, C206 and C207.
- 4. The Permittee shall keep the records in the format and for the duration as specified in §63.6660 for engines C202, C203, C204, C206 and C207.

# V. Requirements of Consent Decree Case No. 2:08-CV-00167-TS-PMV

# A. Applicability

This source is subject to certain requirements of Consent Decree Case No. 2:08-CV-00167-TS-PMV (Consent Decree), filed and effective on July 3, 2012 and terminated on June 4, 2014. The Permittee shall comply with all applicable provisions of the Consent Decree as described in the Termination Clause, notwithstanding the conditions in this draft permit. The Consent Decree in its entirety has been included in Appendix A. The requirements for Wonsits Valley that survive termination are found in paragraphs 17, 19, 20 and 23.<sup>1</sup>

# **B.** Requirements for the Glycol Dehydrator

[Consent Decree Case No. 2:08-CV-00167-TS-PMV, Paragraphs 17]

- 1. Requirements of Consent Decree Case No. 2:08-CV-00167-TS-PMV, Paragraph 17
  - (a) The flare installed pursuant to Paragraph 15 of the Consent Decree shall achieve a 95% by weight or greater reduction of volatile organic compound (VOC) emissions for the glycol dehydrator process vent stream at all times except during periods of time when the pilot flame at the flare is off, the Permittee shall re-light the pilot flame or route emissions from the glycol dehydrator process vent stream to a back-up combustor as expeditiously as practicable. The back-up combustor shall achieve a 95% by weight or greater reduction of VOC emissions from the glycol dehydrator process vent stream when in use as determined by the pilot flame on the combustor being on when in use. The time during which the glycol dehydrator is operated without either: (1) a flare with the pilot flame on; or (2) the back-up combustor with its pilot flame on shall not exceed 140 hours.<sup>2</sup> Nothing in Paragraph 17 of the Consent Decree shall affect the Permittee's obligation to meet the applicable requirements of 40 CFR part 63.
  - (b) Compliance with 40 CFR 63.11(b), and with the associated monitoring and recordkeeping required in 40 CFR 63.773(d)(3)(i)(C), 63.774(b) and 63.774(e) shall be sufficient to determine compliance with the 95% VOC reduction requirement of Paragraph 17 of the Consent Decree.

## C. Requirements for the Condensate Storage Tank

[Consent Decree Case No. 2:08-CV-00167-TS-PMV, Paragraphs 19, 20]

1. Requirements of Consent Decree Case No. 2:08-CV-00167-TS-PMV, Paragraph 19

<sup>&</sup>lt;sup>1</sup> According to EPA records, the Permittee demonstrated compliance with the initial control and monitoring device installation and performance testing requirements of the Consent Decree prior to the effective date of this permit.
<sup>2</sup> The 140 hours are measured on a calendar year basis. Note that 40 CFR part 63 does not permit *any* operation of the glycol dehydrator (D-1) without the use of a control device. Therefore, the effect of the 140 hours provision of the Consent Decree is to limit the period during which the backup combustor may have its pilot light off, and because of the part 63 requirements, the backup combustor may only have the pilot light off if the primary combustor is in operation. That is, at all times the dehydrator is operational, the process stream must be routed to one of the two combustors, and the combustor to which the process stream is routed must be functioning.

(a) The Permittee shall, within 30 days of the Effective Date of the Consent Decree, connect the condensate storage tank, identified as T-1 in this permit, to an existing or new combustor at the facility.

Note to Permittee: The EPA has determined that the requirements of Section V.C.1.a. of this permit have been satisfied. This section has been retained because the provision of the terminated CD was stated to live on in perpetuity.

(b) The Permittee shall, within 60 days of the Effective Date of the Consent Decree, certify to the EPA that the design of the conveyance systems from the condensate storage tank to the combustor does not, under normal operating conditions, cause or contribute to a release of VOCs from the condensate storage tank through thief hatches or pressure relief valves.

Note to Permittee: The EPA has determined that the requirements of Section V.C.1.b. of this permit have been satisfied. This section has been retained because the provision of the terminated CD was stated to live on in perpetuity.

- (c) The Permittee shall equip the combustor with thermocouples (or other heat sensing monitoring devices) to continuously monitor the presence of a pilot flame.
- 2. Requirements of Consent Decree Case No. 2:08-CV-00167-TS-PMV, Paragraph 20
  - (a) The Permittee shall monitor and record the presence of a pilot flame with a continuous recording device, such as a chart recorder or similar device.

## **D. Requirements for RICE**

[Consent Decree Case No. 2:08-CV-00167-TS-PMV, Paragraph 23]

1. Requirements of Consent Decree Case No. 2:08-CV-00167-TS-PMV, Paragraph 23

For RICE a site rating of 500 hp or greater operated at the facility, identified as engines C202, C203, C204, C206 and C207, the Permittee shall comply with the requirements specified below:

- (a) Emissions Control:
  - (i) The Permittee has installed and is operating an oxidation catalyst control device on each lean burn RICE. The four existing lean burn RICE at Wonsits Valley, identified as C202, C203, C204 and C207, shall not exceed 1.0 gram per horsepower hour (g/hp-hr) for NO<sub>X</sub> (nitrogen oxides) and 1.0 g/hp-hr for CO (carbon monoxide) and C206 shall not exceed 1.3 g/hp-hr for NO<sub>X</sub> and 1.0 g/hphr for CO in this permit.
- (b) Emissions Controls Maintenance:

Any oxygen sensors in use shall be replaced within 2,000 hours of engine run time.

- (c) Performance Testing for NO<sub>X</sub> and CO:
  - Not later than 180 days after the Effective Date of the Consent Decree, the Permittee shall conduct initial performance tests for NO<sub>X</sub> and CO emissions, on each RICE, using the test protocol selected from the list in paragraph iv below.

Note to Permittee: The EPA has determined that the requirements of Section V.D.1.c.i. of this permit have been satisfied. This section has been retained because the provision of the terminated CD was stated to live on in perpetuity.

- (ii) The Permittee shall retest each reciprocating internal combustion engine semiannually using the test protocol developed from the test methods specified above. The Permittee shall submit to the EPA the test results for NO<sub>X</sub> and CO with the respective semiannual report required in Section VI.B.1. of this permit that corresponds with the reporting period within which the test was conducted.
- (iii) Performance tests must be conducted at any load condition within plus or minus 10 % of 100 % load unless the reciprocating internal combustion engine cannot achieve plus or minus 10 % of 100 % load at the time of the test. Under such circumstances, the reciprocating internal combustion engine shall be tested at maximum achievable load, and the differential pressure across the catalyst shall be monitored and shall be maintained consistent with operating limitations in 40 CFR part 63, subpart ZZZZ. If the reciprocating internal combustion engine load is increased by 20 % or greater averaged over a 30-day period commencing within 60 days of the last test, then the reciprocating internal combustion engine shall be re-tested at the newly achievable maximum load and the corresponding differential pressure established. For the purposes of this provision regarding engine load during and after performance testing, the Permittee shall monitor and record load at each engine.
- (iv) The Permittee shall select among the following test methods: 40 CFR part 60, appendix A, Method 1 or 1A Sampling port location and number of traverse points; 40 CFR part 60, appendix A, Method 3, 3A or 3B O<sub>2</sub> (oxygen) concentration at inlet and outlet; 40 CFR part 60, appendix A, Method 4 Moisture Content; 40 CFR part 60, appendix A, Method 7E Determination of nitrogen oxides emissions; or 40 CFR part 60, appendix A, Method 10 Determination of carbon monoxide emissions.

[Explanatory note: According to information provided by the Permittee, the engines currently operating as of the issuance of this Part 71 Permit, identified as engines C202, C203, C204, C206 and C207 do not use oxygen sensors. Requirements 1.(b) is included from the Consent Decree Case No. 2:08-CV-00167-TS-PMV, Paragraph 23, to accommodate any allowed off-permit change(s) to install oxygen sensors on any of the engines.]

# VI. <u>Facility-Wide Requirements [40 CFR 71.6(a)(1)]</u>

Conditions in this section of this permit apply to all emissions units located at the source, including any units not specifically listed in Table 2 of the Facility Emission Points section of this permit.

A. Recordkeeping Requirements [40 CFR 71.6(a)(3)(ii)]

The Permittee shall comply with the following generally applicable recordkeeping requirements:

- 1. If the Permittee determines that his or her stationary source that emits (or has the potential to emit, without considering controls) one or more hazardous air pollutants (HAPs) is not subject to a relevant standard or other requirement established under 40 CFR part 63, the Permittee shall keep a record of the applicability determination on site at the source for a period of 5 years after the determination, or until the source changes its operations to become an affected source, whichever comes first. The record of the applicability determination shall include an analysis (or other information) that demonstrates why the Permittee believes the source is unaffected (e.g., because the source is an area source). [40 CFR 63.10(b)(3)]
- 2. Records shall be kept of off permit changes, as required by the Off Permit Changes section (VII.O.) of this permit.

# **B. Reporting Requirements** [40 CFR 71.6(a)(3)(iii)]

1. The Permittee shall submit to the EPA all reports of any required monitoring under this permit semiannually. The first report has already been submitted for this facility. Reports shall be submitted semi-annually, by January 31<sup>st</sup> and July 31<sup>st</sup> of each year. The report due on January 31<sup>st</sup> shall cover the 6-month period ending on the last day of December before the report is due. The report due on July 31<sup>st</sup> shall cover the 6-month period ending on the last day of June before the report is due. All instances of deviations from permit requirements shall be clearly identified in such reports. All required reports shall be certified by a responsible official consistent with the Submissions section of this permit.

[Explanatory note: To help Part 71 Permittees meet reporting responsibilities, the EPA has developed a form "SIXMON" for 6-month monitoring reports. The form may be found on the EPA's website at: <u>https://www.epa.gov/title-v-operating-permits/epa-issued-operating-permits</u>]

- 2. "Deviation" means any situation in which an emissions unit fails to meet a permit term or condition. A deviation is not always a violation. A deviation can be determined by observation or through review of data obtained from any testing, monitoring, or recordkeeping established in accordance with §71.6(a)(3)(i) and (a)(3)(ii). For a situation lasting more than 24 hours which constitutes a deviation, each 24-hour period is considered a separate deviation. Included in the meaning of deviation are any of the following:
  - (a) A situation where emissions exceed an emission limitation or standard;
  - (b) A situation where process or emissions control device parameter values indicate that an emission limitation or standard has not been met; or
  - (c) A situation in which observations or data collected demonstrate noncompliance with an emission limitation or standard or any work practice or operating condition required by the permit.
- 3. The Permittee shall promptly report to the EPA deviations from permit requirements, including those attributable to upset conditions as defined in this permit, the probable cause of such deviations, and any corrective actions or preventive measures taken. "Prompt" is defined as follows:

- (a) Any definition of "prompt" or a specific time frame for reporting deviations provided in an underlying applicable requirement as identified in this permit.
- (b) Where the underlying applicable requirement fails to address the time frame for reporting deviations, reports of deviations will be submitted based on the following schedule:
  - (i) For emissions of a HAP or a toxic air pollutant (as identified in the applicable regulation) that continue for more than an hour in excess of permit requirements, the report shall be made within 24 hours of the occurrence.
  - (ii) For emissions of any regulated air pollutant, excluding a HAP or a toxic air pollutant that continues for more than 2 hours in excess of permit requirements, the report shall be made within 48 hours.
  - (iii) For all other deviations from permit requirements, the report shall be submitted with the semi-annual monitoring report.
- (c) If any of the conditions in (i) or (ii) of paragraph (b) above are met, the Permittee shall notify the EPA by telephone (1-800-227-6312), facsimile (303-312-6409), or by email to r8airreportenforcement@epa.gov based on the timetables listed above. [Notification shall specify that this notification is a deviation report for a Part 71 permit]. A written notice, certified consistent with the Submissions section of this permit shall be submitted within ten working days of the occurrence. All deviations reported under this section shall also be identified in the 6-month report required under Condition 1 in this section of this permit.

[Explanatory note: To help Part 71 Permittees meet reporting responsibilities, the EPA has developed a form "PDR" for prompt deviation reporting. The form may be found on the EPA's website at: <u>https://www.epa.gov/title-v-operating-permits/epa-issued-operating-permits</u>]

## VII. <u>General Provisions</u>

## A. Annual Fee Payment [40 CFR 71.9]

- 1. The Permittee shall pay an annual permit fee in accordance with the procedures outlined below.
- 2. The Permittee shall pay the annual permit fee each year no later than April 1<sup>st</sup>. The fee shall cover the previous calendar year.
- 3. The fee payment shall be in United States currency and shall be paid by money order, bank draft, certified check, corporate check, or electronic funds transfer payable to the order of the U.S. Environmental Protection Agency.
- 4. The Permittee shall send fee payment and a completed fee filing form to:

<b>For regular U.S. Postal Service mail</b> (FedEx, Airborne, DHL, and UPS)	For non-U.S. Postal Service express mail
U.S. Environmental Protection Agency FOIA and Miscellaneous Payments	U.S. Bank Government Lockbox 979078

Cincinnati Finance Center P.O. Box 979078 St. Louis, Missouri 63197-9000 U.S. EPA FOIA & Misc. Payments 1005 Convention Plaza SL-MO-C2-GL St. Louis, Missouri 63101

5. The Permittee shall send an updated fee calculation worksheet form and a photocopy of each fee payment check (or other confirmation of actual fee paid) submitted annually by the same deadline as required for fee payment to the address listed in the Submissions section of this permit.

[Explanatory note: The fee filing form "FF" and the fee calculation worksheet form "FEE" may be found on the EPA's website at: <u>https://www.epa.gov/title-v-operating-permits/epa-issued-operating-permits</u>]

- 6. Basis for calculating annual fee:
  - (a) The annual emissions fee shall be calculated by multiplying the total tons of actual emissions of all "regulated pollutants (for fee calculation)" emitted from the source by the presumptive emissions fee (in dollars per ton) in effect at the time of calculation.
    - (i) "Actual emissions" means the actual rate of emissions in tpy of any regulated pollutant (for fee calculation) emitted from a Part 71 source over the preceding calendar year. Actual emissions shall be calculated using each emissions unit's actual operating hours, production rates, in-place control equipment, and types of materials processed, stored, or combusted during the preceding calendar year.
    - (ii) Actual emissions shall be computed using methods required by the permit for determining compliance, such as monitoring or source testing data.
    - (iii) If actual emissions cannot be determined using the compliance methods in the permit, the Permittee shall use other federally recognized procedures.

# [Explanatory note: The presumptive fee amount is revised each calendar year to account for inflation, and it is available from the EPA prior to the start of each calendar year.]

- (b) The annual emissions fee shall be increased by a GHG fee adjustment for any source that has initiated an activity listed in table at \$71.9(c)(8) since the fee was last paid. The GHG fee adjustment shall be equal to the set fee provided in the table at \$71.9(c)(8) for each activity that has been initiated since the fee was last paid.
- (c) The Permittee shall exclude the following emissions from the calculation of fees:
  - (i) The amount of actual emissions of each regulated pollutant (for fee calculation) that the source emits in excess of 4,000 tpy;
  - (ii) Actual emissions of any regulated pollutant (for fee calculation) already included in the fee calculation; and
  - (iii) The quantity of actual emissions (for fee calculation) of insignificant activities [defined in 40 CFR 71.5(c)(11)(i)] or of insignificant emissions levels from emissions at the source identified in the Permittee's application pursuant to 40 CFR 71.5(c)(11)(ii).
- 7. Fee calculation worksheets shall be certified as to truth, accuracy, and completeness by a

#### responsible official.

# [Explanatory note: The fee calculation worksheet form already incorporates a section to help you meet this responsibility.]

- 8. The Permittee shall retain fee calculation worksheets and other emissions-related data used to determine fee payment for 5 years following submittal of fee payment. [Emission-related data include, for example, emissions-related forms provided by the EPA and used by the Permittee for fee calculation purposes, emissions-related spreadsheets, and emissions-related data, such as records of emissions monitoring data and related support information required to be kept in accordance with 40 CFR 71.6(a)(3)(ii).]
- 9. Failure of the Permittee to pay fees in a timely manner shall subject the Permittee to assessment of penalties and interest in accordance with 40 CFR 71.9(l).
- 10. When notified by the EPA of underpayment of fees, the Permittee shall remit full payment within 30 days of receipt of notification.
- 11. A Permittee who thinks an EPA-assessed fee is in error and who wishes to challenge such fee, shall provide a written explanation of the alleged error to the EPA along with full payment of the EPA assessed fee.
- **B.** Annual Emissions Inventory [40 CFR 71.9(h)(1) and (2)]
- 1. The Permittee shall submit an annual emissions report of its actual emissions for both criteria pollutants and regulated HAPs for this source for the preceding calendar year for fee assessment purposes. The annual emissions report shall be certified by a responsible official and shall be submitted each year to the EPA by April 1<sup>st</sup>.
- 2. The annual emissions report shall be submitted to the EPA at the address listed in the Submissions section of this permit.

[Explanatory note: An annual emissions report, required at the same time as the fee calculation worksheet by 40 CFR 71.9(h), has been incorporated into the fee calculation worksheet form as a convenience.]

- **C. Compliance Requirements** [40 CFR 71.6(a)(6), Section 113(a) and 113(e)(1) of the CAA, and 40 CFR 51.212, 52.12, 52.33, 60.11(g), 61.12]
- 1. Compliance with the Permit
  - (a) The Permittee must comply with all conditions of this Part 71 permit. Any permit noncompliance constitutes a violation of the CAA and is grounds for enforcement action;
  - (b) For permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.
  - (c) It shall not be a defense for a Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the

conditions of this permit.

- (d) For the purpose of submitting compliance certifications in accordance with §71.6(c)(5), or establishing whether or not a person has violated or is in violation of any requirement of this permit, nothing shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed.
- 2. Compliance Schedule [40 CFR 71.5(c)(8)(iii)]
  - (a) For applicable requirements with which the source is in compliance, the source will continue to comply with such requirements.
  - (b) For applicable requirements that will become effective during the permit term, the source shall meet such requirements on a timely basis.
- 3. Compliance Certifications [40 CFR 71.6(c)(5)]
  - (a) The Permittee shall submit to the EPA a certification of compliance with permit terms and conditions, including emission limitations, standards, or work practices annually by January 31<sup>st</sup>, and shall cover the same 12-month period as the two consecutive semiannual monitoring reports.

[Explanatory note: To help Part 71 Permittees meet reporting responsibilities, the EPA has developed a reporting form for annual compliance certifications. The form may be found on the EPA's website at: https://www.epa.gov/title-v-operating-permits/epa-issued-operating-permits ]

- (b) The compliance certification shall be certified as to truth, accuracy, and completeness by a responsible official consistent with 40 CFR 71.5(d).
- (c) The certification shall include the following:
  - (i) Identification of each permit term or condition that is the basis of the certification;
  - (ii) The identification of the method(s) or other means used for determining the compliance status of each term and condition during the certification period, and whether such methods or other means provide continuous or intermittent data. Such methods and other means shall include, at a minimum, the methods and means required in this permit. If necessary, the Permittee also shall identify any other material information that must be included in the certification to comply with Section 113(c)(2) of the CAA, which prohibits knowingly making a false certification or omitting material information;
  - (iii) The status of compliance with each term and condition of the permit for the period covered by the certification based on the method or means designated in (ii) above. The certification shall identify each deviation and take it into account in the compliance certification;
  - (iv) Such other facts as the EPA may require to determine the compliance status of the source; and
  - (v) Whether compliance with each permit term was continuous or intermittent.

## **D. Duty to Provide and Supplement Information** [40 CFR 71.6(a)(6)(v), 71.5(a)(3), and 71.5(b)]

- 1. The Permittee shall furnish to the EPA, within a reasonable time, any information that the EPA may request in writing to determine whether cause exists for modifying, revoking, and reissuing, or terminating the permit, or to determine compliance with the permit. Upon request, the Permittee shall also furnish to the EPA copies of records that are required to be kept pursuant to the terms of the permit, including information claimed to be confidential. Information claimed to be confidential must be accompanied by a claim of confidentiality according to the provisions of 40 CFR part 2, subpart B.
- 2. The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information. In addition, a Permittee shall provide additional information as necessary to address any requirements that become applicable after the date a complete application is filed, but prior to release of a draft permit.
- **E.** Submissions [40 CFR 71.5(d), 71.6(c)(1) and 71.9(h)(2)]
- 1. Any document (application form, report, compliance certification, etc.) required to be submitted under this permit shall be certified by a responsible official as to truth, accuracy, and completeness. Such certifications shall state that based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

[Explanatory note: the EPA has developed a reporting form "CTAC" for certifying truth, accuracy and completeness of Part 71 submissions. The form may be found on the EPA's website at: https://www.epa.gov/title-v-operating-permits/epa-issued-operating-permits]

All fee calculation worksheets and applications for renewals and permit modifications shall be submitted to:

Part 71 Permit Contact, Air Permitting and Monitoring Branch, 8ARD-PM U.S. Environmental Protection Agency, Region 8 1595 Wynkoop Street Denver, Colorado 80202-1129

2. Except where otherwise specified, all reports, test data, monitoring data, notifications, and compliance certifications shall be submitted to:

Branch Chief, Air and Toxics Enforcement Branch, 8ENF-AT Enforcement and Compliance Assurance Division U.S. Environmental Protection Agency, Region 8 1595 Wynkoop Street Denver, Colorado 80202-1129

F. Severability Clause [40 CFR 71.6(a)(5)]

The provisions of this permit are severable, and in the event of any challenge to any portion of this permit, or if any portion is held invalid, the remaining permit conditions shall remain valid and in force.

# **G. Permit Actions** [40 CFR 71.6(a)(6)(iii)]

This permit may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of a request by the Permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.

# H. Administrative Permit Amendments [40 CFR 71.7(d)]

The Permittee may request the use of administrative permit amendment procedures for a permit revision that:

- 1. Corrects typographical errors;
- 2. Identifies a change in the name, address, or phone number of any person identified in the permit, or provides a similar minor administrative change at the source;
- 3. Requires more frequent monitoring or reporting by the Permittee;
- 4. Allows for a change in ownership or operational control of a source where the EPA determines that no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the current and new Permittee has been submitted to the EPA;
- 5. Incorporates into the Part 71 permit the requirements from preconstruction review permits authorized under an EPA-approved program, provided that such a program meets procedural requirements substantially equivalent to the requirements of 40 CFR 71.7 and 71.8 that would be applicable to the change if it were subject to review as a permit modification, and compliance requirements substantially equivalent to those contained in 40 CFR 71.6; or
- 6. Incorporates any other type of change which the EPA has determined to be similar to those listed in (1) through (5) above.

[Note to Permittee: If 1 through 5 above do not apply, please contact the EPA for a determination of similarity prior to submitting your request for an administrative permit amendment under this provision.]

# I. Minor Permit Modifications [40 CFR 71.7(e)(1)]

- 1. The Permittee may request the use of minor permit modification procedures only for those modifications that:
  - (a) Do not violate any applicable requirement;
  - (b) Do not involve significant changes to existing monitoring, reporting or recordkeeping requirements in the permit;

- (c) Do not require or change a case-by-case determination of an emission limitation or other standard, or a source-specific determination for temporary sources of ambient impacts, or a visibility or increment analysis;
- (d) Do not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed to avoid an applicable requirement to which the source would otherwise be subject. Such terms and conditions include:
  - (i) A federally enforceable emissions cap assumed to avoid classification as a modification under any provision of Title I; and
  - (ii) An alternative emissions limit approved pursuant to regulations promulgated under Section 112(i)(5) of the CAA;
- (e) Are not modifications under any provision of Title I of the CAA; and
- (f) Are not required to be processed as a significant modification.
- 2. Notwithstanding the list of changes ineligible for minor permit modification procedures in 1 above, minor permit modification procedures may be used for permit modifications involving the use of economic incentives, marketable permits, emissions trading, and other similar approaches, to the extent that such minor permit modification procedures are explicitly provided for in an applicable implementation plan or in applicable requirements promulgated by the EPA.
- 3. An application requesting the use of minor permit modification procedures shall meet the requirements of 40 CFR 71.5(c) and shall include the following:
  - (a) A description of the change, the emissions resulting from the change, and any new applicable requirements that will apply if the change occurs;
  - (b) The source's suggested draft permit;
  - (c) Certification by a responsible official, consistent with 40 CFR 71.5(d), that the proposed modification meets the criteria for use of minor permit modification procedures and a request that such procedures be used; and
  - (d) Completed forms for the permitting authority to use to notify affected states as required under 40 CFR 71.8.
- 4. The source may make the change proposed in its minor permit modification application immediately after it files such application. After the source makes the change allowed by the preceding sentence, and until the permitting authority takes any of the actions authorized by 40 CFR 71.7(e)(1)(iv)(A) through (C), the source must comply with both the applicable requirements governing the change and the proposed permit terms and conditions. During this time period, the source need not comply with the existing permit terms and conditions it seeks to modify. However, if the source fails to comply with its proposed permit terms and conditions during this time period, the existing permit terms and conditions it seeks to modify may be enforced against it.

- 5. The permit shield under 40 CFR 71.6(f) may not extend to minor permit modifications.
- J. Significant Permit Modifications [40 CFR 71.7(e)(3), 71.8(d), and 71.5(a)(2)]
- 1. The Permittee must request the use of significant permit modification procedures for those modifications that:
  - (a) Do not qualify as minor permit modifications or as administrative amendments;
  - (b) Are significant changes in existing monitoring permit terms or conditions; or
  - (c) Are relaxations of reporting or recordkeeping permit terms or conditions.
- 2. Nothing herein shall be construed to preclude the Permittee from making changes consistent with Part 71 that would render existing permit compliance terms and conditions irrelevant.
- 3. Permittees must meet all requirements of Part 71 for applications, public participation, and review by affected states and tribes for significant permit modifications. For the application to be determined complete, the Permittee must supply all information that is required by 40 CFR 71.5(c) for permit issuance and renewal, but only that information that is related to the proposed change.

# K. Reopening for Cause [40 CFR 71.7(f)]

The permit may be reopened and revised prior to expiration under any of the following circumstances:

- 1. Additional applicable requirements under the CAA become applicable to a major Part 71 source with a remaining permit term of three or more years. Such a reopening shall be completed no later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions have been extended pursuant to 40 CFR 71.7(c)(3);
- 2. Additional requirements (including excess emissions requirements) become applicable to an affected source under the acid rain program. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit;
- 3. The EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit; or
- 4. The EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements.

# L. **Property Rights** [40 CFR 71.6(a)(6)(iv)]

This permit does not convey any property rights of any sort, or any exclusive privilege.

# M. Inspection and Entry [40 CFR 71.6(c)(2)]

1. Upon presentation of credentials and other documents as may be required by law, the Permittee

shall allow the EPA or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a Part 71 source is located or emissionsrelated activity is conducted, or where records must be kept under the conditions of the permit;
- (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;
- (c) Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
- (d) As authorized by the CAA, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

# **N.** Transfer of Ownership or Operation [40 CFR 71.7(d)(1)(iv)]

A change in ownership or operational control of this source may be treated as an administrative permit amendment if the EPA determines no other change in this permit is necessary and provided that a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the current and new Permittee has been submitted to the EPA.

# **O. Off Permit Changes** [40 CFR 71.6(a)(12) and 40 CFR 71.6(a)(3)(ii)]

The Permittee is allowed to make certain changes without a permit revision, provided that the following requirements are met, and that all records required by this section are kept for a period of five (5) years:

- 1. Each change is not addressed or prohibited by this permit;
- 2. Each change shall meet with all applicable requirements and shall not violate any existing permit term or condition;
- 3. Changes under this provision may not include changes subject to any requirement of 40 CFR parts 72 through 78 or modifications under any provision of Title I of the CAA;
- 4. The Permittee must provide contemporaneous written notice to the EPA of each change, except for changes that qualify as insignificant activities under 40 CFR 71.5(c)(11). The written notice must describe each change, the date of the change, any change in emissions, pollutants emitted, and any applicable requirements that would apply as a result of the change;
- 5. The permit shield does not apply to changes made under this provision;
- 6. The Permittee must keep a record describing all changes that result in emissions of any regulated air pollutant subject to any applicable requirement not otherwise regulated under this permit, and the emissions resulting from those changes;
- 7. The notice shall be kept on site and made available to the EPA on request, in accordance with the

general recordkeeping provision of this permit; and

- 8. Submittal of the written notice required above shall not constitute a waiver, exemption, or shield from applicability of any applicable standard or PSD permitting requirements under 40 CFR 52.21 that would be triggered by the change.
- **P. Permit Expiration and Renewal** [40 CFR 71.5(a)(1)(iii), 71.5(a)(2), 71.5(c)(5), 71.6(a)(11), 71.7(b), 71.7(c)(1), and 71.7(c)(3)]
- 1. This permit shall expire upon the earlier occurrence of the following events:
  - (a) Five years elapse from the date of issuance; or
  - (b) The source is issued a Part 70 or Part 71 permit under an EPA-approved or delegated permit program.
- 2. Expiration of this permit terminates the Permittee's right to operate unless a timely and complete permit renewal application has been submitted at least 6 months but not more than 18 months prior to the date of expiration of this permit.
- 3. If the Permittee submits a timely and complete permit application for renewal, consistent with 40 CFR 71.5(a)(2), but the EPA has failed to issue or deny the renewal permit, then all the terms and conditions of the permit, including any permit shield granted pursuant to 40 CFR 71.6(f) shall remain in effect until the renewal permit has been issued or denied.
- 4. The Permittee's failure to have a Part 71 permit is not a violation of this part until the EPA takes final action on the permit renewal application. This protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit any additional information identified as being needed to process the application by the deadline specified in writing by the EPA.
- 5. Renewal of this permit is subject to the same procedural requirements that apply to initial permit issuance, including those for public participation, affected state, and tribal review.
- 6. The application for renewal shall include the current permit number, description of permit revisions and off permit changes that occurred during the permit term, any applicable requirements that were promulgated and not incorporated into the permit during the permit term, and other information required by the application form.

Appendix A – Consent Decree Case No. 2:08-CV-00167-TS-PMV

## IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF UTAH, CENTRAL DIVISION

## UNITED STATES OF AMERICA,

Plaintiff,

UTE INDIAN TRIBE OF THE UINTAH AND OURAY RESERVATION, FRANCES M. POOWEGUP, IRENE C. CUCH, PHILLIP CHIMBURAS, and RON WOPSOCK,

Plaintiffs-Intervenors

QUESTAR GAS MANAGEMENT COMPANY,

Defendant.

CONSENT DECREE

Case No. 2:08-CV-00167-TS-PMW

District Judge TED STEWART

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WHEREAS, Plaintiff United States of America, (the "United States") on behalf of the United States Environmental Protection Agency ("EPA"), filed a complaint in this action on February 29, 2008, alleging that Defendant QEP Field Services Company ("QEPFS"), formerly known as Questar Gas Management Company, violated Section 112 of the Clean Air Act ("Act"), 42 U.S.C. § 7412, Part C, Title 1 of the Act, 42 U.S.C. §§ 7470-7479, and Title V of the Act, 42 U.S.C. §§ 7661-7661f, at its Coyote Wash, Chapita, Island, Wonsits Valley, and River Bend compressor stations (the "Facilities").

WHEREAS, EPA administers the Act's programs for National Emission Standards for Hazardous Air Pollutants ("NESHAP"), Prevention of Significant Deterioration ("PSD"), and federal operating permits under Title V of the Act with respect to the Facilities located on Indian country land in Utah.

WHEREAS, the Complaint alleges, <u>inter alia</u>, QEPFS's Coyote Wash, Chapita, Island, Wonsits Valley, and River Bend compressor stations are all major sources of HAP emissions under Section 112(a)(1) of the Act, 42 U.S.C. § 7412(a)(1), are subject to HH requirements pursuant to 40 C.F.R. §§ 63.760(b)(1) & 63.765(a), and that QEPFS failed to comply with numerous HH requirements concerning the Facilities.

WHEREAS, the Complaint alleges, <u>inter alia</u>, QEPFS's Coyote Wash, Chapita, Island, Wonsits Valley, and River Bend compressor stations are major sources of HAP emissions, their RICE units are subject to ZZZZ regulations pursuant to 40 C.F.R. § 63.6590(a), and QEPFS failed to comply with numerous ZZZZ requirements regarding the Facilities.

WHEREAS, the Complaint alleges, <u>inter alia</u>, QEPFS's Coyote Wash, Chapita, Island, Wonsits Valley, and River Bend compressor stations are each a "major emitting facility" as

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defined by Section 169(1) of the Act, 42 U.S.C. § 7479(1), a "major stationary source" as defined by 40 C.F.R. § 52.21(b)(1)(i)(b), and that QEPFS failed to comply with permit requirements concerning the facilities pursuant to Section 165(a) of the Act, 42 U.S.C. § 7475(a), and 40 C.F.R. §§ 52.21(a)(2)(iii), and (j) - (q) (2007).

WHEREAS, the Complaint alleges, <u>inter alia</u>, QEPFS's Coyote Wash, Chapita, Island, Wonsits Valley, and River Bend compressor stations are each a "Part 71 Source" within the meaning of 40 C.F.R. §§ 71.1 and 71.3, subject to the Title V operating permit program set forth in Title V of the Act at 42 U.S.C. § 7661 - 7661f, and that QEPFS failed to file applications for Part 71 federal operating permits within 12 months after the Chapita and Island Facilities became Part 71 sources and failed to comply with numerous 40 C.F.R. § 71.9 requirements concerning the facilities.

WHEREAS, on October 7, 2010, the Court granted the motion to intervene of Frances M. Poowegup, Irene C. Cuch, Phillip Chimburas, Curtis Cesspooch, and Richard Jenks, Jr., on May 15, 2012 granted the motion to intervene of Ron Wopsock, and on May 15, 2012 granted the motion to dismiss the claims of Curtis Cesspooch and Richard Jenks, Jr., with prejudice.

WHEREAS, Defendant QEPFS has denied and continues to deny the allegations in the Complaint and Complaint-in-Intervention and maintains that it has been and remains in compliance with the Act, is not liable for civil penalties or injunctive relief, and that it is agreeing to the obligations imposed by this Consent Decree solely to avoid further costs and uncertainty of litigation.

WHEREAS, the United States, QEPFS, and Plaintiff-Intervenors recognize, and the Court by entering this Consent Decree finds, that this Consent Decree has been negotiated by the

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Parties in good faith and will avoid litigation between the Parties and that this Consent Decree is fair, reasonable, and in the public interest.

NOW, THEREFORE, before the taking of any testimony, without the adjudication or admission of any issue of fact or law except as provided in Section I, and with the consent of the Parties, IT IS HEREBY ADJUDGED, ORDERED, AND DECREED as follows:

#### I. JURISDICTION AND VENUE

1. This Court has jurisdiction over the subject matter of this action, pursuant to 28 U.S.C. §§ 1331, 1345, and 1355, and Section 113(b) of the Act, 42 U.S.C. § 7413(b), and over the Parties. Venue lies in this District pursuant to Section 113(b) of the Act, 42 U.S.C. § 7413(b), and 28 U.S.C. § 1391(c) and 1395(a), because the violations alleged in the Complaint are alleged to have occurred in, and Defendant conducts business in, this judicial district. For purposes of this Decree, or any action to enforce this Decree, Defendant consents to the Court=s jurisdiction over this Decree and any such action and over Defendant and consents to venue in this judicial district.

2. For purposes of this Consent Decree, Defendant agrees that the Complaint states claims upon which relief may be granted pursuant to Section(s) 112 of the Clean Air Act ("Act"), 42 U.S.C. § 7412; Part C, Title 1 of the Act, 42 U.S.C. §§ 7470-7479; and Title V of the Act, 42 U.S.C. §§ 7661-7661f.

#### II. APPLICABILITY

3. The obligations of this Consent Decree apply to and are binding upon the United States, Plaintiff-Intervenors, and Defendant, and upon any successors, assigns, or other entities or persons otherwise bound by law.

4. QEPFS will condition any transfer, in whole or in part, of ownership of, operation of, or other interest (exclusive of any non-controlling non-operational shareholder or security interest) in, any of the Facilities upon the execution by the transferee of a modification to the Consent Decree which makes the terms and conditions of the Consent Decree apply to such Facility applicable to the transferee. As soon as possible prior to the transfer, OEPFS shall notify the United States of the proposed transfer and of the specific Consent Decree provisions that the transferee is assuming. Within a reasonable time thereafter, QEPFS shall provide a certification from the transferee that the transferee has the financial and technical ability to assume the obligations and liabilities under this Consent Decree that are related to the transfer. By no later than sixty (60) days after the transferee executes a document agreeing to substitute itself for QEPFS for all terms and conditions of this Consent Decree that apply to the Facility that is being transferred, the United States, QEPFS, and the transferee shall jointly file with the Court a motion requesting the Court to substitute the transferee as the Defendant for those terms and conditions of this Consent Decree that apply to the Facility that is being transferred (if the United States concurs). If QEPFS does not secure the agreement of the United States to a Joint Motion within sixty (60) days, then QEPFS and the transferee may file a motion without the agreement of the United States. The United States thereafter may file an opposition to the motion. QEPFS will not be released from the obligations and liabilities of any provision of this Consent Decree unless and until the Court grants the motion substituting the transferee as the Defendant to those provisions.

5. Defendant shall provide a copy of this Consent Decree to all officers, employees, and agents whose duties include compliance with any provision of this Decree.

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#### III. DEFINITIONS

6. Terms used in this Consent Decree that are defined in the Act or in regulations promulgated pursuant to the Act shall have the meanings assigned to them in the Act or such regulations, unless otherwise provided in this Decree. Whenever the terms set forth below are used in this Consent Decree, the following definitions shall apply:

a. "Complaint" shall mean the complaint filed by the United States in this action;

b. "Complaint in Intervention" shall mean the complaint, and amendments thereto, filed by the Plaintiff-Intervenors in this action;

c "Consent Decree" or "Decree" shall mean this Decree;

d. "Day" shall mean a calendar day unless expressly stated to be a business day. In computing any period of time under this Consent Decree, where the last day would fall on a Saturday, Sunday, or federal holiday, the period shall run until the close of business of the next business day;

e. "Defendant" shall mean QEP Field Services Company ("QEPFS"), successor by name change to Questar Gas Management Company;

f. "EPA" shall mean the United States Environmental Protection Agency and any of its successor departments or agencies;

g. "Effective Date" shall have the definition provided in Section XIV.

h. "Facilities" (or, individually, "Facility") shall mean Defendant-s Coyote Wash, Chapita, Island, Wonsits Valley, and River Bend compressor stations in Uintah County, Utah. Provided, however, that references to the "Facilities" in Section V (Compliance Requirements) shall not include the River Bend Facility, as that Facility shall be closed in accordance with the terms of this Consent Decree.

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i. "Paragraph" shall mean a portion of this Decree identified by an arabic numeral;

j. "Parties" shall mean the United States, Defendant, Plaintiff-Intervenors, and the Tribe (the latter of which is a party to this action and this Consent Decree to the limited extent that it was granted intervention under the Court's January 13, 2010 Order (Docket No. 142) solely for sovereign jurisdictional issues raised by the claims and defenses in this case, and also for the purpose of Paragraphs 27 and 77 hereof regarding creation by it of an entity to administer the Tribal Clean Air Trust Fund);

k. "Plaintiff-Intervenors" shall mean Frances M. Poowegup, Irene C. Cuch, Phillip Chimburas, and Ron Wopsock;

1. "Section" shall mean a portion of this Decree identified by a roman numeral;

m. "Tribe" shall mean the Ute Indian Tribe of the Uintah and Ouray Reservation; and

n. "United States" shall mean the United States of America, acting on behalf of EPA.

# IV. <u>CIVIL PENALTY</u>

7. Not later than 30 Days after the Effective Date of this Consent Decree, Defendant shall pay the sum of \$3,650,000 to the United States as a civil penalty, together with interest accruing thirty (30) days after the Effective Date, if the Civil Penalty is not timely paid at the rate specified in 28 U.S.C. § 1961 as of the date of lodging.

8. Defendant shall pay the civil penalty due by FedWire Electronic Funds Transfer ("EFT") to the U.S. Department of Justice in accordance with written instructions to be timely provided to Defendant, following lodging of the Consent Decree, by the Financial Litigation Unit of the U.S. Attorney's Office for the District of Utah. At the time of payment, Defendant shall send a copy of the EFT authorization form and the EFT transaction record, together with a

transmittal letter, which shall state that the payment is for the civil penalty owed pursuant to the Consent Decree in United States v. Questar Gas Management Co., and shall reference the civil action number and DOJ case number 90-5-2-1-08432, to the United States in accordance with Section XIII of this Decree (Notices); by email to <u>acctsreceivable.CINWD@epa.gov;</u> and by mail to:

EPA Cincinnati Finance Office 26 Martin Luther King Drive Cincinnati, Ohio 45268

9. Defendant shall not deduct any penalties paid under this Decree pursuant to this Section or Section VIII (Stipulated Penalties) in calculating its federal income tax.

## V. COMPLIANCE REQUIREMENTS

#### A. <u>River Bend Compressor Facility</u>

10. Within 60 days of the effective date of this Consent Decree, QEPFS shall permanently shut-down the River Bend Compressor Facility by taking all equipment out of service and blind-flanging the inlet and outlet piping of the Facility, and withdrawing its March 2006 Part 71 permit application for the Facility.

# B. <u>Equipment Removal Requirements</u>

11. Not later than the Effective Date of this Consent Decree, QEPFS shall remove the glycol dehydration unit reboilers from the Chapita and Coyote Wash Facilities.

12. Not later than 30 days after the Effective Date of this Consent Decree, QEPFS shall place its order for all equipment necessary to remove the TK-200 and TK-300 condensate storage tanks, as identified in QEPFS' October 2006, Title V permit application, from the Coyote Wash Facility. QEPFS shall physically remove such tanks not later than 120 days after receipt of such equipment.

13. Not later than 60 days after the Effective Date of this Consent Decree, QEPFS shall blind flange one rich burn engine from both the Island and Coyote Wash Compressor Facilities (leaving each facility with no more than one rich burn engine), so as to remove such engines from service. Not later than 90 days after the Effective Date of this Consent Decree, QEPFS shall move such engines to the adjacent yard or to another location off site.

14. Not later than 30 days after completing the requirements of Paragraphs 11 - 13 of this Consent Decree, QEPFS shall certify to EPA that it has completed such requirements and shall identify the dates each action was completed.

# C. <u>Dehydrator Requirements</u>

15. The dehydrators located at the Wonsits Valley and Island Facilities are subject to "major source" standards under 40 C.F.R. Part 63, Subpart HH – NESHAPs for oil and natural gas facilities (hereinafter "Subpart HH"). To comply with the control device requirements of Subpart HH, Defendant shall install and operate, within 60 days of the Effective Date of this Consent Decree, flares connected to the existing dehydrators at the Wonsits Valley and Island Facilities pursuant to the requirements of 40 C.F.R. § 63.765(b)(1)(i). Pursuant to 40 C.F.R. § 63.771(d)(1)(iii), the flares shall be designed and operated in accordance with the requirements of 40 C.F.R. § 63.11(b). The initial notification requirements of 40 C.F.R. § 63.9(b)(4) shall be deemed satisfied on the Effective Date of this Consent Decree.se

16. After the installation of the flares required by Paragraph 15, QEPFS shall comply with all other initial compliance determination, notification, and reporting requirements in 40 C.F.R. Part 63, Subparts A and HH within the time set forth in the regulations. For purposes of the initial compliance determination, notification, and reporting requirements of 40 C.F.R. § 63.775(d), the "compliance date" shall be the Effective Date of this Consent Decree.

17. The flares installed pursuant to Paragraph 15 shall achieve a 95% by weight or greater reduction of VOC emissions from the dehydrator process vent stream at all times except as provided in Paragraph 17(b).

a. Compliance with 40 C.F.R. § 63.11(b), and with the associated monitoring and recordkeeping required in 40 C.F.R. §§ 63.773(d)(3)(i)(C) and 63.774(b) and (e), shall be sufficient to determine compliance with this 95% VOC reduction requirement of this Paragraph.

b. During periods of time when the pilot flame at the flares is off, QEPFS shall re-light the pilot flame or route emissions from the dehydrator process vent stream to a back-up combustor as expeditiously as practicable. The back-up combustors shall achieve a 95% by weight or greater reduction of VOC emissions from the dehydrator process vent stream when in use, determined by the pilot flame on the combustor being on when in use. The time period during which the glycol dehydrator is operated without either (1) a flare with the pilot flame on or (2) the back-up combustor with its pilot flame on shall not exceed 140 hours at the Wonsits Valley Facility and 500 hours at the Island Facility. Nothing in this Paragraph shall affect QEPFS's obligation to meet applicable requirements of 40 C.F.R. Part 63.

18. Not later than 90 days after the Effective Date of this Consent Decree, QEPFS shall certify to EPA that the actions required in Paragraph 15 have been completed and the date on which they were completed.

D. <u>Condensate Tanks</u>

19. QEPFS shall, within 30 days of the Effective Date of this Consent Decree, connect the condensate storage tanks at the Chapita (TO-1, TO-2), Island (TO-1, TO-2) and Wonsits Valley Facilities (T-1) to an existing or new combustor at those Facilities. Within 60 Days of the Effective Date of this Consent Decree, QEPFS shall certify to EPA that the design of

the conveyance systems from these condensate storage tanks to the combustors does not, under normal operating conditions, cause or contribute to a release of volatile organic compounds from the storage tanks through thief hatches or pressure relief valves. QEPFS shall equip the combustors with thermocouples (or other heat sensing monitoring devices) to continuously monitor the presence of the pilot flame. QEPFS shall comply with the provisions of this Paragraph at the Coyote Wash Compressor Station (TK-200 and TK-300) until the tanks are removed pursuant to Paragraph 12.

20. QEPFS shall monitor and record the presence of a pilot flame with a continuous recording device, such as a chart recorder or similar device.

21. Not later than 60 days after the Effective Date of this Consent Decree, QEPFS shall certify to EPA that the actions required in Paragraph 19 have been completed and identify the dates on which they were completed.

# E. <u>RICE Requirements</u>

22. RICE with a site rating of 500 hp or greater at the Facilities are subject to 40 C.F.R. Part 63, Subpart ZZZZ-National Emission Standards for Hazardous Air Pollutants from Stationary Reciprocating Internal Combustion Engines (hereinafter "Subpart ZZZZ"). For purposes of Subpart ZZZZ compliance, the Facilities shall become existing affected major sources under Subpart ZZZZ as of the Effective Date of this Consent Decree. The initial notification requirements of 40 C.F.R. § 63.9(b), 40 C.F.R. § 63.6645, and any other initial notifications required by ZZZZ for all existing RICE at the Facilities, shall be deemed satisfied on the Effective Date of this Consent Decree. QEPFS shall thereafter comply with all other compliance demonstration, notification, and reporting requirements of 40 C.F.R. Part 63, Subparts A and ZZZZ by the date set forth in the regulations. For purposes of the testing and

initial compliance requirements in 40 C.F.R. § 63.6610 and the compliance reporting requirements in 40 C.F.R. § 63.6650(b), the "compliance date" and "start up" date shall be the Effective Date of this Consent Decree. Performance tests must be conducted at any load condition within plus or minus 10 percent of 100 percent load unless the engine cannot achieve plus or minus 10 percent of 100 percent load at the time of the test. Under such circumstances, the engine shall be tested at maximum achievable load, and the differential pressure across the catalyst shall be monitored and shall be maintained consistent with operating limitations in Subpart ZZZZ. If the engine load is increased by 20 percent or greater averaged over a 30 day period commencing within 60 days of the last test, then the engine shall be re-tested at the newly achievable maximum load and the corresponding differential pressure established. For the purposes of this provision regarding engine load during and after performance testing, QEPFS shall monitor and record load at each engine.

23. For RICE with a site rating of 500 hp or greater operated at the Facilities, QEPFS shall comply with the requirements specified below:

a. <u>Emissions Control</u>

(1) <u>Rich burn engines</u>. QEPFS has installed and is operating a nonselective catalytic reduction (NSCR) control device and an air-fuel ratio (AFR) device on the rich-burn RICE at the Island and Coyote Wash Facilities. The rich burn RICE at Coyote Wash shall not exceed emission limits of 1.0 gram per horse power hour (g/hp-hr) for NOx and 1.0 g/hp-hr for CO. The rich burn RICE at Island shall not exceed emission limits of 8.0 g/hp-hr for NOx and 5.0 g/hp-hr for CO.

(2) <u>Lean burn engines</u>. QEPFS has installed and is operating an oxidation catalyst control device on each lean burn RICE. All lean burn RICE at the Coyote

Wash and Wonsits Valley Facilities shall not exceed an emission limit of 1.0 g/hp-hr for NOx and 1.0 g/hp-hr for CO, except that engine C206 (Waukesha A27; serial number C-13271/2) at the Wonsits Valley Facility shall not exceed an emission limit of 1.30 g/hp-hr for NOx. The three existing lean burn RICE at the Chapita Facility shall not exceed 2.50 g/hp-hr for NOx and 1.0 g/hp-hr for CO.

b. <u>Emissions Controls Maintenance</u>. Oxygen sensors shall be replaced within 2000 hours of engine run time.

c. <u>Performance Testing for NOx and CO.</u>

(1) Not later than 180 days after the Effective Date of the Consent Decree, QEPFS shall conduct initial performance tests for NOx and CO emissions on each RICE using the test protocol selected from the list below.

(2) QEPFS shall retest each RICE semi-annually using the test protocol selected from the list below. QEPFS shall submit to EPA the test results for NOx and CO with the semi-annual report required pursuant to Subpart ZZZZ.

(3) The test must be conducted at any load condition within plus or minus 10 percent of 100 percent load unless the engine cannot achieve plus or minus 10 percent of 100 percent load at the time of the test. Under such circumstances, the engine shall be tested at maximum achievable load, and the differential pressure across the catalyst shall be monitored and shall be maintained consistent with operating limitations in Subpart ZZZZ. If the engine load is increased by 20 percent or greater averaged over a 30 day period commencing within 60 days of the last test, then the engine shall be re-tested at the newly achievable maximum load and the corresponding differential pressure established. For the purposes of this provision regarding

engine load during and after performance testing, QEPFS shall monitor and record load at each engine.

(4) QEPFS shall select among the following test methods: 40 C.F.R.
Part 60, Appendix A, Method 1 or 1A - Sampling port location and number of traverse points;
40 C.F.R. Part 60, Appendix A, Method 3, 3A or 3B - O2 concentration at inlet and outlet; 40
C.F.R. Part 60, Appendix A, Method 4 - Moisture Content; 40 C.F.R. Part 60, Appendix A,
Method 7E – Determination of nitrogen oxides emissions; 40 C.F.R. Part 60, Appendix A,
Method 10 – Determination of carbon monoxide emissions.

#### F. <u>40 C.F.R. Part 71 (Clean Air Act Title V) Operating Permit Requirements</u>

24. The Coyote Wash, Chapita, Island, and Wonsits Valley Facilities are each subject to the requirements of 40 C.F.R. Part 71. Not later than 180 days after the Effective Date of this Consent Decree, QEPFS shall submit updated Part 71 permit applications for the Wonsits Valley, Coyote Wash, Chapita, and Island Compressor Facilities that reflect current operations. Not later than 60 days after receipt of the Part 71 permit applications, EPA shall notify QEPFS whether the Part 71 permit applications are complete. EPA shall not unreasonably delay its determination that the applications are complete. EPA agrees to propose as Part 71 permit conditions, the specific emission limits, operating parameters, monitoring requirements, and recordkeeping requirements set forth in Paragraphs 15, 16, 17, 19, 20, 22, and 23 in the Part 71 permits that it proposes for public comment. QEPFS may contest any permit conditions inconsistent with this Consent Decree in the proposed Part 71 permits in accordance with the provisions of 40 C.F.R. Part 71.11. The requirements under Paragraphs 15, 16, 17, 19, 20, 22, and 23 are deemed "applicable requirements" under Part 71 and Title V of the Clean Air Act. EPA shall propose for public comment draft Part 71 permits for two of the Facilities within 90

days after each application is deemed complete; EPA shall propose for public comment draft Part 71 permits for the remaining two Facilities within 180 days after each application is deemed complete. The United States agrees that the provisions of Paragraphs 15, 16, 17, 19, 20, 22, and 23 of this Consent Decree include adequate monitoring to assure that the Facilities meet the limits, standards, and requirements set forth in this Decree.

# G. <u>Limits on Emissions</u>

25. The emission limits and control requirements set forth in Paragraphs 15, 16, 17, 22, and 23 of this Consent Decree are "federally enforceable" and "legally enforceable" for purposes of calculating the potential to emit of hazardous air pollutants, VOCs, NOx, and CO emissions at the Coyote Wash, Chapita, Wonsits Valley, and Island Facilities under the Clean Air Act and any implementing regulations, including PSD/NSR applicability. In addition, the monitoring, reporting, and recordkeeping requirements provided for in this Consent Decree ensure that the emission limits and control requirements are enforceable as a practical matter, which is sometimes referred to as "practicably enforceable."

# VI. ADDITIONAL INJUNCTIVE RELIEF/TRIBAL CLEAN AIR MITIGATION PROJECT

26. Not later than 180 days after the Effective Date of this Consent Decree, QEPFS shall convert all natural gas powered pneumatic instrument control systems at the Facilities to compressed instrument air systems. Not later than 30 days after completing this project, QEPFS shall submit a report to EPA with a description of the work completed.

27. Not later than 60 Days after the Effective Date of this Consent Decree, Plaintiff-Intervenors shall form a non-profit corporation (referred to herein as the "Tribal Clean Air Trust Fund") in accordance with applicable Utah or tribal law and this Paragraph of the Decree, including the filing of bylaws and articles of incorporation, to fund beneficial environmental

projects on the Uintah and Ouray Reservation of Northern Utah, including projects to reduce emissions of air pollution on the Reservation, mitigate the impacts of air pollution on tribal members, screen for air pollution related health impacts among tribal members, or educate tribal members about the deleterious impacts of air pollution on public health and the environment. Creation of the Tribal Clean Air Trust Fund under tribal law is contingent on the creation of a non-profit corporation for the purposes set forth in this Consent Decree, including the provisions in this Paragraph concerning the uses of and limitations on assets of the Tribal Clean Air Trust Fund, that was subject to timely review and consent of the Parties prior to its creation.

a. The assets of the Tribal Clean Air Trust Fund shall not be commingled with property of the Ute Indian Tribe of the Uintah and Ouray Reservation, and grants from the Tribal Clean Air Trust Fund shall not be made to or for the benefit of any Party to this action. Assets of the Tribal Clean Air Trust Fund shall not be used to enforce this Consent Decree directly or indirectly or to pursue any claim, action, demand, or proceeding against QEPFS or its employees, affiliates, successors, or assigns, including but not limited to claims under the Clean Air Act, and the bylaws and/or articles of incorporation of the Tribal Charitable Trust Fund shall expressly state this limitation on the use of its assets.

b. In satisfaction of the claims of Plaintiff-Intervenors, not later than 90 Days after the Effective Date of this Consent Decree, or such later date as provided in Paragraph 27.c, below, Defendant shall pay \$350,000 to the Tribal Clean Air Trust Fund, payable in accordance with written instructions that shall be provided to Defendant by the Tribal Clean Air Trust Fund.

c. In the event bylaws and articles of incorporation governing the administration of the Tribal Clean Air Trust Fund as required in Paragraph 27, above, have not been timely filed with the State of Utah or pursuant to tribal law, or if the Tribal Clean Air Trust

Fund has not provided payment instructions as required in Paragraph 27.b, Defendant shall not make the payment required in Paragraph 27.b. In that event Defendant shall make the payment required within 30 Days of receiving the bylaws, articles of incorporation, and payment instructions; except that if the Plaintiff-Intervenors (or the Board of Directors of the Tribal Clean Air Trust Fund) do not establish and provide the bylaws or articles of incorporation within 120 Days of the Effective Date of this Consent Decree, QEPFS's obligation to make the payment required in Paragraph 27.b shall terminate.

d. Plaintiff-Intervenors' right to enforce QEPFS's obligations under this Consent Decree, whether through dispute resolution, an action in court, or any other means shall be limited to a claim or dispute with respect to QEPFS's obligation to make the payment required under this Paragraph 27.

#### VII. <u>REPORTING REQUIREMENTS</u>

28. On the date QEPFS submits its annual or other periodic reports pursuant to 40 C.F.R. Subparts HH or ZZZZ or, if no such reports are submitted during a calendar year, not later than January 31 of the succeeding calendar year, Defendant shall submit a report for the preceding year that shall include a description of any non-compliance with the requirements of this Consent Decree and an explanation of the violation's likely cause and of the remedial steps taken, or to be taken, to prevent or minimize such violation. If the cause of a violation cannot be fully explained at the time the report is due, Defendant shall so state in the report. Defendant shall thereafter investigate the cause of the violation and shall then submit an amendment to the report, including a full explanation of the cause of the violation, within 30 Days of the Day Defendant becomes aware of the cause of the violation. Nothing in this Paragraph or the

following Paragraph relieves Defendant of its obligation to provide the notice required by Section IX of this Consent Decree (Force Majeure).

29. Whenever any violation of this Consent Decree, or any other event affecting Defendant's performance under this Decree poses an immediate threat to the public health or welfare or the environment, Defendant shall notify EPA orally or by electronic or facsimile transmission as soon as possible, but no later than 24 hours after Defendant first knew of the violation or event. This procedure is in addition to the requirements set forth in the preceding Paragraph.

30. All reports shall be submitted to the EPA official designated in Section XIII of this Consent Decree (Notices).

31. Each report submitted by Defendant under this Section shall be signed by an official of the submitting party and include the following certification:

I certify that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

This certification requirement does not apply to emergency or similar notifications where compliance would be impractical.

32. The reporting requirements of this Consent Decree do not relieve Defendant of any reporting obligations required by the Clean Air Act or implementing regulations, or by any other federal, state, or local law, regulation, permit, or other requirement.

33. Any information provided pursuant to this Consent Decree may be used by the United States in any proceeding to enforce the provisions of this Consent Decree and as otherwise permitted by law.

# VIII. STIPULATED PENALTIES

34. Defendant shall be liable for stipulated penalties to the United States for violations of this Consent Decree as specified below, unless excused under Section IX (Force Majeure) or Section X (Dispute Resolution). Only as specified below, a violation includes failing to perform any obligation required by the terms of this Decree, including any work plan or schedule approved under this Decree, according to all applicable requirements of this Decree and within the specified time schedules established by or approved under this Decree.

35. <u>Late Payment of Civil Penalty</u>. If Defendant fails to pay the civil penalty required to be paid under Section IV of this Decree (Civil Penalty) when due, Defendant shall pay a stipulated penalty of \$1000 per Day for each Day that the payment is late.

# 36. <u>Stipulated Penalty Amounts</u>:

# a. Dehydrators

	Violation	Stipulated Penalty
1.	For failure to install and operate flares and	For each unit: \$1,000 per day for the first
	combustors as specified in Paragraph 15	30 days of noncompliance, \$1,500 per day
	and 17.	from the 31 <sup>st</sup> to 60 <sup>th</sup> day of noncompliance, and
		\$2,000 per day thereafter.

# b. Condensate Tanks

	Violation	Stipulated Penalty
1.	For failure to comply with the obligations specified in Paragraph 19.	For each unit: \$1,000 per day for the first 30 days of noncompliance, \$1,500 per day from the 31 <sup>st</sup> to 60 <sup>th</sup> day of noncompliance, and \$2,000 per day thereafter.
2.	For failure to remove condensate tanks as specified in Paragraph 12.	For each unit: \$1,000 per day for the first 30 days of noncompliance, \$1,500 per day from the 31 <sup>st</sup> to 60 <sup>th</sup> day of noncompliance, and \$2,000 per day thereafter.

# c. Compressor Engines

	Violation	Stipulated Penalty
1.	For failure to blind flange engines as specified in Paragraph 13.	For each unit: \$1,000 per day for the first 30 days of noncompliance, \$1,500 per day from the 31 <sup>st</sup> to 60 <sup>th</sup> day of noncompliance, and \$2,000 per day thereafter.
2.	For failure remove engines as specified in Paragraph 13.	For each unit: \$500 per day for the first 30 days of noncompliance, \$1,000 per day from the 31 <sup>st</sup> to 60 <sup>th</sup> day of noncompliance, and \$1,500 per day thereafter.
3.	For failure to conduct tests on the RICE emission controls as required by Paragraph 23(c).	For each unit: \$500 per day for the first 30 days of noncompliance, \$1,000 per day from the 31 <sup>st</sup> to 60 <sup>th</sup> day of noncompliance, and \$1,500 per day thereafter.
4.	For failure to meet the emissions limits in Paragraph 23(a).	For each unit: \$500 per day for the first 30 days of noncompliance, \$1,000 per day from the 31 <sup>st</sup> to 60 <sup>th</sup> day of noncompliance, and \$1,500 per day thereafter.
5.	For failure to meet the requirements of Paragraph 23(b).	For each unit: \$500 per day for the first 30 days of noncompliance, \$1,000 per day from the 31 <sup>st</sup> to 60 <sup>th</sup> day of noncompliance, and \$1,500 per day thereafter.

# d. Pneumatic Controllers

	Violation	Stipulated Penalty
1.	For failure to convert natural gas powered	For each unit: \$200 per day for the first
	pneumatic instrument control systems to	30 days of noncompliance, \$500 per day from
	compressed instrument air systems as	the 31 <sup>st</sup> to 60 <sup>th</sup> day of noncompliance, and
	specified in Paragraph 26.	\$1,000 per day thereafter.

# e. General Recordkeeping/Reporting Requirements

	Violation	Stipulated Penalty
1.	For failure to maintain records or submit	For each violation: \$200 per day for the first
	reports as required by Paragraphs 14, 17,	30 days of noncompliance, \$500 per day from
	18, 20, 21, 22, 23(c)(3), and 28.	the $31^{\text{st}}$ to $60^{\text{th}}$ day of noncompliance, and
		\$1,000 per day thereafter.

37. Except as provided in Paragraph 40 and its subparts below, stipulated penalties under this Section shall begin to accrue on the Day after performance is due or on the Day a violation occurs, whichever is applicable, and shall continue to accrue until performance is satisfactorily completed or until the violation ceases. Stipulated penalties shall accrue simultaneously for separate violations of this Consent Decree.

38. QEPFS shall pay stipulated penalties upon written demand by the United States no later than sixty (60) days after QEPFS receives such demand. A demand for the payment of stipulated penalties shall identify the particular violation(s) to which the stipulated penalty relates, the stipulated penalty amount that the United States is demanding for each violation (as best can be estimated), the calculation method underlying the demand, and the grounds upon which the demand is based.

39. The United States may in the unreviewable exercise of its discretion, reduce or waive stipulated penalties otherwise due it under this Consent Decree.

40. Stipulated penalties shall not accrue and need not be paid during any Dispute Resolution, as provided below:

a. In the event of a dispute over stipulated penalties, stipulated penalties will not accrue commencing upon the date that QEPFS notifies the United States of a dispute in accordance with Paragraph 55 if QEPFS has placed the disputed amount demanded in a commercial escrow account with interest.

b. If the dispute is resolved by agreement or by a decision of the United States that is not appealed to the Court, Defendant shall pay the escrowed amount of penalties or other amount determined to be owing, together with interest, to the United States within 30 Days of the Effective Date of the agreement or the receipt of EPA-s decision or order.

c. If the dispute is appealed to the Court and thereafter is resolved in QEPFS' favor, the escrowed amount plus accrued interest will be returned to QEPFS; otherwise, EPA will be entitled to the amount that was determined to be due by the Court, plus the interest that has accrued in the escrow account on such amount.

41. Defendant shall pay stipulated penalties owing to the United States in the manner set forth and with the confirmation notices required by Paragraph 8 unless the United States provides alternate payment instructions, except that the transmittal letter shall state that the payment is for stipulated penalties and shall state for which violation(s) the penalties are being paid.

42. If Defendant fails to pay stipulated penalties according to the terms of this Consent Decree, Defendant shall be liable for interest on such penalties, as provided for in 28 U.S.C. § 1961, accruing as of the date payment became due. Nothing in this Paragraph shall be construed to limit the United States from seeking any remedy otherwise provided by law for Defendant's failure to pay any stipulated penalties.

43. Subject to the provisions of Section XII of this Consent Decree (Effect of Settlement/Reservation of Rights), the stipulated penalties provided for in this Consent Decree shall be in addition to any other rights, remedies, or sanctions available to the United States for Defendant's violation of this Consent Decree or applicable law. Where a violation of this Consent Decree is also a violation of the Clean Air Act, 43 U.S.C. § 7401, et seq., or its implementing regulations, Plaintiff may seek stipulated penalties or statutory penalties for the violation, but not both.

#### IX. FORCE MAJEURE

44. If any event occurs or fails to occur which causes a delay or impediment to performance in complying with any provision of this Consent Decree that QEPFS believes to be a force majeure, QEPFS shall notify the EPA official specified in Section XIII (Notice) of its force majeure claim in writing as soon as practicable, but in any event within twenty (20) business days of the date when QEPFS first knew of the event or should have known of the event by the exercise of due diligence. In this notice, QEPFS shall specifically reference this Paragraph and describe the anticipated length of time the delay may persist, the cause or causes of the delay, and the measures taken or to be taken by QEPFS to prevent or minimize the delay and the schedule by which those measures will be implemented. QEPFS shall take all reasonable steps to avoid or minimize such delays. The notice required by this part will be effective upon the mailing of the same by overnight mail or by certified mail, return receipt requested, to EPA as specified in Section XIII (Notices).

45. Failure by QEPFS to substantially comply with the notice requirements of Paragraph 44 shall render this Section IX (Force Majeure) voidable by the United States as to the

specific event for which QEPFS has failed to comply with such notice requirement, and, if voided, is of no effect as to the particular event involved.

46. The United States shall notify QEPFS in writing regarding its claim of a delay or impediment to performance within forty-five (45) days of receipt of the force majeure notice provided under Paragraph 44.

47. If the United States agrees that the delay or impediment to performance has been or shall be caused by circumstances beyond the control of QEPFS including any entity controlled by QEPFS and that QEPFS could not have prevented the delay by the exercise of due diligence, the United States and QEPFS shall stipulate in writing to an extension of the required deadline(s) for all requirement(s) affected by the delay by a period equivalent to the delay actually caused by such circumstances. Such stipulation shall be treated as a non-material change to the Consent Decree pursuant to Paragraph 77, and therefore shall not need to be approved by the Court. QEPFS will not be liable for stipulated penalties for the period of any such delay.

48. If the United States does not accept QEPFS's claim of a delay or impediment to performance, QEPFS must submit the matter to the Court for resolution to avoid payment of stipulated penalties, by filing a petition for determination with the Court by no later than 60 Days after receipt of the notice in Paragraph 46. Once QEPFS has submitted this matter to the Court, the United States shall have 60 Days to file its response to the petition. If the Court determines that the delay or impediment to performance has been or shall be caused by circumstances beyond the control of QEPFS including any entity controlled by QEPFS and that the delay could not have been prevented by QEPFS by the exercise of due diligence, QEPFS shall be excused as to that event(s) and delay (including stipulated penalties), for a period of time equivalent to the delay caused by such circumstances.

49. QEPFS shall bear the burden of proving that any delay of any requirement(s) of this Consent Decree was caused by or will be caused by circumstances beyond its/their control, including any entity controlled by it, and that it could not have prevented the delay by the exercise of due diligence. QEPFS shall also bear the burden of proving the duration and extent of any delay(s) attributable to such circumstances. An extension of one compliance date based on a particular event may, but will not necessarily, result in an extension of a subsequent compliance date or dates.

50. Unanticipated or increased costs or expenses associated with the performance of QEPFS's obligations under this Consent Decree shall not constitute circumstances beyond its control or serve as the basis for an extension of time under this Section IX.

51. Notwithstanding any other provision of this Consent Decree, the Parties do not intend that QEPFS's serving of a force majeure notice or the Parties' inability to reach agreement shall cause this Court to draw any inferences nor establish any presumptions adverse to any Party.

52. As part of the resolution of any matter submitted to this Court under this Section IX, the United States and QEPFS by agreement, or the Court, by order, may in appropriate circumstances extend or modify the schedule for completion of work under the Consent Decree to account for the delay in the work that occurred as a result of any delay or impediment to performance agreed to by the United States or approved by this Court. QEPFS shall be liable for stipulated penalties for their failure thereafter to complete the work in accordance with the extended or modified schedule.

#### X. <u>DISPUTE RESOLUTION</u>

53. This Court shall retain jurisdiction of this matter for the purposes of implementing and enforcing the terms and conditions of the Consent Decree and for the purpose of adjudicating all disputes that may arise under the provisions of the Consent Decree, until the Consent Decree terminates in accordance with Section XVII of this Consent Decree (Termination).

54. The dispute resolution procedure set forth in this Section X will be available to resolve any and all disputes arising under this Consent Decree, provided that the Party making such application has made a good faith attempt to resolve the matter with the other Parties.

55. The dispute resolution procedure required herein will be invoked upon the giving of written notice by one of the Parties to this Consent Decree to another advising the other appropriate Party(ies) of a dispute pursuant to this Section X. The notice will describe the nature of the dispute, and will state the noticing Party's position with regard to such dispute. The Party or Parties receiving such notice will acknowledge receipt of the notice and the Parties will expeditiously schedule a meeting to discuss the dispute informally.

56. Disputes submitted to dispute resolution will, in the first instance, be the subject of informal negotiations between the Parties. Such period of informal negotiations will not extend beyond 90 Days from the date of the first meeting between representatives of the Parties, unless the Parties agree in writing that this period should be extended. Failure by the Parties to extend the informal negotiation period in writing will not terminate the informal negotiation period provided that the Parties are continuing to negotiate in good faith. Informal negotiations may include the exchange of written summaries of the Parties' positions.

57. In the event that the Parties are unable to reach agreement during such informal negotiation period as provided in Paragraph 56, the United States shall provide QEPFS, within 90 Days after the end of the informal negotiation period, with a written summary of its position regarding the dispute. QEPFS shall have 30 Days to respond in writing. The position advanced by the United States shall be considered binding unless, within 45 Days of QEPFS's receipt of the written summary of the United States' position, QEPFS files with the Court a petition which describes the nature of the dispute. The United States shall respond to the petition within 45 Days of filing. In resolving the dispute between the Parties, the position of the United States shall be upheld unless QEPFS demonstrates by a preponderance of the evidence in the administrative record that the United States' position was incorrect.

58. Where the nature of the dispute is such that a more timely resolution of the issue is required, a Party may seek shorter time periods than those set forth in this Section X.

59. The Parties do not intend that the invocation of this Section X by a Party shall cause the Court to draw any inferences or establish any presumptions adverse to either Party.

60. As part of the resolution of any dispute submitted to dispute resolution, the Parties, by agreement, or this Court, by order, may, in appropriate circumstances, extend or modify the schedule for completion of work under this Consent Decree to account for the delay in the work that occurred as a result of dispute resolution. QEPFS shall be liable for stipulated penalties for its failure thereafter to complete the work in accordance with the extended or modified schedule

#### XI. INFORMATION COLLECTION AND RETENTION

61. The United States and its representatives, including attorneys, contractors, and consultants, shall have the right of entry into any Facility covered by this Consent Decree, at all reasonable times, upon presentation of credentials, to:

a. monitor the progress of activities required under this Consent Decree;

b. verify any data or information submitted to the United States in

accordance with the terms of this Consent Decree;

c. obtain samples and, upon request, splits of any samples taken by Defendant or its representatives, contractors, or consultants;

d. obtain documentary evidence, including photographs, video, and similar data; and

e. assess Defendant's compliance with this Consent Decree.

62. Upon request, Defendant shall provide EPA or its authorized representatives splits of any samples taken by Defendant. Upon request, EPA shall provide Defendant splits of any samples taken by EPA.

63. Until five years after the termination of this Consent Decree, Defendant shall retain, and shall instruct its contractors and agents to preserve, all non-identical copies of all documents, records, or other information (including documents, records, or other information in electronic form) in its or its contractors= or agents= possession or control, or that come into its or its contractors= or agents= possession or control, and that relate in any manner to Defendant=s performance of its obligations under this Consent Decree. This information-retention requirement shall apply regardless of any contrary corporate or institutional policies or procedures. At any time during this information-retention period, upon request by the United

States, Defendant shall provide copies of any documents, records, or other information required to be maintained under this Paragraph.

64. At the conclusion of the information-retention period provided in the preceding Paragraph, Defendant shall notify the United States at least 90 Days prior to the destruction of any documents, records, or other information subject to the requirements of the preceding Paragraph and, upon request by the United States, Defendant shall deliver any such documents, records, or other information to EPA. Defendant may assert that certain documents, records, or other information is privileged under the attorney-client privilege or any other privilege recognized by federal law. If Defendant asserts such a privilege, it shall provide the following: (1) the title of the document, record, or information; (2) the date of the document, record, or information; (3) the name and title of each author of the document, record, or information; (4) the name and title of each addressee and recipient; (5) a description of the subject of the document, record, or information; and (6) the privilege asserted by Defendant. However, no documents, records, or other information required under this Consent Decree shall be withheld on grounds of privilege.

65. Defendant may also assert that information required to be provided under this Section is protected as Confidential Business Information ("CBI") under 40 C.F.R. Part 2. As to any information that Defendant seeks to protect as CBI, Defendant shall follow the procedures set forth in 40 C.F.R. Part 2.

66. This Consent Decree in no way limits or affects any right of entry and inspection, or any right to obtain information, held by the United States pursuant to applicable federal laws, regulations, or permits, nor does it limit or affect any rights, duties, or obligations of Defendant

regarding entry and inspection or to maintain documents, records, or other information imposed by applicable federal or state laws, regulations, or permits.

#### XII. EFFECT OF SETTLEMENT/RESERVATION OF RIGHTS

67. This Consent Decree resolves:

a. The civil and administrative claims of the United States for the violations alleged in the Complaint filed in this action through the date of lodging and all civil and administrative liability of Defendant for violations at the Facilities through the date of lodging of the following statutory or regulatory provisions: (a) PSD requirements at Part C of Subchapter I of the Act, 42 U.S.C. § 7475, and the regulations promulgated thereunder at 40 C.F.R. § 52.21, insofar as they result from initial construction or modification of the Facilities that resulted in a significant net increase of NOx, VOC and/or CO, and commenced and ceased before the Date of Lodging of the Consent Decree; (b) National Emissions Standards for Hazardous Air Pollutants, 40 C.F.R. Part 63, Subparts A, HH, and ZZZZ; (c) Title V of the Clean Air Act, 42 U.S.C. § 7661; and (d) Section 114 of the Clean Air Act, 42 U.S.C. § 7414.

b. The civil claims of Plaintiff-Intervenors for the violations alleged in the Complaint in Intervention filed in this action through the date of lodging and all civil liability of Defendant to Plaintiff-Intervenors for violations at the Facilities through the date of lodging of the following statutory or regulatory provisions: (a) PSD requirements at Part C of Subchapter I of the Act, 42 U.S.C. § 7475, and the regulations promulgated thereunder at 40 C.F.R. § 52.21, insofar as they result from initial construction or modification of the Facilities that resulted in a significant net increase of NOx, VOC and/or CO, and commenced and ceased before the Date of Lodging of the Consent Decree; (b) National Emissions Standards for Hazardous Air Pollutants,

40 C.F.R. Part 63, Subparts A, HH, and ZZZZ; (c) Title V of the Clean Air Act, 42 U.S.C. § 7661; and (d) Section 114 of the Clean Air Act, 42 U.S.C. § 7414.

c. All claims of the Tribe arising out of the limited grant of intervention under the Court's January 13, 2010 Order (Docket No. 142).

68. The United States reserves all legal and equitable remedies available to enforce the provisions of this Consent Decree, except as expressly stated in Paragraph 67, above. This Consent Decree shall not be construed to limit the rights of the United States to obtain penalties or injunctive relief under the Act or implementing regulations, or under other federal laws, regulations, or permit conditions, except as expressly specified in Paragraph 67. The United States further reserves all legal and equitable remedies to address any imminent and substantial endangerment to the public health or welfare or the environment arising at, or posed by, Defendant's Facilities.

69. In any subsequent administrative or judicial proceeding initiated by the United States for injunctive relief, civil penalties, other appropriate relief relating to the Facilities or Defendant:s violations, Defendant shall not assert, and may not maintain, any defense or claim based upon the principles of waiver, res judicata, collateral estoppel, issue preclusion, claim preclusion, claim-splitting, or other defenses based upon any contention that the claims raised by the United States in the subsequent proceeding were or should have been brought in the instant case, except with respect to claims that have been specifically resolved pursuant to Paragraph 67 of this Section.

70. This Consent Decree is not a permit, or a modification of any permit, under any federal, State, or local laws or regulations. Defendant is responsible for achieving and maintaining complete compliance with all applicable federal, State, and local laws, regulations,

and permits; and Defendant-s compliance with this Consent Decree shall be no defense to any action commenced pursuant to any such laws, regulations, or permits, except as set forth herein. The United States does not, by its consent to the entry of this Consent Decree, warrant or aver in any manner that Defendant-s compliance with any aspect of this Consent Decree will result in compliance with provisions of the Act, 42 U.S.C. § 7401, et seq., or with any other provisions of federal, State, or local laws, regulations, or permits. Provided, however, that no provision of this Consent Decree requires QEPFS to apply for or obtain a permit under the Federal Minor Source Review Program in Indian Country, 40 C.F.R. §§ 49.151-161; any such requirement shall be governed solely by 40 C.F.R. §§ 49.151-161.

71. This Consent Decree shall not be construed to create rights in, or grant any cause of action to, any third party not party to this Consent Decree.

#### XIII. <u>NOTICES</u>

72. Unless otherwise specified herein, whenever notifications, submissions, or communications are required by this Consent Decree, they shall be made in writing and addressed as follows:

Notification to the United States:

Chief, Environmental Enforcement Section Environment and Natural Resources Division U.S. Department of Justice Box 7611 Ben Franklin Station Washington, D.C. 20044-7611 Re: DOJ No. 90-5-2-1-08432

and

Director, Air & Toxics Technical Enforcement Program Office of Enforcement, Compliance and Environmental Justice U.S. Environmental Protection Agency; Region 8 1595 Wynkoop Street Denver, CO 80202

# Notification to EPA:

Director, Air & Toxics Technical Enforcement Program Office of Enforcement, Compliance and Environmental Justice U.S. Environmental Protection Agency Region 8 1595 Wynkoop Street Denver, CO 80202

Notification to Defendant:

Perry H. Richards Senior Vice-President, QEP Resources Inc. 1050 17<sup>th</sup> Street; Suite 500 Denver, CO 80265

Notification to the Plaintiff-Intervenors:

Secretary, Business Committee Ute Indian Tribe of the Uintah and Ouray Reservation PO Box 190 Fort Duchesne, UT 84026

Plaintiff-Intervenors agree that notice to the Secretary of the Business Committee of the Ute

Indian Tribe of the Uintah and Ouray Reservation shall constitute notice to each Plaintiff-

Intervenor.

73. Any Party may, by written notice to the other Parties, change its designated notice

recipient or notice address provided above.

74. Notices submitted pursuant to this Section shall be deemed submitted upon

mailing, unless otherwise provided in this Consent Decree or by mutual agreement of the Parties

in writing.

#### XIV. EFFECTIVE DATE

75. The Effective Date of this Consent Decree shall be the date upon which this Consent Decree is entered by the Court or a motion to enter the Consent Decree is granted, whichever occurs first, as recorded on the Court-s docket.

## XV. RETENTION OF JURISDICTION

76. The Court shall retain jurisdiction over this case until termination of this Consent Decree, for the purpose of resolving disputes arising under this Decree or entering orders modifying this Decree, pursuant to Sections X and XVI, or effectuating or enforcing compliance with the terms of this Decree. The Plaintiff-Intervenors and the Tribe, by virtue of their participation in this litigation and this Consent Decree, have expressly and unequivocally waived sovereign immunity from suit in the federal district court of Utah for the limited purpose of effectuating and enforcing this Consent Decree, including Paragraph 27. The Plaintiff-Intervenors and the Tribe agree that the entity created pursuant to Paragraph 27 (the Tribal Clean Air Trust Fund) shall be considered and deemed an arm of the Tribe and as such also has waived any and all sovereign immunity from suit in the federal district court of Utah for the limited purpose of effectuating and enforcing this Consent Decree, including Paragraph 27.

#### XVI. MODIFICATION

77. This Consent Decree contains the entire agreement of the Parties and shall not be modified by any prior oral or written agreement, representation, or understanding. With the exception of Paragraph 27, which may be modified only by the written agreement of all the Parties, the other terms of this Consent Decree may be modified by a subsequent written agreement signed only by the United States and QEPFS. The United States may consult with the Ute Indian Tribe of the Uintah and Ouray Reservation regarding any modification to this

Consent Decree. Where a modification constitutes a material change to this Decree, it shall be effective only upon approval by the Court.

78. Any disputes concerning modification of this Decree shall be resolved pursuant to Section X of this Decree (Dispute Resolution), provided, however, that, instead of the burden of proof provided by Paragraph 57, the Party seeking the modification bears the burden of demonstrating that it is entitled to the requested modification in accordance with Federal Rule of Civil Procedure 60(b).

# XVII. TERMINATION

79. If QEPFS has completed the requirements of Section V (Compliance Requirements) of this Decree, has thereafter maintained substantial compliance with this Consent Decree for a period of 18 months and has paid the civil penalty and any accrued stipulated penalties as required by this Consent Decree, Defendant may serve upon the United States a Notice of Termination, stating that Defendant has satisfied those requirements, together with all necessary supporting documentation. The Notice of Termination shall not include Paragraphs 17, 19, 20, and 23, which shall survive this Consent Decree.

80. Unless the Plaintiff objects in writing with specific reasons within sixty (60) days of receipt of the certification, the Court shall order that this Consent Decree be terminated on QEPFS's motion. If the Plaintiff objects to QEPFS's certification, then the matter shall be submitted to the Court for resolution under Section X (Dispute Resolution) of this Consent Decree.

81. Termination of this Consent Decree will end the Parties' obligations under this Decree, including obligations under Section V (Compliance Requirements) and Section VIII (Stipulated Penalties), with the exception of the obligations referenced in Paragraphs 17, 19, 20,

and 23, which shall expressly survive termination of this Decree. The obligations referenced in Paragraphs 17, 19, 20, and 23 shall continue for each Facility until such time as QEPFS ceases operation of the Facility; obtains a federal minor source preconstruction permits for the Facility that include emissions limits for the units and pollutants covered in Paragraphs 17, 19, 20, and 23; obtains a PSD permit for the Facility that include emissions limits for the units and pollutants covered in Paragraphs 17, 19, 20, and 23; or some combination thereof for each Facility.

82. Upon Termination of this Consent Decree pursuant to Paragraph 80, if Title V permits have been issued containing the applicable requirements contained in Paragraphs 17, 19, 20, and 23, Plaintiff shall enforce such applicable requirements through the Title V permits and the Act.

83. Upon Termination of this Consent Decree pursuant to Paragraph 80, if Title V permits have not been issued or have been issued and expired:

a. For violations of "applicable requirements" contained in Section V other than Paragraphs 17, 19, 20, and 23, Plaintiff shall enforce such "applicable requirements" through Section 113 of the CAA, and not through this Consent Decree.

b. For violations of "applicable requirements" contained in Paragraphs 17,
19, 20, and 23, Plaintiff shall enforce such "applicable requirements" through this Consent
Decree pursuant to motion to the Court.

## XVIII. <u>COSTS</u>

84. The Parties shall bear their own costs in this action, including attorneys' fees.

# XIX. PUBLIC PARTICIPATION

85. This Consent Decree shall be lodged with the Court for a period of not less than 30 Days for public notice and comment in accordance with 28 C.F.R. § 50.7. The United States

reserves the right to withdraw or withhold its consent if the comments regarding the Consent Decree disclose facts or considerations indicating that the Consent Decree is inappropriate, improper, or inadequate. Defendant consents to entry of this Consent Decree without further notice and agrees not to withdraw from or oppose entry of this Consent Decree by the Court or to challenge any provision of the Decree, unless the United States has notified Defendant in writing that it no longer supports entry of the Decree.

#### XX. <u>SIGNATORIES/SERVICE</u>

86. Each undersigned representative of Defendant and the Assistant Attorney General for the Environment and Natural Resources Division of the Department of Justice certifies that he or she is fully authorized to enter into the terms and conditions of this Consent Decree and to execute and legally bind the Party he or she represents to this document.

87. This Consent Decree may be signed in counterparts, and its validity shall not be challenged on that basis. Each Party agrees to accept service of process by mail with respect to all matters arising under or relating to this Consent Decree and to waive the formal service requirements set forth in Rules 4 and 5 of the Federal Rules of Civil Procedure and any applicable Local Rules of this Court including, but not limited to, service of a summons.

#### XXI. INTEGRATION

88. This Consent Decree constitutes the final, complete, and exclusive agreement and understanding among the Parties with respect to the settlement embodied in the Decree and supercedes all prior agreements and understandings, whether oral or written. No other document, nor any representation, inducement, agreement, understanding, or promise, constitutes any part of this Decree or the settlement it represents, nor shall it be used in construing the terms of this Decree.

# XXII. FINAL JUDGMENT

89. Upon approval and entry of this Consent Decree by the Court, this Consent Decree shall constitute a final judgment of the Court as to the United States, the Tribe, Plaintiff- Intervenors, and Defendant.

Dated and entered this 3<sup>rd</sup> day of July, 2012

# **EXHIBIT 5**

Andeavor, Title V Permit Renewal Application Operating Permit No. V-OU-000005-2000.00 from Thomas Gibbons (MPLX) (Apr. 11, 2018).

# V-U0-00005-2018,00



Andeavor 1801 California Street, Suite 1200 Danver, CO 80202

andeavor com

April 10, 2018

Part 71 Permit Contact Air Program, 8P-AR U.S. EPA, Region 8 1595 Wynkoop Street Denver, CO 80202

# RECEIVED APR 1 1 2018

FedEx #771929288168

# RE: Wonsits Valley Compressor Station (Uintah County, Utah) Revised Part 71 Federal Operating Permit Renewal Application Operating Permit No. V-UO-000005-2000.00

Dear Sir or Madam:

Andeavor, operator of the Wonsits Valley Compressor Station, is submitting the enclosed Title V operating permit application on behalf of Andeavor Field Services LLC. The facility currently operates under Operating Permit No. V-UO-000005-2000.00 which expires on October 10, 2018. According to permit Condition VII.Q.2, the permit renewal application must be submitted at least 6 months prior to the date of expiration of the permit; therefore, the enclosed application is timely submitted.

The application package to renew this permit, pursuant to 40 CFR Part 71, contains a facility narrative (including an Introduction, Process Description and Emission Summary) and the following appendices:

- Appendix A EPA Part 71 Forms
- Appendix B Emission Calculations
- Appendix C Supporting Documentation for Emission Calculations

In addition, Andeavor is requesting that EPA allow alternative test methods for engine emissions testing. This would include alternative testing methods with the FTIR analyzer. The alternative methods for the FTIR analyzer are EPA 40 CFR 63(A), Method 320, and ASTM D 6348-03. These would use Method 320 as an optional alternative method for EPA Methods 4 (moisture content), 7E (NO<sub>x</sub>), and 10 (CO) that are currently required by permit Condition V.D.2.(c). FTIR records moisture, NO<sub>x</sub>, and CO simultaneously under a single method.

If you have any questions regarding this submittal, please contact me at (303) 454-6685 or Thomas.H.Gibbons@andeavor.com.

Sincerely,

Thomas A. Sildon

Thomas Gibbons Environmental Specialist

Encl: Application Package

BHDS I LINEA DE ARCERS

Federal Operating Permit Application

# Federal Operating Permit Renewal Application for Wonsits Valley Compressor Station

# Uintah County, Utah

Prepared By:

Andeavor 1801 California Street, Suite 1200

Denver, CO 80202

Submitted To:

# **U.S. Environmental Protection Agency**

Air and Radiation Program, 8P-AR 1595 Wynkoop Street Denver, CO 80202

April 2018



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## 1.0 Introduction

Andeavor, operator of the Wonsits Valley Compressor Station, is submitting this permit application package to the U.S. Environmental Protection Agency, Region 8, on behalf of Andeavor Field Services, LLC (formerly known as QEP Field Services, LLC) for the purpose of renewing the Part 71 Operating Permit for the Wonsits Valley Compressor Station.

The Wonsits Valley Compressor Station is currently operating under Part 71 operating permit V-UO-000005-2000.00, issued to QEP Field Services Company (QEPFS) by EPA Region 8 on September 10, 2013. This permit was issued with an effective date of October 10, 2013, and an expiration date of October 10, 2018.

This application incorporates the following modifications that were submitted to EPA after the original September 10, 2013, issuance date:

 Minor Modification (April 21, 2014): reconstruction of compressor engine unit C207, now subject to NSPS Subpart JJJJ.

Other physical changes to the existing facility include:

- Compressed air, not natural gas, is used to drive pneumatic devices and pumps. Thus, emission unit GP from the original Part 71 permit is not applicable.
- None of the lean-burn compressor engines currently has an oxygen sensor; therefore, the requirement referenced in Condition V.D.2.b to replace oxygen sensors within 2000 hours of engine run time is not applicable.
- Condensate is not currently loaded out from the facility, so insignificant emission unit LO is not currently applicable.

The following sections are included in this application:

- Section 2 of this application includes a process description of the facility.
- Section 3 provides a summary of emissions-related information.
- Section 4 contains a regulatory review of federal air quality regulations.
- Appendix A contains the required EPA Part 71 application forms pertaining to new emissions units that are part of this permit application revision.
- Appendix B contains the detailed emission calculations.
- Appendix C contains supporting data for the emission calculations, including engine specification sheets and gas/liquids analyses.

## 2.0 Summary of Operation

#### 2.1.1 Facility Location

The Wonsits Valley Compressor Station is located on the Uintah and Ouray Indian Reservation in Uintah County, Utah, 22 miles south of Vernal, Utah, in SE<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> of Section 12, Township 8 South, Range 21 East. A site location map is provided in Figure 2-1.

The site is in an area classified as attainment for all criteria pollutants.

#### 2.1.2 Process Description

A comingled gas/liquid stream (containing natural gas, condensate, and produced water) flows from the field via two 16-inch pipelines to a slug catcher at the station where the liquids and gas are separated. The liquids gravity feed to a 3-phase separator that separates produced water, condensate, and gas. The separated produced water is fed into a pipeline leaving the site. Condensate is temporarily stored in storage tank (unit T-1, controlled with combustor unit C-1) and is then gravity fed off site to the Battery 4 facility. The gas continues to one of the inlet scrubbers at 100 psig at near ambient temperature. The gas continues through a 24-inch line where it enters the compressors (units C202, C203, C204, C206, or C207). The gas is compressed and discharged at up to 1200 psig and 120°F. After compression, the gas can flow through a discharge cooler during hot weather to cool it to 120°F or bypass the cooler in colder weather. From the cooler, the gas flows through the dehydrator (unit D-1) inlet coalescer filter to take out the lube oil from the gas. The gas then enters the dehydrator absorber (contactor) and bubbles up through lean triethylene glycol (TEG) to take the water out of the gas stream. During this process, water vapor is removed from the gas to a concentration determined by a sales contract. The dry gas then enters the downstream coalescer to catch any TEG carryover. The pipeline quality natural gas exits the contactor, is metered, and is routed off location through a 12-inch pipeline to the Ironhorse Complex Gas Plant. Fuel gas for the station is pulled from the discharge after the dehydrator where it is filtered and separated. The dry fuel gas is then pushed through individual coalescer filters at each engine.

The rich TEG exits the contactor and is regenerated using heat in a vessel known as a reboiler (R-1). A natural gas-fired heater heats the TEG to a set temperature that boils the impurities out of the TEG. The vapors from the reboiler are routed to the BTEX condenser to remove liquids that drain into the distillate tank. Overhead vapors from the BTEX condenser and flash gas from the flash tank are sent to an emission control device (open flare, unit FL-1, with backup combustor, unit C-2) with a control efficiency of at least 95%. The regenerated lean TEG is circulated back through to the contactor.

There are fugitive emissions associated with the potential seeping of gas from connections, seals, flanges and valves. Instrument air is utilized on site for energizing pneumatic equipment.

A facility plot plan is provided as Figure 2-2 and process flow diagram as Figure 2-3.

#### 2.1.3 Emission Controls

Emissions controls for the facility include:

- oxidation catalysts for the five natural gas-fired, lean-burn compressor engines (units C202, C203, C204, C206, and C207);
- an open flare (unit FL-1) to control VOC and HAP emissions from the dehydration unit (unit D-1), with an enclosed combustor (unit C-1) as backup, with destruction efficiencies of at least 95% (flame presence of pilots is monitored continually); and
- an enclosed combustor (unit C-2) to control VOC and HAP emissions from the condensate storage tank (unit T-1) with a destruction efficiency of at least 95% (flame presence of pilot is monitored continually).

## 3.0 Emissions Summary

The Wonsits Valley Compressor Station emissions estimates include all the sources listed below. A summary of total emissions (allowable with federally enforceable controls) listed by individual pollutant is found in Table 3-1. A summary of emissions (potential to emit with federally enforceable controls) listed by source is found in Table 3-2.

Detailed emission calculations are provided in Appendix B for the following:

- Compressor Engines (five natural gas-fired units)
- TEG Dehydrator (100 MMscfd, controlled with flare and backup combustor)
- Glycol Reboiler (1 MMBtu/hr)
- Condensate Storage Tank (one 500-bbl, controlled with combustor)
- Miscellaneous Chemical Storage Tanks (eight, insignificant)
- Truck Loadout, Condensate (insignificant)
- Equipment Leaks (Fugitives)
- Pigging (insignificant)
- Engine Startups (insignificant)
- Compressor Blowdowns
- Emergency Shutdowns (insignificant)
- Dehydrator Flare
- Tank Vapor Combustor
- Dehydrator Backup Combustor

#### Table 3-1. Facility Emissions Summary (Federally Enforceable)

Pollutant	Allowable Emissions (tpy)		
Nitrogen Oxides (NO <sub>x</sub> )	182.7		
Carbon Monoxide (CO)	172.9		
Volatile Organic Compounds (VOC)	121.8		
Sulfur Dioxide (SO <sub>2</sub> )	0.5		
Particulate Matter, less than 10 µm (PM10)	5.8		
Formaldehyde 1	9.8		
Lead (Pb)	0		
Fluorides (gaseous and particulate)	0		
Sulfuric Acid Mist (H2SO4)	0		
Hydrogen Sulfide (H <sub>2</sub> S)	0		
Total Reduced Sulfur (TRS)	0		
Reduced Sulfur Compounds	0		
Total Hazardous Air Pollutants (HAPs)	22.5		

<sup>1</sup>Single largest HAP

Emission Unit ID	Emission Source Description	NO <sub>x</sub> (tpy)	CO (tpy)	VOC (tpy)	SO <sub>2</sub> (tpy)	PM/PM <sub>10</sub> (tpy)	HCHO <sup>1</sup> (tpy)	Total HAP (tpy)
C202	3406-hp Caterpillar G3612LE 4SLB Compressor Engine, equipped with SCO	32.9	32.9	17.9	0.1	1.1	1.6	2.7
C203	3406-hp Caterpillar G3612LE 4SLB Compressor Engine, equipped with SCO	32.9	32.9	17.9	0.1	1.1	1.6	2.7
C204	3406-hp Caterpillar G3612LE 4SLB Compressor Engine, equipped with SCO	32.9	32.9	17.9	0.1	1 .1	1.6	2.7
C206	3100-hp Waukesha 12V-AT27GL 4SLB Compressor Engine, equipped with SCO	38.9	29.9	11.0	0.1	1.0	2.7	3.6
C207	4554-hp Caterpillar G3616LE 4SLB Compressor Engine, equipped with SCO	44.0	44.0	23.4	0.1	1.5	2.2	3.6
D-1	100-MMscfd TEG Dehydrator, equipped with flare (FL-1), backup combustor (C-2)			15.3			E	6.1
T-1	500-bbl Condensate Tank, equipped with combustor (C-1)	<b>R</b> .		3.6		¥.		0.2
EL	Equipment Leaks			4.8				0.4
СВ	Compressor Blowdowns	14		10.0				0.5
FL-1	Dehydrator Flare	0.7	0.17	32		4		alter
C-1	Tank Vapor Enclosed Combustor	0.4	<mark>0.11</mark>					1
Total		182.7	172.9	121.8	0.5	5.8	9.8	22.5

#### Table 3-2. Facility Equipment Emissions Inventory

<sup>1</sup>Formaldehyde (HCHO) emissions represent the highest individual HAP.

## 4.0 Regulatory Review

This section provides a regulatory review of the federal air quality requirements applicable to Wonsits Valley Compressor Station. The purpose of this section is to provide appropriate explanation and rationale regarding the applicability or non-applicability of these regulations to the facility.

#### 40 CFR Part 71 - Operating Permit Requirements (Title V)

The federal operating permit program (Title V of the Federal Clean Air Act) is implemented by regulations codified at 40 CFR Part 71. The facility is a major stationary source with respect to the Part 71 Operating Permit Program. The potential to emit (PTE), considering all federally enforceable controls, of criteria air pollutants exceeds the major source threshold of 100 tpy. In addition, per §63.764(f), a major HAP source subject to 40 CFR Part 63, Subpart HH, is required to apply for a 40 CFR Part 71 operating permit.

It should be noted per Consent Decree 2:08-CV-00167-TS-PMW, 17(b), the existing dehydration unit and engines are subject to the "major source" requirements of 40 CFR Part 63, Subparts HIH and ZZZZ; however, the site is a currently synthetic minor source with regard to HAP emissions.

#### 40 CFR Part 52 - Prevention of Significant Deterioration (PSD)

This facility is not a source listed in one of the 28 PSD source categories; therefore PSD requirements are triggered if the PTE exceeds 250 tpy of any criteria pollutant or 100,000 tpy of carbon dioxide equivalent (CO<sub>2</sub>e). Based on these thresholds, with the federally enforceable controls, this facility is a synthetic minor stationary source with respect to the Prevention of Significant Deterioration (PSD) Program.

#### New Source Performance Standards (NSPS)

**40 CFR Part 60 Subpart A - General Provisions:** New Source Performance Standards (NSPS) Subpart A, General Provisions, applies to any stationary source that contains an affected facility to which a NSPS is applicable. As discussed below, this facility is subject to several NSPS; therefore, the requirements of Subpart A apply.

**40 CFR Part 60 Subpart Dc – Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units:** NSPS Subpart Dc applies to steam generating units for which construction, modification, or reconstruction is commenced after June 9, 1989, and that have a maximum design heat input capacity less than 29 megawatts (MW) (100 MMBtu/hr) but greater than or equal to 2.9 MW (10 MMBtu/hr). 40 CFR 60.41c states:

"Steam generating unit means a device that combusts any fuel and produces steam or heats water or heats any heat transfer medium. This term includes any duct burner that combusts fuel and is part of a combined cycle system. This term does not include process heaters as defined in this subpart." The facility does not contain any heaters that have a maximum design heat input capacity of at least 10 MMBtu/hr; therefore, Subpart Dc does not apply.

**40 CFR Part 60 Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984:** Per 40 CFR 60.110b(d)(2) and (d)(4), this subpart does not apply to vessels with a design capacity less than or equal to 1,589.874 cubic meters (420,000 gal, 10,000 bbl) used for petroleum or condensate stored, processed, or treated prior to custody transfer or pressure vessels designed to operate in excess of 204.9 kilopascal (kPa) and without emissions to the atmosphere. The potentially subject atmospheric tanks at the facility have capacities of less than 1,589.874 m<sup>3</sup>; therefore, the storage tanks are exempt from this subpart.

**40 CFR 60 Subpart KKK – Standards of Performance for Equipment Leaks of VOC from Onshore Natural Gas Processing Plants:** This subpart applies to natural gas processing plants that commenced construction, reconstruction, or modification after January 20, 1984, and on or before August 23, 2011, and include the following facilities located at onshore natural gas processing plants: a compressor station, dehydration unit, underground storage tank, field gas gathering system, or liquefied natural gas unit. A natural gas processing plant is defined in Subpart KKK as "any processing site engaged in the extraction of natural gas liquids from field gas, fractionation of mixed natural gas liquids to natural gas processing plant; therefore, the facility is not subject to this subpart.

**40 CFR Part 60 Subpart LLL - Standards of Performance for Onshore Natural Gas Processing: SO<sub>2</sub> Emissions:** NSPS Subpart LLL applies to the following facilities that process natural gas: each sweetening unit, and each sweetening unit followed by a sulfur recovery unit. The facility does not contain any sweetening units; therefore, Subpart LLL does not apply. The facility is a compressor station and not a natural gas processing plant; therefore, the facility is not subject to this subpart.

**40 CFR 60 Subpart JJJJ – Standards of Performance for Stationary Spark Ignition Internal Combustion Engines:** This subpart applies to manufacturers, owners, and operators of stationary spark ignition (SI) internal combustion engines (ICE), which commenced construction on or after June 12, 2006, and were manufactured on or after July 1, 2008 (100-500 hp), on or after January 1, 2008 (lean burn, 500-1350 hp), or on or after July 1, 2007 (rich burn, >500 hp and lean burn >1350 hp). Based on the dates of reconstruction (in 2007 and 2014), all compressor engines are subject to this subpart.

40 CFR 60 Subpart OOOO - Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution for which Construction, Modification or Reconstruction Commenced after August 23, 2011, and on or before September 18, 2015: This subpart applies to "affected facilities" including but not limited to pneumatic controllers, storage vessels, reciprocating compressors, centrifugal compressors with wet seals, and components at onshore natural gas processing plants, which commenced construction, were modified, or were reconstructed after August 23, 2011, and on

or before September 18, 2015. All equipment at the facility was installed before August 23, 2011; therefore, the facility is not subject to this subpart.

**40 CFR 60 Subpart OOOOa – Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced After September 18, 2015:** This subpart applies to "affected facilities" including but not limited to pneumatic controllers, pneumatic pumps, storage vessels, reciprocating compressors, centrifugal compressors with wet seals, and components at onshore natural gas processing plants and compressor stations, which commenced construction, were modified, or were reconstructed after September 18, 2015. All equipment at the facility was installed before September 18, 2015; therefore, the facility is not subject to this subpart.

#### National Emission Standards for Hazardous Air Pollutants (NESHAPS)

**40 CFR Part 63 Subpart A – General Provisions:** National Emission Standards for Hazardous Air Pollutants (NESHAP) Subpart A, General Provisions, apply to any stationary source that contains an affected facility to which a NESHAP is applicable. As discussed below, this facility is subject to a NESHAP; therefore, the requirements of Subpart A apply.

**40 CFR 63 Subpart HH – National Emission Standards for Hazardous Air Pollutants From Oil and Natural Gas Production Facilities:** This subpart applies to glycol dehydration units, storage vessels with the potential for flashing and throughput greater than 500 bbl/day, and fugitive equipment at processing plants that are major sources of hazardous air pollutants (HAP) emissions, and triethylene glycol (TEG) dehydration units at area sources of HAP emissions. The facility is not a natural gas processing plant. The facility does not have any storage vessels with a throughput greater than 500 bbl/day.

The TEG dehydrator at this facility is classified as a large glycol dehydration unit, defined as a unit with actual annual average natural gas flow rate of at least 3 MMscfd and actual annual average benzene emissions equal to or greater than 0.90 Mg/yr, including units complying with the 0.9 Mg/yr control option under §63.765(b)(1)(ii). As a major source of HAP emissions, per §63.764(c)(1)(i), the dehydrator must comply with the control requirements for glycol dehydration unit process vents specified in §63.765.

Federally enforceable control requirements for glycol dehydration units are specified in §63.765. The dehydration unit at the Wonsits Valley Compressor Station is complying with the control requirements because the process vent is connected to a control device through closed-vent systems as required by §63.765(b)(1)(i). The offgas from the BTEX condenser is routed to the flare. Flash gas is also sent to the flare.

Per §63.765(b)(1)(i), the control device must be designed and operated in accordance with the requirements of §63.771(d) which, for the dehydrator at this facility equipped with a flare (achieving 95% HAP reduction), stipulates that the control device be designed and operated in accordance with the requirements of §63.11(b).

Monitoring requirements are specified in 63.773(c) and (d). The closed-vent system complies with the monitoring and inspection requirements of 63.773(c). The flare complies with the requirement to continuously monitor and record the presence of the pilot flame, per 63.773(d)(3)(i)(C).

The dehydration units must also demonstrate on-going compliance with the following:

- Record keeping requirements in §63.774
- Reporting requirements in §63.775

**40** CFR 63 Subpart ZZZZ – National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines: This subpart applies to stationary reciprocating internal combustion engines (RICE) at major and area sources of HAPs. The five compressor engines are 4-stroke, lean-burn units, each greater than 500 horsepower. Per Consent Decree Case No. 2:08-CV-00167-TS-PM, the facility is an existing major source under Subpart ZZZZ as of July 3, 2012. As such, the engines are subject to the existing RICE provisions of Subpart ZZZZ and are operated in compliance with all applicable requirements of this subpart.

**40 CFR 63 Subpart DDDDD – National Emission Standards for Hazardous Air Pollutants for Major Sources:** Industrial, Commercial, and Institutional Boilers and Process Heaters: This subpart applies to industrial, commercial, or institutional boilers or process heaters located at, or part of, a major source of HAP. The facility is a synthetic minor HAP source because there are federally enforceable emission controls that limit HAP emissions to less than major source levels. Consequently, the facility is not a major source of HAP and Subpart DDDDD does not apply.

#### 40 CFR Part 64 - Compliance Assurance Monitoring

Compliance Assurance Monitoring (CAM) requirements apply to a pollutant-specific emissions unit (PSEU) at a major source that is required to obtain a part 70 or 71 permit if the unit satisfies all of the following criteria:

- The unit is subject to an emission limitation or standard for the applicable regulated air pollutant (or a surrogate thereof);
- The unit uses a control device to achieve compliance with any such emission limitation or standard; and
- The unit has potential pre-control device emissions of the applicable regulated air pollutant that are equal to or greater than 100 percent of the amount, in tons per year, required for a source to be classified as a major source.

Compressor engine C207 has potential pre-control device emission total for CO that is greater than 100 tpy and formaldehyde that is greater than 10 tpy, and uses a control device to achieve compliance; however, since the engine is subject to the CO limitation under NSPS Subpart JJJJJ and the formaldehyde surrogate CO limitation under MACT Subpart ZZZZ, it is exempt from CAM per §64.2(b)(1)(i).

The dehydration unit has potential pre-control device VOC emissions that are greater than 100 tpy, and HAP emissions that are greater than 10 tpy each for benzene, toluene, and xylenes and 25 tpy for aggregated HAP emissions. A control device is used to achieve compliance with the HAP limitations of MACT Subpart HH and the Part 71 permit limits. Since the

dehydration unit is subject to the HAP limitations of MACT Subpart HH, it is exempt from CAM per §64.2(b)(1)(i). It is also exempt from CAM per §64.2(b)(1)(vi) because the Part 71 permit specifies a continuous compliance determination method for VOC, as defined in §64.1.

#### 40 CFR Part 68 – Chemical Accident Prevention Provisions

The Chemical Accident Prevention rules under 40 CFR Part 68 require covered facilities to conduct a hazard assessment, develop a prevention program and an emergency response program, and submit a Risk Management Plan (RMP). Facilities must comply if they have "covered" processes involving regulated, highly hazardous substances in excess of specified threshold levels.

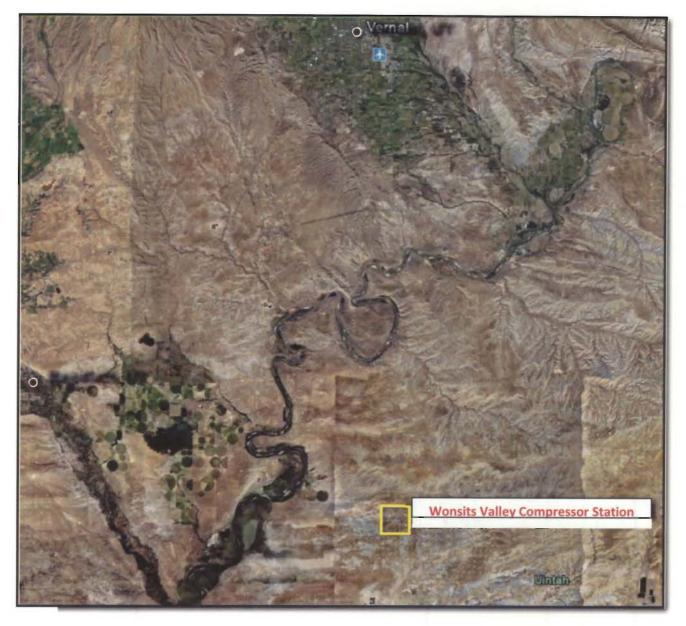
The facility does not have any regulated or highly hazardous substances in excess of specified threshold levels. As such, this facility is not subject to this subpart.

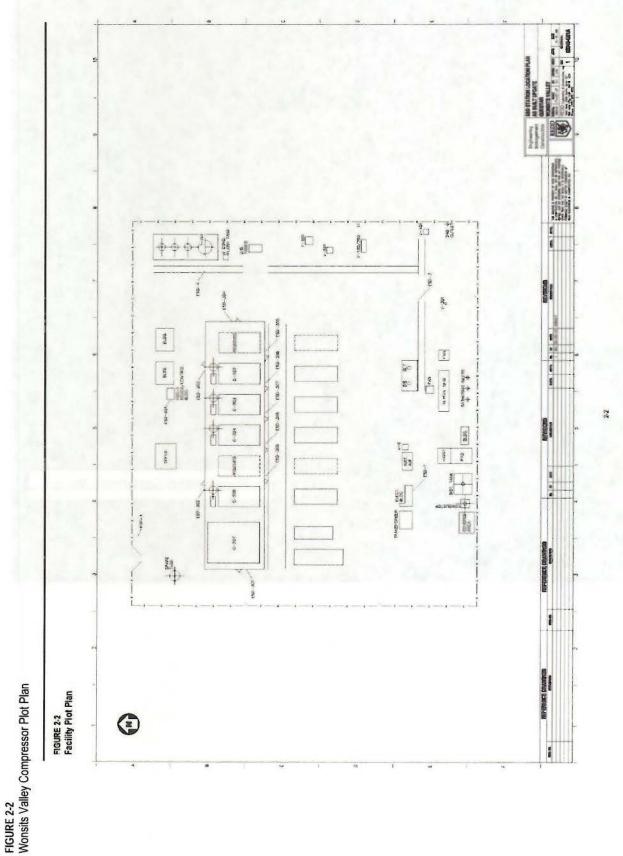
#### **Permit Shield**

Andeavor is requesting a permit shield for the following regulations that are not currently applicable to Wonsits Valley Compressor Station per 40 CFR 71.6(f).

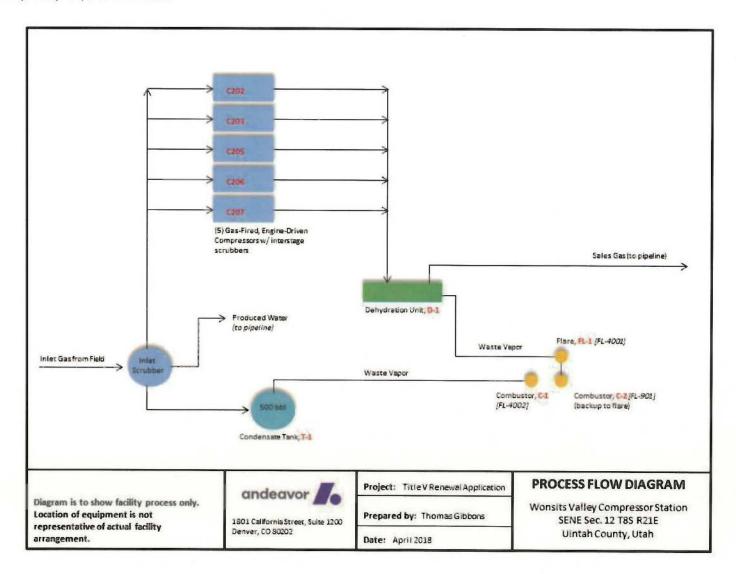
- 40 CFR Part 52, Prevention of Significant Deterioration (PSD)
- 40 CFR Part 60 Subpart Dc
- 40 CFR Part 60 Subpart Kb
- 40 CFR Part 60 Subpart KKK
- 40 CFR Part 60 Subpart LLL
- 40 CFR Part 60 Subpart OOOO
- 40 CFR Part 60 Subpart OOOOa
- 40 CFR Part 63 Subpart DDDDD
- 40 CFR Part 64, Compliance Assurance Monitoring
- 40 CFR Part 68, Chemical Accident Prevention

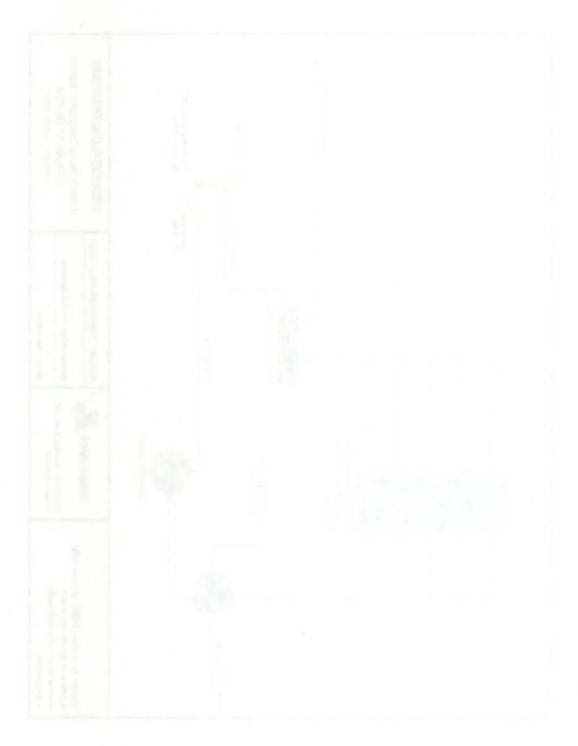
FIGURE 2-1 Wonsits Valley Compressor Station Site Map





#### FIGURE 2-3 Simplified Wonsits Valley Facility Simplified Process Flow





# Appendices

# sapina -

# APPENDIX A EPA Part 71 Forms

- 0\_CTAC\_5900-02
- 1\_GIS\_5900-79
- 2\_EUD1\_5900-80\_C202
- 3\_EUD1\_5900-80\_C203
- 4\_EUD1\_5900-80\_C204
- 5\_EUD1\_5900-80\_C206
- 6\_EUD1\_5900-80\_C207
- 7\_EUD2\_5900-81\_D-1
- 8\_EUD2\_5900-81\_T-1
- 9\_EUD2\_5900-81\_EL
- 10\_EUD2\_5900-81\_CB
- 11\_EUD2\_5900-81\_FL-1
- 12\_EUD2\_5900-81\_C-1
- 13\_EMISS\_5900-84\_C202
- 14\_EMISS\_5900-84\_C203
- 15\_EMISS\_5900-84\_C204
- 16\_EMISS\_5900-84\_C206
- 17\_EMISS\_5900-84\_C207
- 18\_EMISS\_5900-84\_D-1
- 19\_EMISS\_5900-84\_T-1
- 20\_EMISS\_5900-84\_EL
- 21\_EMISS\_5900-84\_CB
- 22\_EMISS\_5900-84\_FL-1
- 23\_EMISS\_5900-84\_C-1
- 24\_PTE\_5900-85
- 25\_IE\_5900-83
- 26 I-COMP 5900-86

A REALES



#### Federal Operating Permit Program (40 CFR Part 71) CERTIFICATION OF TRUTH, ACCURACY, AND COMPLETENESS (CTAC)

This form must be completed, signed by the "Responsible Official" designated for the facility or emission unit, and sent with each submission of documents (i.e., application forms, updates to applications, reports, or any information required by a part 71 permit).

A. Responsible Official		
Name: (Last) <u>Gebhardt</u> (F	irst) <u>Michael</u>	(MI) _P
Title Vice President, Mid-Continent Gathe	ering and Processin	g
Street or P.O. Box _1801 California St., Su	ite 1200	<u>`</u>
City <u>Denver</u>	_State <u>CO</u> Z	IP <u>80202</u>
Telephone ( <u>303</u> ) <u>454</u> - <u>6625</u> Ext	Facsimile (	
B. Certification of Truth, Accuracy and ( responsible official)	Completeness (to I	be signed by the
I certify under penalty of law, based on info inquiry, the statements and information con and complete.		
Name (signed)		1 0 0
Name (typed)Michael P. Gebhardt	Date:	4,9,18

(3.51.5) SHEWER FROM COMPLEX (2.1.5)

St. P. H.



#### Federal Operating Permit Program (40 CFR Part 71) GENERAL INFORMATION AND SUMMARY (GIS)

A. Mailing Address and Contact Information

Facility name Wonsits Valley Compress	or Station
Mailing address: Street or P.O. Box1801	California St., Suite 1200
City Denver	StateO ZIP
Contact person:	Title Environmental Specialist
Telephone ( <u>303</u> ) <u>454</u> - <u>6685</u>	Ext
Facsimile ()	
B. Facility Location	T340 ant 1
C. Owner	
Name Andeavor Field Services LLC	Street/P.O. Box 1801 California St., Suite 1200
City Denver	State_CO_ ZIP_80202
Telephone ( <u>303</u> ) <u>454</u> - <u>6685</u> Ex	xt
D. Operator	service managed can involve mean DTH and a cond
Name <u>Same as owner</u>	Street/P.O. Box
City	State ZIP
Telephone () Ext	

21-00 and 1907 at 19

#### E. Application Type

Mark only one p marked.	ermit application type	and answer the suppl	ementary question	appropriate for the type
Initial Permi	t X Renewal	Significant Mod	Minor Permit	t Mod(MPM)
Group Proc	essing, MPM	Administrative Am	nendment	
For initial permit	s, when did operations	s commence?/	1	
For permit renew	val, what is the expirat	tion date of current pe	rmit? <u>10 / 10 /</u>	2018
. Applicable Requ	irement Summary	S. DAV		
Mark the types of	of applicable requirement	ents that apply:		
SIP	FIP/1	rip _	PSD	Non-attainment NSR

2

X Minor source NSR	X Section 111	Phase I acid rain	Phase II acid rain
Stratospheric ozone	OCS regulations	X NESHAP	<u>X</u> Sec. 112(d) MACT
Sec. 112(g) MACT	Early reduction of HAP	Sec 112(j) MACT	RMP [Sec.112(r)]

\_\_\_\_ Section 129 \_\_\_\_\_ NAAQS, increments or visibility but for temporary sources (This is rare)

Is the source subject to the Deepwater Port Act? \_\_\_YES \_X\_NO

Has a risk management plan been registered? YES X NO Agency

Phase II acid rain application submitted? \_\_\_YES \_X\_NO If YES, Permitting Authority \_

#### G. Source-Wide PTE Restrictions and Generic Applicable Requirements

#### Cite and describe any emissions-limiting requirements and/or facility-wide "generic" applicable requirements.

40 CFR Part 60 Subpart A - General Provisions

40 CFR 60 Subpart JJJJ – Standards of Performance for Stationary Spark Ignition Internal Combustion Engines

40 CFR Part 63 Subpart A – General Provisions

40 CFR 63 Subpart HH – National Emission Standards for Hazardous Air Pollutants From Oil and Natural Gas Production Facilities

40 CFR 63 Subpart ZZZZ – National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

### H. Process Description

VISIONAL CONTRACTOR DATE

List processes, products, and SIC codes for the facility.

Process	Products	SIC
Oil & Gas Extraction	Crude Petroleum and Natural Gas	131
	and his most rate	

3

#### I. Emission Unit Identification

Assign an emissions unit ID and describe each emissions unit at the facility. Control equipment and/or alternative operating scenarios associated with emissions units should by listed on a separate line. Applicants may exclude from this list any insignificant emissions units or activities.

Emissions Unit ID	Description of Unit
C202	3406-hp Caterpillar G3612LE Compressor Engine, 4-Stroke Lean-Burn RICE; Serial No. 1YG00023; natural gas-fired; equipped with SCO; Installed: 9/2007, Reconstructed: 9/2007
C203	3406-hp Caterpillar G3612LE Compressor Engine, 4-Stroke Lean-Burn RICE; Serial No. 1YG00022; natural gas-fired; equipped with SCO; Installed: 9/2007, Reconstructed: 9/2007
C204	3406-hp Caterpillar G3612LE Compressor Engine, 4-Stroke Lean-Burn RICE; Serial No. 1YG00034; natural gas-fired; equipped with SCO; Installed: 9/2007, Reconstructed: 9/2007
C206	3100-hp Waukesha 12V-AT27GL Compressor Engine, 4-Stroke Lean-Burn RICE; Serial No. C-13271/2; natural gas-fired; equipped with SCO; Installed: 3/2001, Reconstructed: 6/2007
C207	4554-hp Caterpillar G3616LE Compressor Engine, 4-Stroke Lean-Burn RICE; Serial No. BLB00215; natural gas-fired; equipped with SCO; Installed: 6/2008, Reconstructed: 1/2014
D-1	100-MMscfd TEG Dehydrator; equipped with flare, backup combustor
T-1	500-bbl Condensate Tank, 21900 bbl/yr; vapors controlled by enclosed combustor (C-1)
EL	Equipment Leaks
СВ	Compressor Blowdowns
FL-1	Dehydrator Flare (primary control for D-1)
C-1	Enclosed Combustor (control for condensate tank, T-1)
C-2	Enclosed Combustor (backup control for dehydrator, D-1)

#### J. Facility Emissions Summary

Enter potential to emit (PTE) for the facility as a whole for each regulated air pollutant listed below. Enter the name of the single HAP emitted in the greatest amount and its PTE. For all pollutants, stipulations to major source status may be indicated by entering "major" in the space for PTE. Indicate the total actual emissions for fee purposes for the facility in the space provided. Applications for permit modifications need not include actual emissions information.

tons/yr		_ tons/yr	voc_	133.2	_ tons/yr	SO2 _	0.4	tons/yr
PM-10	5.9	tons/yr	co _	173.1	_ tons/yr	Lead _	0	tons/yr
Total HA	AP	0	tons/yr					
Single H	IAP with g	reatest amo	ount	formaldel	nyde	PTE	.8 tons	s/yr
Total of	regulated	pollutants (1	for fee ca	alculation),	Sec. F, line	5 of form	FEE	N/A tons/yr
	_		1.00	tob mark				*
visting F	odorally-E	nforceable	Pormit	•				
usung r	euerany-L	morceaple	rennu	5				
Permit n	umbor(a)	110 0000	05.2000	00 Pormi	thing Bar	+ 74	Pormitti	ng authorityEPA
Permit n	umber(s) _			_ Permit				ing authority
Permit n	umber(s) _			_ Permit				
Permit n	umber(s) <u>-</u> Unit(s) Co	overed by (	General	_ Permit	type		_ Permitti	ing authority
Permit n	umber(s) <u>-</u> Unit(s) Co	overed by (	General	_ Permit	type		_ Permitti	ing authority
Permit n mission Emission	umber(s) <u>-</u> Unit(s) Co n unit(s) su	overed by C	General neral per	_ Permit	type	able	_ Permitti	ing authority
Permit n mission Emission Check o	umber(s) <u>-</u> Unit(s) Co n unit(s) su ne:	overed by C ubject to gen Application	General neral per n made	Permit	type Not Applica Coverage gr	able	_ Permitti	ing authority
Permit n mission Emission Check o	umber(s) <u>-</u> Unit(s) Co n unit(s) su ne:	overed by C ubject to gen Application	General neral per n made	Permit	type Not Applica Coverage gr	able	_ Permitti	ing authority
Permit n mission Emission Check o	umber(s) <u>-</u> Unit(s) Co n unit(s) su ne:	overed by C ubject to gen Application	General neral per n made	Permit	type Not Applica Coverage gr	able	_ Permitti	ing authority
Permit n mission Emission Check o General	umber(s) _ Unit(s) Co n unit(s) su ne: permit ide	overed by C ubject to ge Application ntifier	General neral per n made	Permit	type Not Applica Coverage gr	able	_ Permitti	ing authority
Permit n mission Emission Check o General	umber(s) _ Unit(s) Co n unit(s) su ne: permit ide	overed by C ubject to gen Application	General neral per n made	Permit	type Not Applica Coverage gr	able	_ Permitti	ing authority
Permit n mission Emission Check o General	umber(s) _ Unit(s) Co n unit(s) su ne: permit ide erenced In	overed by C ubject to gen Application ntifier	General neral per n made	_ Permit	type Not Applica Coverage gr	able ranted Exp	_ Permitti	ing authority

**INSTRUCTIONS FOLLOW** 



#### Federal Operating Permit Program (40 CFR Part 71) EMISSION UNIT DESCRIPTION FOR FUEL COMBUSTION SOURCES (EUD-1)

#### A. General Information

Emissions unit ID C202 Description 3406-hp, 4SLB compressor engine

SIC Code (4-digit) \_\_\_\_\_ SCC Code \_20200254\_\_

### B. Emissions Unit Description

Primary use <u>Natural Gas Compressor Engine</u>	_ Temporary SourceYes _X_No		
Manufacturer Caterpillar	Model No. G3612LE		
Serial Number1YG00023	Installation Date 9 / / 2007		
Boiler Type: Industrial boiler Process burner	Electric utility boiler		
Other (describe)	A Server and the late base & B		
Boiler horsepower rating Boiler stea	m flow (lb/hr)		
Type of Fuel-Burning Equipment (coal burning only):			
Hand firedSpreader stokerUnderfeed	stokerOverfeed stoker		
Traveling grateShaking gratePulverized,	, wet bed Pulverized, dry bed		
Actual Heat InputMM BTU/hr Max. Design H	Heat InputMM BTU/hr		

#### C. Fuel Data

Primary fuel type(s) Natural Gas Standby fuel type(s)

N/A

Describe each fuel you expected to use during the term of the permit.

Fuel Type	Max. Sulfur Content (%)	Max. Ash Content (%)	BTU Value (cf, gal., or lb.)
Natural Gas	Negligible	Negligible	1113 Btu/scf (HHV)
And the second second			

#### D. Fuel Usage Rates

Fuel Type	Annual Actual	Maximum Usage		
	Usage	Hourly	Annual	
Natural Gas	N/A	23 Mscf	202 MMsc	
1000 1 1 0				
	lamber and state			

#### E. Associated Air Pollution Control Equipment

Emissions unit ID C202 Device type Selective Catalytic Oxidation (SCO)
Air pollutant(s) Controlled CO, HCHO, VOC, HAPs Manufacturer N/A
Model No. N/A Serial No. N/A
Installation date 9/ /2007 Control efficiency (%) 60% (CO), 50% (VOC), 81% HCHO, 50% HAP
Efficiency estimation method <u>SCO manufacturer and stack testing</u>

#### F. Ambient Impact Assessment

This information must be completed by temporary sources or when ambient impact assessment is an applicable requirement for this emissions unit (this is not common).

Stack height (ft)	Inside stack diameter (ft)
Stack temp (°F)	Design stack flow rate (ACFM)
Actual stack flow rate (ACFM)	Velocity (ft/sec)



#### Federal Operating Permit Program (40 CFR Part 71) EMISSION UNIT DESCRIPTION FOR FUEL COMBUSTION SOURCES (EUD-1)

#### A. General Information

Emissions unit ID C203 Description 3406-hp, 4SLB compressor engine

SIC Code (4-digit) 1311 SCC Code 20200254

## B. Emissions Unit Description

Primary use <u>Natural Gas Compressor Engine</u>	Temporary SourceYes _X_No
Manufacturer Caterpillar	Model No. G3612LE
Serial Number 1YG00022	Installation Date 9 / / 2007
Boiler Type: Industrial boiler Process burner	Electric utility boiler
Other (describe)	E. Antonisted Ale Bolistics Contras Equ
Boiler horsepower rating Boiler stea	m flow (lb/hr)
Type of Fuel-Burning Equipment (coal burning only):	
Hand firedSpreader stokerUnderfeed	stokerOverfeed stoker
Traveling grateShaking gratePulverized,	, wet bed Pulverized, dry bed
Actual Heat InputMM BTU/hr Max. Design H	Heat InputMM BTU/hr

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#### C. Fuel Data

Primary fuel type(s) <u>Natural Gas</u>

Standby fuel type(s)\_\_\_\_

N/A

Describe each fuel you expected to use during the term of the permit.

Fuel Type	Max. Sulfur Content (%)	Max. Ash Content (%)	BTU Value (cf, gal., or lb.)
Natural Gas	Negligible	Negligible	1113 Btu/scf (HHV)

#### **D. Fuel Usage Rates**

Fuel Type	Annual Actual	Maximum Usage		
	Usage	Hourly	Annual	
Natural Gas	N/A	23 Mscf	202 MMsc	
mer				
	hadred size for	- Second		

#### E. Associated Air Pollution Control Equipment

Emissions unit ID <u>C203</u> Devic	ce type Selective Catalytic Oxidation (SCO)
Air pollutant(s) Controlled <u>CO, HCHC</u>	D, VOC, HAPs_ Manufacturer_N/A
Model No. <u>N/A</u> Serial No. <u>I</u>	N/A
Installation date 10/ /2007 Control et	fficiency (%) <u>60% (CO), 50% (VOC), 81% HCHO, 50% HAP</u>
Efficiency estimation method	SCO manufacturer and stack testing

#### F. Ambient Impact Assessment

This information must be completed by temporary sources or when ambient impact assessment is an applicable requirement for this emissions unit (this is not common).

Stack height (ft)	Inside stack diameter (ft)
Stack temp (°F)	Design stack flow rate (ACFM)
Actual stack flow rate (ACFM)	Velocity (ft/sec)



#### Federal Operating Permit Program (40 CFR Part 71) EMISSION UNIT DESCRIPTION FOR FUEL COMBUSTION SOURCES (EUD-1)

#### A. General Information

Emissions unit ID C204 Description 3406-hp, 4SLB compressor engine

SIC Code (4-digit) <u>1311</u> SCC Code <u>20200254</u>

#### B. Emissions Unit Description

Primary use <u>Natural Gas Compressor Engine</u>	Temporary SourceYes _X_No
Manufacturer Caterpillar	Model No. G3612LE
Serial Number 1YG00034	Installation Date9_/_/_2007_
Boiler Type: Industrial boiler Process burner	Electric utility boiler
Other (describe)	T. Associated Ale Telephone Constant Equation
Boiler horsepower rating Boiler ste	eam flow (lb/hr)
Type of Fuel-Burning Equipment (coal burning only):	
Hand firedSpreader stokerUnderfee	ed stokerOverfeed stoker
Traveling grateShaking gratePulverize	ed, wet bed Pulverized, dry bed
Actual Heat Input <u>25.7</u> MM BTU/hr Max. Desigr	h Heat InputMM BTU/hr

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#### C. Fuel Data

Primary fuel type(s) Natural Gas Si

Standby fuel type(s)\_\_\_\_

N/A

Describe each fuel you expected to use during the term of the permit.

Fuel Type	Max. Sulfur Content (%)	Max. Ash Content (%)	BTU Value (cf, gal., or lb.)
Natural Gas	Negligible	Negligible	1113 Btu/scf (HHV)

#### **D. Fuel Usage Rates**

Fuel Type	Annual Actual	Maximum Usage	
	Usage	Hourly	Annual
Natural Gas	N/A	23 Mscf	202 MMsct
The state want wanted			
	a state of the second stat		

#### E. Associated Air Pollution Control Equipment

Emissions unit ID <u>C204</u> Devi	ice type Selective Catalytic Oxidation (SCO)
Air pollutant(s) Controlled_CO, HCH	IO, VOC, HAPs Manufacturer N/A
Model NoN/ASerial No	N/A
Installation date <u>9/ /2007</u> Control et	fficiency (%) <u>60% (CO), 50% (VOC), 81% HCHO, 50% HAP</u>
Efficiency estimation method	SCO manufacturer and stack testing

#### F. Ambient Impact Assessment

This information must be completed by temporary sources or when ambient impact assessment is an applicable requirement for this emissions unit (this is not common).

Stack height (ft)	Inside stack diameter (ft)
Stack temp (°F)	Design stack flow rate (ACFM)
Actual stack flow rate (ACFM)	Velocity (ft/sec)



#### Federal Operating Permit Program (40 CFR Part 71) EMISSION UNIT DESCRIPTION FOR FUEL COMBUSTION SOURCES (EUD-1)

#### A. General Information

Emissions unit ID C206 Description 3100-hp, 4SLB compressor engine

SIC Code (4-digit) \_\_\_\_\_ SCC Code \_20200254

## B. Emissions Unit Description

Primary use <u>Natural Gas Compressor Engine</u>	_ Temporary SourceYes _X_No						
Manufacturer Waukesha	Model No. 12V-AT27GL						
Serial NumberC-13271/2	_ Installation Date 3 / / 2001						
Boiler Type: Industrial boiler Process burner	Electric utility boiler						
Other (describe)							
Boiler horsepower rating Boiler stea	im flow (lb/hr)						
Type of Fuel-Burning Equipment (coal burning only):							
Hand firedSpreader stokerUnderfeed	stokerOverfeed stoker						
Traveling grateShaking gratePulverized	, wet bed Pulverized, dry bed						
Actual Heat Input <u>22.9</u> MM BTU/hr Max. Design	Heat InputMM BTU/hr						

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#### C. Fuel Data

Primary fuel type(s) Natural Gas Standby fuel type(s) N/A

Describe each fuel you expected to use during the term of the permit.

#### D. Fuel Usage Rates

Fuel Type	Annual Actual Usage	Maximum Usage	
		Hourly	Annual
Natural Gas	N/A	21 Mscf	180 MMscf
and the second second			
	C. Normania		

#### E. Associated Air Pollution Control Equipment

Emissions unit ID C206 Device type Selective Catalytic Oxidation (SCO)				
Air pollutant(s) Controlled_CO, HCHO, VOC, HAPs_ Manufacturer_N/A				
Model No. N/A Serial No. N/A				
Installation date 4/ /2001 Control efficiency (%) 55% (CO), 50% (VOC), 45% HCHO, 50% HAP				
Efficiency estimation method SCO manufacturer and stack testing				

#### F. Ambient Impact Assessment

This information must be completed by temporary sources or when ambient impact assessment is an applicable requirement for this emissions unit (this is not common).

Stack height (ft)	Inside stack diameter (ft)
Stack temp (°F)	Design stack flow rate (ACFM)
Actual stack flow rate (ACFM)	Velocity (ft/sec)



#### Federal Operating Permit Program (40 CFR Part 71) EMISSION UNIT DESCRIPTION FOR FUEL COMBUSTION SOURCES (EUD-1)

#### A. General Information

Emissions unit ID C207 Description 4554-hp, 4SLB compressor engine

SIC Code (4-digit) 1311 SCC Code 20200254

# B. Emissions Unit Description

Primary use <u>Natural Gas Compressor Engine</u>	Model No. <u>G3616LE</u>						
Manufacturer Caterpillar							
Serial NumberBLB00215							
Boiler Type: Industrial boiler Process burner	Electric utility boiler						
Other (describe)							
Boiler horsepower rating Boiler steam flow (lb/hr)							
Type of Fuel-Burning Equipment (coal burning only):							
Hand firedSpreader stokerUnderfeed	stokerOverfeed stoker						
Traveling grateShaking gratePulverized,	wet bed Pulverized, dry bed						
Actual Heat Input <u>34.2</u> MM BTU/hr Max. Design Heat Input <u>34.2</u> MM BTU/hr							

#### C. Fuel Data

Primary fuel type(s) Natural Gas Standby fuel type(s)

N/A

Describe each fuel you expected to use during the term of the permit.

Fuel Type	Max. Sulfur Content (%)	Max. Ash Content (%)	BTU Value (cf, gal., or lb.)
Natural Gas	Negligible	Negligible	1113 Btu/scf (HHV)

#### D. Fuel Usage Rates

Fuel Type	Annual Actual	Maximum Usage		
	Usage	Hourly	Annual	
Natural Gas	N/A	31 Mscf	269 MMscf	
	Den course a	-		

### E. Associated Air Pollution Control Equipment

Emissions unit ID C207 Device type Selective Catalytic Oxidation (SCO)
Air pollutant(s) Controlled CO, HCHO, VOC, HAPs Manufacturer N/A
Model No. <u>N/A</u> Serial No. <u>N/A</u>
Installation date 6/ /2008 Control efficiency (%) 60% (CO), 50% (VOC), 81% HCHO, 50% HAP
Efficiency estimation method SCO manufacturer and stack testing

#### F. Ambient Impact Assessment

This information must be completed by temporary sources or when ambient impact assessment is an applicable requirement for this emissions unit (this is not common).

Stack height (ft)	_ Inside stack diameter (ft)
Stack temp (°F)	Design stack flow rate (ACFM)
Actual stack flow rate (ACFM)	Velocity (ft/sec)



٩.	General Information
	Emissions unit ID       D-1       Description 100-MMscfd TEG Dehydration Unit         SIC Code (4-digit)       1311       SCC Code       31000227
	Emissions Unit Description
	Equipment type TEG Dehydration Unit Temporary source: Yes X No Manufacturer Gas Conditioners Inc. Model No. N/A
	Serial No. <u>39-1-08</u> Installation date / / N/A
	Articles being coated or degreased <u>N/A</u>
	Application methodN/A
	Overspray (surface coating) (%) Drying method
	No. of dryers <u>N/A</u> Tank capacity (degreasers) (gal)
	Associated Air Pollution Control Equipment
	Emissions unit ID FL-1 Device Type Open Flare
	Manufacturer John Zink Model No
	Serial No VC-9122090 Installation date _3 / 28 / 2012
	Control efficiency (%)95 Capture efficiency (%)
	Air pollutant(s) controlled VOC, CH4, HAP Efficiency estimation method design
).	Ambient Impact Assessment
	This information must be completed by temporary sources or when ambient impact assessment is an applicable requirement for this emissions unit (this is not common).
	Stack height (ft) Inside stack diameter (ft)
	Stack temp (F) Design stack flow rate (ACFM)
	Actual stack flow rate (ACFM) Velocity (ft/sec)

#### E. VOC-containing Substance Data

List each VOC-containing substance consumed, processed or produced at the emissions unit that is emitted into the air. In the name column, if providing a brand name, include the name of the manufacture; if the substance contains HAP, list the constituent HAP.

Substance Name (Chemical, Brand Name)	CAS No.	Substance Type	Actual Usage (gal/yr)	Max Usage (gal/day)	Max Usage (gal/year)	VOC Content (Ib/gal)
Flash Tank Vent & Reboiler Vent Emissions	N/A	Natural Gas	63.6 MMscfd (CY2017)	100 MMscfd	36,500 MMscf/yr	33.9 lb/MMscf (uncontrolled air emissions)
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1911 186.9	. C. Hate	Call Inc.				
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## Federal Operating Permit Program (40 CFR Part 71) EMISSIONS UNIT DESCRIPTION FOR VOC EMITTING SOURCES (EUD-2)

۹.	General Information
	Emissions unit ID <u>T-1</u> Description <u>500-bbl condensate storage</u> <u>tank</u> SIC Code (4-digit) <u>1311</u> SCC Code <u>40400311</u>
	Emissions Unit Description
	Equipment type Condensate Storage Tank Temporary source: Yes X No
	ManufacturerSivalls Model No N/A
	Serial No98424 Installation date/ _/ 2001
	Articles being coated or degreased <u>N/A</u>
	Application methodN/A
	Overspray (surface coating) (%) Drying method
	No. of dryers <u>N/A</u> Tank capacity (degreasers) (gal) <u>21,000</u>
	Associated Air Pollution Control Equipment
	Emissions unit ID <u>C-1</u> Device Type <u>Enclosed Combustor</u>
	Manufacturer <u>Cimarron</u> Model No
	Serial No53000709 Installation date _2 / / 2012
	Control efficiency (%)
	Air pollutant(s) controlled VOC, CH4, HAP Efficiency estimation method design
	Ambient Impact Assessment

 This information must be completed by temporary sources or when ambient impact assessment is an applicable requirement for this emissions unit (this is not common).

 Stack height (ft) \_\_\_\_\_\_\_
 Inside stack diameter (ft) \_\_\_\_\_\_\_

 Stack temp (F) \_\_\_\_\_\_\_
 Design stack flow rate (ACFM) \_\_\_\_\_\_\_

Actual stack flow rate (ACFM) \_\_\_\_\_ Velocity (ft/sec)

### E. VOC-containing Substance Data

List each VOC-containing substance consumed, processed or produced at the emissions unit that is emitted into the air. In the name column, if providing a brand name, include the name of the manufacture; if the substance contains HAP, list the constituent HAP.

Substance Name (Chemical, Brand Name)	CAS No.	Substance Type	Actual Usage (gal/yr)	Max Usage (gal/day)	Max Usage (gal/year)	VOC Content (Ib/gal)
Condensate	N/A	condensate	<b>5456 bbl</b> (CY2017)	60 bbl/day	21,900 bbl/yr	<b>4.81</b> (uncontrolled air emissions)
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# SEPA United States Environmental Protection Agency

OMB No. 2060-0336, Approval Expires 05/31/2019

## Federal Operating Permit Program (40 CFR Part 71) EMISSIONS UNIT DESCRIPTION FOR VOC EMITTING SOURCES (EUD-2)

#### A. General Information

Emissions unit ID <u>EL</u> Descriptio	on Fugitive Equipment Leaks
SIC Code (4-digit) 1311	SCC Code _31000220
B. Emissions Unit Description	al lonk
Equipment type Fugitive Equipment Le	eaks Temporary source: Yes X No
Manufacturer N/A	Model No. N/A
Serial No. <u>N/A</u>	Installation date / / N/A
Articles being coated or degreasedN	I/A
Application method	-
Overspray (surface coating) (%)	Drying method
No. of dryers <u>N/A</u> Tank of	capacity (degreasers) (gal)
C. Associated Air Pollution Control Equi	pment
Emissions unit ID <u>N/A</u> Device Typ	be N/A
Manufacturer N/A Model No_	N/A
Serial No. N/A	Installation date/_/
Air pollutant(s) controlled <u>N/A</u> Eff	Capture efficiency (%)
D. Ambient Impact Assessment	

This information must be completed by applicable requirement for this emission	temporary sources or when ambient impact assessment is an ns unit (this is not common).
Stack height (ft)	Inside stack diameter (ft)
Stack temp (F)	Design stack flow rate (ACFM)
Actual stack flow rate (ACFM)	Velocity (ft/sec)

## E. VOC-containing Substance Data

List each VOC-containing substance consumed, processed or produced at the emissions unit that is emitted into the air. In the name column, if providing a brand name, include the name of the manufacture; if the substance contains HAP, list the constituent HAP.

Substance Name (Chemical, Brand Name)	CAS No.	Substance Type	Actual Usage (gal/yr)	Max Usage (gal/day)	Max Usage (gal/year)	VOC Content (Ib/gal)
Natural Gas	N/A	vapors, liquids	N/A	N/A	N/A	N/A
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OMB No. 2060-0336, 19

References and the set of the set	Approval Expires 05/31/20
Federal Operating Permit Program (40 CFR Part 71) EMISSIONS UNIT DESCRIPTION FOR VOC EMITTING SO	OURCES (EUD-2)
A. General Information	Sad souther
Emissions unit ID <u>CB</u> Description Compressor Blowdowns	6 (C202, C203, C204, C206, C207)
SIC Code (4-digit) <u>1311</u> SCC Code <u>31000309</u>	gotteres day less to
B. Emissions Unit Description	Maninedi
Equipment type <u>Compressors (5)</u> Temporary source: Yes <u>}</u> Manufacturer <u>varies</u> Model No. <u>varies</u> Serial No. <u>N/A</u> Installation	date_/_/_N/A
Articles being coated or degreased <u>N/A</u> Application method <u>N/A</u>	
Application method       N/A         Overspray (surface coating) (%)       Drying method         No. of dryers       N/A       Tank capacity (degreasers) (gage)	
C. Associated Air Pollution Control Equipment	
Emissions unit ID <u>N/A</u> Device Type <u>N/A</u>	
Manufacturer <u>N/A</u> Model No <u>N/A</u>	
Serial No. <u>N/A</u> Installation	date/_/
Control efficiency (%) <u>N/A</u> Capture efficiency (%	۵)
Air pollutant(s) controlled <u>N/A</u> Efficiency estimation metho	od <u>N/A</u>
D. Ambient Impact Assessment	
This information must be completed by temporary sources or when amb applicable requirement for this emissions unit (this is not common).	bient impact assessment is an
Stack height (ft) Inside stack diameter (ft)	· · · · · · · · · · · · · · · · · · ·
Stack temp (F) Design stack flow rate (A	CFM)
Actual stack flow rate (ACFM) Velocity (ft/set	ec)

## E. VOC-containing Substance Data

List each VOC-containing substance consumed, processed or produced at the emissions unit that is emitted into the air. In the name column, if providing a brand name, include the name of the manufacture; if the substance contains HAP, list the constituent HAP.

Substance Name (Chemical, Brand Name)	CAS No.	Substance Type	Actual Usage (gal/yr)	Max Usage (gal/day)	Max Usage (gal/year)	VOC Content (Ib/gal)
Natural gas venting from compressor blowdowns	N/A	natural gas	N/A	N/A	N/A	See EMISS (EPA Form 5900-84)
	Cort 2	and bould				
		odlel-start				
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## Federal Operating Permit Program (40 CFR Part 71) EMISSION UNIT DESCRIPTION FOR FUEL COMBUSTION SOURCES (EUD-1)

#### A. General Information

Emissions unit ID \_\_\_\_\_FL-1 \_\_\_\_ Description\_Open Flare

SIC Code (4-digit) 1311 SCC Code 31000215

## B. Emissions Unit Description

Primary use Flare for Dehydrator Control Temp	orary SourceYes _X_No
Manufacturer John Zink	Model No. LHT-1-12-20-X-1/6-X
Serial Number VC-9122090	Installation Date 3 / 28 / 2012
Boiler Type: Industrial boiler Process burner	Electric utility boiler
Other (describe)	in a feature inclusion day that much day in
Boiler horsepower rating Boiler stea	m flow (lb/hr)
Type of Fuel-Burning Equipment (coal burning only):	
Hand firedSpreader stokerUnderfeed	stokerOverfeed stoker
Traveling grateShaking gratePulverized,	, wet bed Pulverized, dry bed
Actual Heat Input <u>1.3</u> MM BTU/hr Max. Desig	n Heat Input <u>1.3</u> MM BTU/hr

EPA Form 5900-80

#### C. Fuel Data

Primary fuel type(s) Natural Gas

Standby fuel type(s) N/A

Describe each fuel you expected to use during the term of the permit.

Fuel Type	Max. Sulfur Content (%)	Max. Ash Content (%)	BTU Value (cf, gal., or lb.)
Natural Gas Pilot Fuel	Negligible	Negligible	1113 Btu/scf (HHV)
Dehy Flash Gas & Still Vent Vapors	Negligible	Negligible	1267 Btu/scf

#### D. Fuel Usage Rates

Fuel Type	Annual Actual	Maximum Usage		
	Usage Hourly	Hourly	Annual	
Natural Gas Pilot Fuel	N/A	0.051 Mscf/hr	0.45 MMscf/yr	
Dehy Flash Gas & Still Vent Vapors	N/A	1.11 Mscf/hr	9.7 MMscf/yr	

#### E. Associated Air Pollution Control Equipment

Emissions unit ID <u>N/A</u> Device type <u>N/A</u>	
Air pollutant(s) Controlled <u>N/A</u> Manufacturer <u>N/A</u>	
Model No. N/A Serial No. N/A	
Installation date / Control efficiency (%)N/A	
Efficiency estimation method N/A	

#### F. Ambient Impact Assessment

This information must be completed by temporary sources or when ambient impact assessment is an applicable requirement for this emissions unit (this is not common).

Stack height (ft)	Inside stack diameter (ft)
Stack temp (°F)	_ Design stack flow rate (ACFM)
Actual stack flow rate (ACFM)	Velocity (ft/sec)



## Federal Operating Permit Program (40 CFR Part 71) EMISSION UNIT DESCRIPTION FOR FUEL COMBUSTION SOURCES (EUD-1)

#### A. General Information

Emissions unit ID <u>C-1</u> Description <u>Enclosed Combustor</u>

SIC Code (4-digit) <u>1311</u> SCC Code <u>31000215</u>

## B. Emissions Unit Description

Drimony uno Combuston for Tank Vener Control	Temperature Very V No.
Primary use <u>Combustor for Tank Vapor Control</u>	Temporary SourceYes _X_No
Manufacturer Cimarron	Model No30" Standard ECD
Serial Number 53000709	Installation Date 12 / / 2003
Boiler Type: Industrial boiler Process burner	Electric utility boiler
Other (describe)	and includes and the second second
Boiler horsepower rating Boiler stea	am flow (lb/hr)
Type of Fuel-Burning Equipment (coal burning only):	Constant Not Sales of Constants
Hand firedSpreader stokerUnderfeed	stokerOverfeed stoker
Traveling grateShaking gratePulverized	, wet bed Pulverized, dry bed
Actual Heat InputMM BTU/hr Max. De	sign Heat Input <u>0.688</u> MM BTU/hr
Actual Heat InputMM BTU/hr Max. De	sign Heat Input <u>0.688</u> MM BTU/hr

#### C. Fuel Data

Primary fuel type(s) Natural Gas

Standby fuel type(s) N/A

Describe each fuel you expected to use during the term of the permit.

Fuel Type	Max. Sulfur Content (%)	Max. Ash Content (%)	BTU Value (cf, gal., or lb.)
Natural Gas Pilot	Negligible	Negligible	1113 Btu/scf (HHV)
Condensate Tank Vapors	Negligible	Negligible	1710 Btu/scf

#### D. Fuel Usage Rates

Fuel Type	Annual Actual	Maximum Usage		
	Usage	Hourly	Annual	
Natural Gas	N/A	0.013 Mscf/hr	0.11 MMscf/yı	
Condensate Tank Vapors	N/A	0.39 Mscf/hr	3.44 MMscf/yr	

#### E. Associated Air Pollution Control Equipment

missions unit ID <u>N/A</u> Device type <u>N/A</u>	
Air pollutant(s) Controlled_ <u>N/A</u> Manufacturer_ <u>N/A</u>	
Model No. N/A Serial No. N/A	
Installation date / / Control efficiency (%)	
Efficiency estimation method N/A	

#### F. Ambient Impact Assessment

This information must be completed by temporary sources or when ambient impact assessment is an applicable requirement for this emissions unit (this is not common).

Stack height (ft)	Inside stack diameter (ft)
Stack temp (°F)	Design stack flow rate (ACFM)
Actual stack flow rate (ACFM)	Velocity (ft/sec)



#### Federal Operating Permit Program (40 CFR Part 71) EMISSION CALCULATIONS (EMISS)

Calculate potential to emit (PTE) for applicability purposes and actual emissions for fee purposes for each emissions unit, control device, or alternative operating scenario identified in section I of form **GIS**. If form **FEE** does not need to be submitted with the application, do not calculate actual emissions.

#### A. Emissions Unit ID <u>C202</u>

#### B. Identification and Quantification of Emissions

	1000 B	Emission Rates				
Air Pollutants	Actual	Potential to Emit				
	Annual Emissions (tons/yr)	Hourly (lb/hr)	Annual (tons/yr)	CAS No.		
NOx	NA **	7.5	32.9	11104-93-1		
co	NA **	7.5	32.9	630-08-0		
voc	NA **	4.1	17.9	NA		
SO <sub>2</sub>	NA **	0	0.1	7446-09-5		
PM <sub>10</sub>	NA **	0.3	1.1	NA		
1,3-Butadiene	NA **	0	0	106-99-0		
Acetaldehyde	NA **	0.1	0.5	75-07-0		
Acrolein	NA **	0.1	0.3	107-02-8		
Benzene	NA **	0	0	71-43-2		
Ethylbenzene	NA **	0	0	100-41-4		
Formaldehyde	NA **	0.4	1.6	50-00-0		
Wethanol	NA **	0	0.1	67-56-1		
РАН	NA **	0	0	83-32-9		
Foluene	NA **	0	0	108-88-3		
Xylene	NA **	0	0	1330-20-7		



#### Federal Operating Permit Program (40 CFR Part 71) EMISSION CALCULATIONS (EMISS)

Calculate potential to emit (PTE) for applicability purposes and actual emissions for fee purposes for each emissions unit, control device, or alternative operating scenario identified in section I of form **GIS**. If form **FEE** does not need to be submitted with the application, do not calculate actual emissions.

#### A. Emissions Unit ID <u>C203</u>

#### **B.** Identification and Quantification of Emissions

		Emission Rates				
Air Pollutants	Actual	Potent	ial to Emit			
	Annual Emissions (tons/yr)	Hourly (lb/hr)	Annual (tons/yr)	CAS No.		
NOx	NA **	7.5	32.9	11104-93-1		
со	NA **	7.5	32.9	630-08-0		
VOC	NA **	4.1	17.9	NA		
SO <sub>2</sub>	NA **	0	0.1	7446-09-5		
PM <sub>10</sub>	NA **	0.3	1.1	NA		
1,3-Butadiene	NA **	0	0	106-99-0		
Acetaldehyde	NA **	0.1	0.5	75-07-0		
Acrolein	NA **	0.1	0.3	107-02-8		
Benzene	NA **	0	0	71-43-2		
Ethylbenzene	NA **	0	0	100-41-4		
Formaldehyde	NA **	0.4	1.6	50-00-0		
Methanol	NA **	0	0.1	67-56-1		
РАН	NA **	0	0	83-32-9		
Toluene	NA **	0	0	108-88-3		
Xylene	NA **	0	0	1330-20-7		



#### Federal Operating Permit Program (40 CFR Part 71) EMISSION CALCULATIONS (EMISS)

Calculate potential to emit (PTE) for applicability purposes and actual emissions for fee purposes for each emissions unit, control device, or alternative operating scenario identified in section I of form **GIS**. If form **FEE** does not need to be submitted with the application, do not calculate actual emissions.

#### A. Emissions Unit ID <u>C204</u>

#### B. Identification and Quantification of Emissions

	1910 B	Emission Rates				
Air Pollutants	Actual	Potential to Emit				
	Annual Emissions (tons/yr)	Hourly (lb/hr)	Annual (tons/yr)	CAS No.		
NOx	NA **	7.5	32.9	11104-93-1		
co	NA **	7.5	32.9	630-08-0		
VOC	NA **	4.1	17.9	NA		
SO <sub>2</sub>	NA **	0	0.1	7446-09-5		
PM <sub>10</sub>	NA **	0.3	1.1	NA		
1,3-Butadiene	NA **	0	0	106-99-0		
Acetaldehyde	NA **	0.1	0.5	75-07-0		
Acrolein	NA **	0.1	0.3	107-02-8		
Benzene	NA **	0	0	71-43-2		
Ethylbenzene	NA **	0	0	100-41-4		
Formaldehyde	NA **	0.4	1.6	50-00-0		
Wethanol	NA **	0	0.1	67-56-1		
РАН	NA **	0	0	83-32-9		
Foluene	NA **	0	0	108-88-3		
Kylene	NA **	0	0	1330-20-7		



#### Federal Operating Permit Program (40 CFR Part 71) EMISSION CALCULATIONS (EMISS)

Calculate potential to emit (PTE) for applicability purposes and actual emissions for fee purposes for each emissions unit, control device, or alternative operating scenario identified in section I of form **GIS**. If form **FEE** does not need to be submitted with the application, do not calculate actual emissions.

#### A. Emissions Unit ID \_\_\_\_\_\_

#### B. Identification and Quantification of Emissions

	augus P	Emission Rates				
Air Pollutants	Actual	Potential to Emit				
	Annual Emissions (tons/yr)	Hourly (lb/hr)	Annual (tons/yr)	CAS No.		
NOx	NA **	8.8	38.9	11104-93-1		
со	NA **	6.8	29.9	630-08-0		
VOC	NA **	2.5	11.0	NA		
SO <sub>2</sub>	NA **	0	0.1	7446-09-5		
PM <sub>10</sub>	NA **	0.2	1.0	NA		
1,3-Butadiene	NA **	0	0	106-99-0		
Acetaldehyde	NA **	0.1	0.4	75-07-0		
Acrolein	NA **	0.1	0.3	107-02-8		
Benzene	NA **	0	0	71-43-2		
Ethylbenzene	NA **	0	0	100-41-4		
Formaldehyde	NA **	0.6	2.7	50-00-0		
Methanol	NA **	0	0.1	67-56-1		
РАН	NA **	0	0	83-32-9		
Toluene	NA **	0	0	108-88-3		
Xylene	NA **	0	0	1330-20-7		



#### Federal Operating Permit Program (40 CFR Part 71) EMISSION CALCULATIONS (EMISS)

Calculate potential to emit (PTE) for applicability purposes and actual emissions for fee purposes for each emissions unit, control device, or alternative operating scenario identified in section I of form **GIS**. If form **FEE** does not need to be submitted with the application, do not calculate actual emissions.

#### A. Emissions Unit ID <u>C207</u>

#### **B.** Identification and Quantification of Emissions

	100 A				
Air Pollutants	Actual	Potential to Emit			
	Annual Emissions (tons/yr)	Hourly (lb/hr)	Annual (tons/yr)	CAS No.	
NOx	NA **	10.0	44.0	11104-93-1	
со	NA **	10.0	44.0	630-08-0	
VOC	NA **	5.4	23.4	NA	
SO <sub>2</sub>	NA **	0	0.1	7446-09-5	
PM <sub>10</sub>	NA **	0.3	1.5	NA	
1,3-Butadiene	NA **	0	0	106-99-0	
Acetaldehyde	NA **	0.1	0.6	75-07-0	
Acrolein	NA **	0.1	0.4	107-02-8	
Benzene	NA **	0	0	71-43-2	
Ethylbenzene	NA **	0	0	100-41-4	
Formaldehyde	NA **	0.5	2.2	50-00-0	
Methanol	NA **	0	0.2	67-56-1	
РАН	NA **	0	0	83-32-9	
Toluene	NA **	0	0	108-88-3	
Xylene	NA **	0	0	1330-20-7	



#### Federal Operating Permit Program (40 CFR Part 71) EMISSION CALCULATIONS (EMISS)

Calculate potential to emit (PTE) for applicability purposes and actual emissions for fee purposes for each emissions unit, control device, or alternative operating scenario identified in section I of form **GIS**. If form **FEE** does not need to be submitted with the application, do not calculate actual emissions.

#### A. Emissions Unit ID \_\_\_\_\_

#### B. Identification and Quantification of Emissions

	(Fighting	Emission Rates				
	Actual	Potent	ial to Emit			
Air Pollutants	Annual Emissions (tons/yr)	Hourly (lb/hr)	Annual (tons/yr)	CAS No.		
VOC	NA **	1.6	15.3	NA		
Benzene	NA **	0.2	1.9	71-43-2		
Ethylbenzene	NA **	0	0.1	100-41-4		
Toluene	NA **	0.1	2.7	108-88-3		
Xylene	NA **	0	1.1	1330-20-7		
n-Hexane	NA **	0.1	0.3	110-54-3		
0-17-01	10	10	1 10	- 0		

## **Applied Technology Services**

1210 D Street, Rock Springs, WY 82901 (307) 352-7292

Meter Name:	WONSITS VALLEY COMP. FUEL 301	
Field Name:	REDWASH GATHERING	
Analyst:	PHILLIPS	

Meter Location #:	006086	Report Date:	09/04/2012 12:39
Cylinder Pressure:	0	Sample Dates(s):	09/04/2012 to 09/04/2012
Line Pressure:	1046	Flowing Temp:	112

	Gas Analysis by	<b>Chromatograph</b>	@14.	73	
NAME	MOLE%	BTU	-	SG	GPM
Nitrogen	0.2881	0.0000		0.0028	0.0000
Methane	90.2971	914.1107		0.5002	0.0000
CO2	0.9650	0.0000		0.0147	0.0000
Ethane	4.7038	83.4357		0.0488	1.2577
H2S	0.0000	0.0000		0.0000	0.0000
Propane	1.9810	49.9593		0.0302	0.5456
i-Butane	0.4325	14.0970		0.0087	0.1415
n-Butane	0.5586	18.2654		0.0112	0.1761
i-Pentane	0.2158	8.6539		0.0054	0.0789
n-Pentane	0.1673	6.7221		0.0042	0.0606
Hexanes	0.1796	8.5614		0.0053	0.0738
Heptanes	0.1436	7.9200		0.0050	0.0662
Octanes	0.0676	4.2341		0.0027	0.0346
Nonanes	0.0000	0.0000		0.0000	0.0000
Ideal Total	100.0000	1115.9595	10	0.6390	2.4351

Gross BTU/Real Cu Ft	t. @ 60 deg	F		Gasoline Content
Pressure Base =			15.025	Pressure Base = 14.73
Dry =	1118.9694	1112.8759	1141.4408	<b>Propane GPM = <math>0.5456</math></b>
Saturated =	1100.7826	1094.6871	1123.2611	Butane GPM = $0.3176$
Actual BTU =	1118.9694	1112.8759	1141.4408	14# Gasoline GPM = 0.3455
Real S.G. =	0.640479	0.640470	0.640514	26# Gasoline GPM = 0.4847
Compressibility =	0.997310	0.997325	0.997256	Total GPM = 2.4351

Sulfur Content Mercaptans ppm = N/A H2S ppm = N/A Dewpoints H2O #/mmcf = N/A Hydrocarbon = N/A @ psig = N/A

Comments

Component	Mol%	Wt%	LV%
Benzene	1.1333	0.8452	0.6758
Toluene	2.9510	2.5958	2.1058
Ethylbenzene	0.2203	0.2233	0.1812
M&P Xylene	2.1580	2.1873	1.7807
O-Xylene	0.3636	0.3685	0.2946
2,2,4-Trimethylpentane	1.3747	1.4991	1.4722
Data File:	Wonsit Valley Compressor	Page #2	

GRI E&P TANK INFORMATION			
Component	Mol%	Wt%	LV%
H2S	PLA AND DESCRIPTION		
02			
CO2	0.1648	0.0692	0.0599
N2	0.0264	0.0071	0.0062
C1	9.8520	1.5088	3.5573
C2	2.8039	0.8049	1.5979
C3	3.3353	1.4040	1.9580
IC4	1.5152	0.8408	1.0566
NC4	3.1131	1.7274	2.0914
IC5	2.6843	1.8489	2.0934
NC5	2.7802	1.9150	2.1475
Hexanes	3.6946	3.0396	3.2456
Heptanes	18.4092	16.8698	16.3234
Octanes	7.8836	8.5894	8.3989
Nonanes	4.9105	6.0127	5.8954
Benzene	1.1333	0.8452	0.6758
Toluene	2.9510	2.5958	2.1058
E-Benzene	0.2203	0.2233	0.1812
Xylene	2.5216	2.5558	2.0753
n-C6	3.2163	2.6461	2.8184
2,2,4-Trimethylpentane	1.3747	1.4991	1.4722
C10 Plus	THE LOUIS I		
C10 Mole %	27.4103	44.9973	42.2399
Molecular Wt.	174.0560		
Specific Gravity	0.7537		
Total	100.00	100.00	100.00

- Distant

## QUESTAR APPLIED TECHNOLOGY

## 1210 D. Street, Rock Springs, Wyoming 82901

#### (307) 352-7292

Analysis Date/Time: Analyst Initials:	N/A 8/9/2011 AST 60	8:49 AM F	Description: Tield: ML#: GC Method:	Wonsit Valley Wonsit Valley QEP FS Quesliq1.M	Compressor	
	200	0	ata File:	QPC34.D		
	8/5/2011	Ir	nstrument ID:	1		
Component	Mol%		Wt%		LV%	
Methane	9.8520		1.5088		3.5573	
Ethane	2.8039		0.8049		1.5979	
Propane	3.3353		1.4040		1.9580	
sobutane	1.5152		0.8408		1.0566	
n-Butane	3.1131		1.7274		2.0914	
Neopentane	0.0405		0.0279		0.0331	
sopentane	2.6438		1.8210		2.0603	
n-Pentane	2.7802		1.9150		2.1475	
2,2-Dimethylbutane	0.1724		0.1418		0.1534	
2,3-Dimethylbutane	0.5786		0.4760		0.5053	
2-Methylpentane	1.8129		1.4915		1.6035	
3-Methylpentane	1.1307		0.9303		0.9834	
n-Hexane	3.2163		2.6461		2.8184	
Heptanes	19.5425		17.7150		16.9992	
Octanes	12.2093		12.6843		11.9769	
Nonanes	7.6524		8.7918		8.1519	
Decanes plus	27.4103		44.9973		42.2399	
Nitrogen	0.0264		0.0071		0.0062	
Carbon Dioxide	0.1648		0.0692		0.0599	
Total	100.0000		100.0000		100.0000	
Global Properties	100.0000	Units	100.0000		100.0000	
Siobal Properties		onits				
Avg Molecular Weight	104.7501	gm/mole				
Pseudocritical Pressure	441.46	psia				
Pseudocritical Temperatu	481.32	degF				
Specific Gravity	0.70731	gm/ml				
iquid Density	5.8968					
iquid Density	247.67	요즘 이번 사람이 있는 것 같아?				
Specific Gravity	2.5655					
SCF/bbl		SCF/bbl				
SCF/gal		SCF/gal				
MCF/gal		MCF/gal				
gal/MCF		gal/MCF				
Net Heating Value		BTU/SCF at 6	50°F			
Net Heating Value		BTU/lb at 60°				
Gross Heating Value		BTU/SCF at 6				
Gross Heating Value		BTU/Ib at 60°				
a da se a construction de la construction 🐨 la construction de la		BTU/gal at 60				
Gross Heating Value	68.55372468	a - a martin - a cara				
API Gravity						
MON	46.6					
RON	48.1					
RVP	529.396	psia		Page #1		
				LOOO #1		

Component	Mol%	Wt%	LV%
Benzene	0.0174	0.0734	0.0272
Toluene	0.0188	0.0932	0.0350
Ethylbenzene	0.0005	0.0028	0.0010
M&P Xylene	0.0040	0.0229	0.0086
O-Xylene	0.0005	0.0027	0.0010
2,2,4-Trimethylpentane	0.0063	0.0388	0.0176
Cyclopentane	0.0000	0.0000	0.0000
Cyclohexane	0.0422	0.1914	0.0801
Methylcyclohexane	0.0582	0.3078	0.1304
Description:	Wonsit Valley Comp In	nlet	

## GRI GlyCalc Information

Component	Mol%	Wt%	LV%
Carbon Dioxide	1.0785	2.5591	1.0255
Hydrogen Sulfide	0.0000	0.0000	0.0000
Nitrogen	0.2834	0.4280	0.1733
Methane	90.1296	77.9557	85.1793
Ethane	4.7115	7.6382	7.0446
Propane	2.0675	4.9153	3.1783
Isobutane	0.4107	1.2870	0.7496
n-Butane	0.5215	1.6343	0.9173
Isopentane	0.2116	0.8228	0.4328
n-Pentane	0.1578	0.6140	0.3189
Cyclopentane	0.0000	0.0000	0.0000
n-Hexane	0.0686	0.3185	0.1572
Cyclohexane	0.0422	0.1914	0.0801
Other Hexanes	0.1083	0.5033	0.2492
Heptanes	0.0694	0.3773	0.1759
Methylcyclohexane	0.0582	0.3078	0.1304
2,2,4 Trimethylpentane	0.0063	0.0388	0.0176
Benzene	0.0174	0.0734	0.0272
Toluene	0.0188	0.0932	0.0350
Ethylbenzene	0.0005	0.0028	0.0010
Xylenes	0.0045	0.0256	0.0096
C8+ Heavies	0.0337	0.2135	0.0972
Subtotal	100.0000	100.0000	100.0000
Oxygen	0.0000	0.0000	0.0000
Total	100.0000	100.0000	100.0000

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## QUESTAR APPLIED TECHNOLOGY

## 1210 D. Street, Rock Springs, Wyoming 82901

(307) 352-7292

LIMS ID: Analysis Date/Time: Analyst Initials: Instrument ID: Data File: Date Sampled:	N/A 9/5/2012 ABK Instrument 1 QPC35.D 8/31/2012	3:01 PM	Description: Field: ML#: GC Method:	Wonsit Valley Comp Inlet Wansit Valley QEP Quesbtex
Component	Mol%	5	Wt9	6 LV%
Methane Ethane Propane Isobutane n-Butane Neopentane Isopentane n-Pentane 2,2-Dimethylbutane 2,3-Dimethylbutane 2-Methylpentane	90.1296 4.7115 2.0675 0.4107 0.5215 0.0095 0.2021 0.1578 0.0073 0.0184 0.0528		77.9557 7.6382 4.9153 1.2870 1.6343 0.0368 0.7860 0.6140 0.0341 0.0856 0.2453	85.1793 7.0446 3.1783 0.7496 0.9173 0.0202 0.4126 0.3189 0.0171 0.0421 0.1222
3-Methylpentane n-Hexane Heptanes Octanes Nonanes Decanes plus Nitrogen Carbon Dioxide Oxygen Hydrogen Sulfide	0.0298 0.0686 0.2123 0.0252 0.0120 0.0015 0.2834 1.0785 0.0000 0.0000		0.1383 0.3185 1.0819 0.1539 0.0766 0.0114 0.4280 2.5591 0.0000 0.0000	0.0678 0.1572 0.4662 0.0701 0.0326 0.0051 0.1733 1.0255 0.0000 0.0000
Total Global Properties Gross BTU/Real CF Sat.Gross BTU/Real CF Gas Compressibility (Z) Specific Gravity Avg Molecular Weight Propane GPM Butane GPM Gasoline GPM 26# Gasoline GPM Total GPM Base Mol% Sample Temperature: Sample Pressure: H2SLength of Stain Tube	100.0000 1118.0 1099.7 0.9973 0.6420 18.548 0.566625 0.298042 0.293426 0.458522 2.644928 99.735 98 98 98 98	Units		100.0000 D°F and14.73 psia D°F and14.73 psia

## TANKS 4.0.9d Emissions Report - Detail Format Individual Tank Emission Totals

## **Emissions Report for: Annual**

100 bbl Dehy Drip Tank - Vertical Fixed Roof Tank Salt Lake City, Utah

			Losses(lb	s)		
Components		Working Loss	Brea	thing Loss	Total Emissions	
Gasoline (RVP 12)		36.57		699.04	735.61	

Vapor Space Outage (ft)	4,0990
Working Losses (lb):	36.5682
Vapor Molecular Weight (lb/lb-mole):	64.0000
Vapor Pressure at Daily Average Liquid	
Surface Temperature (psia):	5.6573
Annual Net Throughput (gal/yr.):	4,241.8985
Annual Turnovers	1.0000
Turnover Factor.	1.0000
Maximum Liquid Volume (gal):	4,241,8985
Maximum Liquid Height (ft):	8.0000
Tank Diameter (ft):	9,5000
Working Loss Product Factor	1.0000
Total Losses (Ib)	735.6060



Page 4 of 6

## TANKS 4.0.9d Emissions Report - Detail Format Detail Calculations (AP-42)

#### 100 bbl Dehy Drip Tank - Vertical Fixed Roof Tank Salt Lake City, Utah

Annual Emission Calcaulations	
Standing Losses (Ib):	699.0378
Vapor Space Volume (cu ft):	290.5431
Vapor Density (lb/cu ft):	0.0657
Vapor Space Expansion Factor:	0.2237
Vented Vapor Saturation Factor	0.4486
Tank Vapor Space Volume:	
Vapor Space Volume (cu ft):	290.5431
Tank Diameter (ft).	9.5000
Vapor Space Outage (ft)	
Tank Shell Height (ft):	8.0000
Average Liquid Height (ft)	4.0000
Roof Outage (ft).	0.0990
Roof Outage (Cone Roof)	
Roof Outage (ft):	0.0990
Roof Height (ft):	0.0000
Roof Slope (ft/ft):	0.0625
Shell Radius (ft)	4.7500
Vapor Density	
Vapor Density (lb/cu ft):	0.0657
Vapor Molecular Weight (lb/lb-mole):	64.0000
Vapor Pressure at Daily Average Liquid	
Surface Temperature (psia):	5.6573
Daily Avg. Liquid Surface Temp. (deg. R):	513,5939
Daily Average Ambient Temp. (deg. F):	51,9625
Ideal Gas Constant R	51,9025
	10.731
(psia cuft / (lb-mol-deg R)): Liquid Bulk Temperature (deg. R):	511,6525
Tank Paint Solar Absorptance (Shell):	0.1700
Tank Paint Solar Absorptance (Roof):	0.1700
Daily Total Solar Insulation	
Factor (Btu/sqft day).	1,452,1184
Vapor Space Expansion Factor	
Vapor Space Expansion Factor:	0.2237
Daily Vapor Temperature Range (deg. R):	23.7301
Daily Vapor Pressure Range (psia):	1.2998
Breather Vent Press, Setting Range(psia):	0.0600
Vapor Pressure at Daily Average Liquid	
Surface Temperature (psia):	5.6573
Vapor Pressure at Daily Minimum Liquid	
Surface Temperature (psia):	5.0372
Vapor Pressure at Daily Maximum Liquid	
Surface Temperature (psia):	6.3370
Daily Avg. Liquid Surface Temp. (deg R).	513,5939
Daily Min, Liquid Surface Temp. (deg R):	507.6614
Daily Max. Liquid Surface Temp. (deg R).	519.5264
Daily Ambient Temp. Range (deg. R):	23.3583
Vented Vapor Saturation Factor	
	0.4400
Vented Vapor Saturation Factor	0.4486
Vapor Pressure at Daily Average Liquid:	F 4579
Surface Temperature (psia):	5.6573

## TANKS 4.0.9d Emissions Report - Detail Format Liquid Contents of Storage Tank

## 100 bbl Dehy Drip Tank - Vertical Fixed Roof Tank Salt Lake City, Utah

Mixture/Component	Month	Tem	iily Liquid S perature (d Min.	urf. eg F) Max.	Liquid Bulk Temp (deg F)	Vapo Avg.	r Pressure Min.	(psia) Max.	Vapor Mol. Weight.	Liquid Mass Fract.	Vapor Mass Fract,	Mol, Weight	Basis for Vapor Pressure Calculations	
Gasoline (RVP 12)	All	53.92	47.99	59.86	51.98	5.6573	5.0372	6.3370	64.0000			92.00	Option 4: RVP=12, ASTM Slope=3	

## **TANKS 4.0.9d Emissions Report - Detail Format Tank Indentification and Physical Characteristics**

## Identification

Identification	
User Identification:	100 bbl Dehy Drip Tank
City:	Salt Lake City
State:	Utah
Company:	QEP Resources
Type of Tank:	Vertical Fixed Roof Tank
Description:	QEP Resources Wonsits Valley Compressor Station 100 bbl Tank Dehy Drip Tank
Tank Dimensions	
Shell Height (ft):	8.00
Diameter (ft):	9.50
Liquid Height (ft) :	8.00
Avg. Liquid Height (ft):	4.00
Volume (gallons):	4.241.90
Turnovers:	1.00
Net Throughput(gal/yr):	4.241.90
Is Tank Heated (y/n):	N
Paint Characteristics	
Shell Color/Shade:	White/White
Shell Condition	Good
Roof Color/Shade:	White/White
Roof Condition:	Good
Roof Characteristics	
Type:	Cone
Height (ft)	0.00
Slope (ft/ft) (Cone Roof)	0.06
Breather Vent Settings	
Vacuum Settings (psig):	-0.03
Pressure Settings (psig)	0.03

Meterological Data used in Emissions Calculations: Salt Lake City, Utah (Avg Atmospheric Pressure = 12.64 psia)

## TANKS 4.0.9d Emissions Report - Detail Format Individual Tank Emission Totals

## **Emissions Report for: Annual**

65 gal TEG tank - Vertical Fixed Roof Tank Salt Lake City, Utah

	Losses(lbs)						
Components	Working Loss	Breathing Loss	Total Emissions				
Ethylene Glycol	0.00	0.01	0.02				

Vapor Space Outage (ft):	3.3833
Working Losses (Ib):	0.0020
Vapor Molecular Weight (Ib/Ib-mole): Vapor Pressure at Daily Average Liguid	62.0682
Surface Temperature (psia):	0.0005
Annual Net Throughput (gal/yr.):	2,744,9000
Annual Turnovers:	1,0000
Turnover Factor:	1.0000
Maximum Liquid Volume (gal):	2,744,9000
Maximum Liquid Height (ft):	7.3000
Tank Diameter (ft):	8.0000
Working Loss Product Factor:	1.0000
Total Losses (Ib):	0.0163



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Page 4 of 6

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## TANKS 4.0.9d Emissions Report - Detail Format Detail Calculations (AP-42)

#### 65 gal TEG tank - Vertical Fixed Roof Tank Salt Lake City, Utah

Annual Emission Calcaulations	
Standing Losses (Ib):	0.0143
Vapor Space Volume (cu ft):	170.0649
Vapor Density (lb/cu ft):	0.0000
Vapor Space Expansion Factor:	0.0415
Vented Vapor Saturation Factor:	0.9999
Tank Vapor Space Volume:	
Vapor Space Volume (cu ft):	170.0649
	8.000
Tank Diameter (ft):	3.3833
Vapor Space Outage (ft):	7.3000
Tank Shell Height (ft)	
Average Liquid Height (ft) Roof Outage (ft)	4.0000
Nooi Oulage (II).	0.0635
Roof Outage (Cone Roof)	0.000
Roof Outage (ft)	0.0833
Roof Height (ft):	0.0000
Roof Slope (ft/ft):	0.062
Shell Radius (ft):	4.0000
Vapor Density	
Vapor Density (lb/cu ft):	0.0000
Vapor Molecular Weight (Ib/Ib-mole)	62.0682
Vapor Pressure at Daily Average Liquid	
Surface Temperature (psia):	0.0005
Daily Avg. Liquid Surface Temp. (deg. R):	513.5939
Daily Average Ambient Temp. (deg. F):	51.9625
Ideal Gas Constant R	
(psia cuft / (lb-mol-deg R)):	10.731
Liquid Bulk Temperature (deg. R):	511.6525
Tank Paint Solar Absorptance (Shell):	0.1700
Tank Paint Solar Absorptance (Roof)	0.1700
Daily Total Solar Insulation	
Factor (Btu/sqft day):	1,452.1184
Vapor Space Expansion Factor	
Vapor Space Expansion Factor:	0.0415
Daily Vapor Temperature Range (deg. R):	23.7301
Daily Vapor Pressure Range (psia):	0.0003
Breather Vent Press. Setting Range(psia):	0.0600
Vapor Pressure at Daily Average Liquid	
Surface Temperature (psia):	0.0005
Vapor Pressure at Daily Minimum Liquid	
Surface Temperature (psia):	0.0003
Vapor Pressure at Daily Maximum Liquid	
Surface Temperature (psia):	0.0007
Dally Avg. Liquid Surface Temp. (deg R):	513.5939
Daily Min. Liquid Surface Temp. (deg R):	507,6614
Daily Max, Liquid Surface Temp, (deg R);	519,5264
Daily Ambient Temp. Range (deg. R)	23.3583
Vented Vapor Saturation Factor	
Vented Vapor Saturation Factor	0.9999
Vapor Pressure at Daily Average Liquid:	0.9995
	0 0004
Surface Temperature (psia):	0.0005

## TANKS 4.0.9d Emissions Report - Detail Format Liquid Contents of Storage Tank

#### 65 gal TEG tank - Vertical Fixed Roof Tank Salt Lake City, Utah

Mixture/Component	Month	Temp	ily Liquid Su perature (de Min.	uff. Ig F) Max.	Liquid Bulk Temp (deg F)	Vapo Avg.	or Pressure Min.	(psia) Max.	Vapor Mol. Weight.	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations
Ethylene Glycol	All	53.92	47.99	59.86	51.98	0.0005	0.0003	0.0007	62.0682			62.07	Option 2: A=8.0908, B=2088.9, C=203.5

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## TANKS 4.0.9d Emissions Report - Detail Format Tank Indentification and Physical Characteristics

#### Identification

Salt Lake City
Utah
QEP Resources
Vertical Fixed Roof Tank
QEP Resources Wonsits Valley Compressor Station 65 bbl Tank TEG
7.30
8.00
7.30
4.00
2,744.90
1.00
2,744.90
Ν
White/White
Good
White/White
Good
Cone
0.00
0.06
-0.03
0.03

Meterological Data used in Emissions Calculations: Salt Lake City, Utah (Avg Atmospheric Pressure = 12.64 psia)

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## TANKS 4.0.9d Emissions Report - Detail Format Individual Tank Emission Totals

## **Emissions Report for: Annual**

100 bbl Used EG Tank - Vertical Fixed Roof Tank Salt Lake City, Utah

Components	Losses(lbs)						
	Working Loss	Breathing Loss	Total Emissions				
Ethylene Glycol	0.01	0.02	0.03				

Vapor Space Outage (ft)	4.0990
Working Losses (Ib):	0.0077
Vapor Molecular Weight (lb/lb-mole):	62.0682
Vapor Pressure at Daily Average Liquid	
Surface Temperature (psia):	0.0005
Annual Net Throughput (gal/yr.):	10,604,7463
Annual Turnovers	2.5000
Turnover Factor:	1.0000
Maximum Liquid Volume (gal):	4,241,8985
Maximum Liquid Height (ft):	8.0000
Tank Diameter (ft):	9,5000
Working Loss Product Factor	1.0000
Total Losses (Ib);	0.0321

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## TANKS 4.0.9d Emissions Report - Detail Format Detail Calculations (AP-42)

#### 100 bbl Used EG Tank - Vertical Fixed Roof Tank Salt Lake City, Utah

Annual Emission Calcaulations	
Standing Losses (Ib):	0.0244
Vapor Space Volume (cu ft):	290.543
Vapor Density (lb/cu ft):	0.0000
Vapor Space Expansion Factor:	0.0415
Vented Vapor Saturation Factor	0.9999
Tank Vapor Space Volume	
Vapor Space Volume (cu ft)	000 6404
Tank Diameter (ft):	290.5431
Vapor Space Outage (ft):	9.5000
Tank Shell Height (ft).	8.0000
Average Liquid Height (ft):	
Roof Outage (ft):	4.0000
Nooi Ouldge (II)	0.0650
Roof Outage (Cone Roof)	
Roof Outage (ft):	0.0990
Roof Height (ft):	0.0000
Roof Slope (ft/ft)	0.0625
Shell Radius (ft)	4.7500
Vapor Density	
Vapor Density (Ib/cu ft):	0.0000
Vapor Molecular Weight (lb/lb-mole):	62,0682
Vapor Pressure at Daily Average Liquid	
Surface Temperature (psia):	0.0005
Daily Avg. Liquid Surface Temp. (deg. R)	513.5939
Daily Average Ambient Temp. (deg. F):	51.9625
Ideal Gas Constant R	
(psia cuft / (lb-mol-deg R)):	10.731
Liquid Bulk Temperature (deg. R):	511.6525
Tank Paint Solar Absorptance (Shell)	0.1700
Tank Paint Solar Absorptance (Roof):	0.1700
Daily Total Solar Insulation	100,220,000
Factor (Btu/sqft day):	1,452.1184
Vapor Space Expansion Factor	
Vapor Space Expansion Factor:	0.0415
Daily Vapor Temperature Range (deg. R):	23.7301
Daily Vapor Pressure Range (psia)	0.0003
Breather Vent Press. Setting Range(psia)	0.0600
Vapor Pressure at Daily Average Liquid	
Surface Temperature (psia):	0.0005
Vapor Pressure at Daily Minimum Liquid	
Surface Temperature (psia):	0.0003
Vapor Pressure at Daily Maximum Liquid	0.0007
Surface Temperature (psia):	0.0007
Daily Avg. Liquid Surface Temp. (deg R):	513.5939
Daily Min. Liquid Surface Temp. (deg R):	507.6614
Daily Max. Liquid Surface Temp. (deg R):	519.5264
Daily Ambient Temp, Range (deg, R).	23.3583
Vented Vapor Saturation Factor	
Vented Vapor Saturation Factor.	0.9999
Vapor Pressure at Daily Average Liquid:	
Surface Temperature (psia):	0.0005

## TANKS 4.0.9d Emissions Report - Detail Format Liquid Contents of Storage Tank

#### 100 bbl Used EG Tank - Vertical Fixed Roof Tank Salt Lake City, Utah

			ily Liquid Si perature (de		Liquid Bulk Temp	Vapo	or Pressure	(psia)	Vapor Mol,	Liquid Mass	Vapor Mass	Mol.	Basis for Vapor Pressure
Mixture/Component	Month	Avg.	Min.	Max,	(deg F)	Avg.	Min.	Max.	Weight.	Fract.	Fract.	Weight	Calculations
Ethylene Glycol	All	53.92	47.99	59.86	51.98	0.0005	0.0003	0.0007	62.0682			62.07	Option 2: A=8.0908, B=2088.9, C=203.5

## TANKS 4.0.9d Emissions Report - Detail Format Tank Indentification and Physical Characteristics

# Identification User Identification: 100 bbl Used EG Tank City: Salt Lake City State: Utah Company: QEP Resources Type of Tank: Vertical Fixed Roof Tank Description: QEP Resources Wonsits Valley Compressor Station 100 bbl Tank Used Ethlylene Glycol Tank Dimensions Shell Height (ft):

Shell Height (ft):		8.00
Diameter (ft):		9.50
Liquid Height (ft) :		8.00
Avg. Liquid Height (ft):		4.00
Volume (gallons):		4,241.90
Turnovers:		2.50
Net Throughput(gal/yr):		10,604.75
Is Tank Heated (y/n):	N	

#### **Paint Characteristics**

Shell Color/Shade: Shell Condition Roof Color/Shade: Roof Condition:	White/White Good White/White Good		
Roof Characteristics Type: Height (ft) Slope (ft/ft) (Cone Roof)	Cone	0.00 0.06	
Breather Vent Settings Vacuum Settings (psig): Pressure Settings (psig)		-0.03 0.03	

Meterological Data used in Emissions Calculations: Salt Lake City, Utah (Avg Atmospheric Pressure = 12.64 psia)

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## TANKS 4.0.9d Emissions Report - Detail Format Individual Tank Emission Totals

## **Emissions Report for: Annual**

## 100 bbl Used Lube Oil Tank - Vertical Fixed Roof Tank Salt Lake City, Utah

	Losses(lbs)							
Components	Working Loss	Breathing Loss	Total Emissions					
Crude oil (RVP 5)	41.54	158.86	200.39					

Vapor Space Outage (ft):	4,0990
Working Losses (Ib):	41,5365
Vapor Molecular Weight (lb/lb-mole):	50,0000
Vapor Pressure at Daily Average Liquid	
Surface Temperature (psia):	2.5505
Annual Net Throughput (gal/yr.):	18,240,1637
Annual Turnovers:	4.3000
Turnover Factor:	1.0000
Maximum Liquid Volume (gal):	4.241.8985
Maximum Liquid Height (ft):	8.0000
Tank Diameter (ft):	9.5000
Working Loss Product Factor:	0.7500
Total Losses (Ib):	200.3943



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## TANKS 4.0.9d Emissions Report - Detail Format Detail Calculations (AP-42)

#### 100 bbl Used Lube Oil Tank - Vertical Fixed Roof Tank Salt Lake City, Utah

Annual Emission Calcaulations	
Annual Emission Calcaulations	
Standing Losses (Ib):	158.8578
Vapor Space Volume (cu ft):	290,5431
Vapor Density (lb/cu ft):	0.0231
Vapor Space Expansion Factor:	0.1006
Vented Vapor Saturation Factor.	0.6435
Tank Vapor Space Volume:	
Vapor Space Volume (cu ft)	290.5431
Tank Diameter (ft)	9.5000
Vapor Space Outage (ft):	4.0990
Tank Shell Height (ft):	8.0000
Average Liquid Height (ft):	4,0000
Roof Outage (ft):	0.0990
Roof Outage (Cone Roof)	
Roof Outage (ft):	0.0990
Roof Height (ft)	0.0000
Roof Slope (ft/ft):	0.0625
Shell Radius (ft):	4.7500
Vapor Density	
Vapor Density (lb/cu ft):	0.0231
Vapor Molecular Weight (lb/lb-mole)	50.0000
Vapor Pressure at Daily Average Liquid	00.0000
Surface Temperature (psia):	2.5505
Daily Avg. Liquid Surface Temp. (deg. R):	513,5939
Daily Average Ambient Temp. (deg. F):	51.9625
Ideal Gas Constant R	01.9020
(psia cuft / (lb-mol-deg R)):	10.731
Liquid Bulk Temperature (deg. R):	511.6525
Tank Paint Solar Absorptance (Shell):	0.1700
Tank Paint Solar Absorptance (Shell)	0.1700
	0.1700
Daily Total Solar Insulation	
Factor (Btu/sqft day):	1,452.1184
Vapor Space Expansion Factor	0.00022
Vapor Space Expansion Factor:	0.1006
Daily Vapor Temperature Range (deg. R):	23.7301
Daily Vapor Pressure Range (psia).	0.6092
Breather Vent Press. Setting Range(psia):	0.0600
Vapor Pressure at Daily Average Liquid	
Surface Temperature (psia):	2.5505
Vapor Pressure at Daily Minimum Liquid	
Surface Temperature (psia):	2.2605
Vapor Pressure at Daily Maximum Liquid	
Surface Temperature (psia).	2.8697
Daily Avg. Liquid Surface Temp. (deg R):	513.5939
Daily Min, Liquid Surface Temp. (deg R):	507.6614
Daily Max. Liquid Surface Temp. (deg R):	519.5264
Daily Ambient Temp. Range (deg. R).	23.3583
Vented Vapor Saturation Factor	
Vented Vapor Saturation Factor	0.6435
	5.0400
Vapor Pressure at Daily Average Liquid:	

## TANKS 4.0.9d Emissions Report - Detail Format Liquid Contents of Storage Tank

### 100 bbl Used Lube Oil Tank - Vertical Fixed Roof Tank Salt Lake City, Utah

Mixture/Component	Month	Tem	ily Liquid Su berature (de Min.	irf. g F) Max.	Liquid Bulk Temp (deg F)	Vapo Avg.	or Pressure Min.	(psia) Max,	Vapor Mol. Weight.	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations	3	
Crude oil (RVP 5)	All	53.92	47.99	59.86	51.98	2.5505	2.2605	2.8697	50.0000			207.00	Option 4: RVP=5		

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## TANKS 4.0.9d Emissions Report - Detail Format Tank Indentification and Physical Characteristics

Identification								
User Identification:	100 bbl Used Lube Oil Tank							
City:	Salt Lake City							
State:	Utah							
Company:	QEP Resources							
Type of Tank:	Vertical Fixed Roof Tank							
Description:	QEP Resources Wonsits Valley Compressor Station 100 bbl Tank Used Lube Oil							
Tank Dimensions								
Shell Height (ft):	8.00							
Diameter (ft):	9.50							
Liquid Height (ft) :	8.00							
Avg. Liquid Height (ft):	4.00							
Volume (gallons):	4.241.90							
Turnovers:	4.30							
Net Throughput(gal/yr):	18.240.16							
Is Tank Heated (y/n):	Ν							
Paint Characteristics								
Shell Color/Shade:	White/White							
Shell Condition	Good							
Roof Color/Shade:	White/White							
Roof Condition:	Good							
Roof Characteristics								
Type:	Cone							
Height (ft)	0.00							
Slope (ft/ft) (Cone Roof)	0.06							
Breather Vent Settings								
Vacuum Settings (psig):	-0.03							
Pressure Settings (psig)	0.03							

Meterological Data used in Emissions Calculations: Salt Lake City, Utah (Avg Atmospheric Pressure = 12.64 psia)

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## TANKS 4.0.9d Emissions Report - Detail Format Individual Tank Emission Totals

## **Emissions Report for: Annual**

100 bbl New Lube Oil Tank - Vertical Fixed Roof Tank Salt Lake City, Utah

	Losses(lbs)							
Components	Working Loss	Breathing Loss	Total Emissions					
Crude oil (RVP 5)	407.32	158.86	566.17					



Vapor Space Outage (ft):	4.0990
Working Losses (Ib):	407.3152
Vapor Molecular Weight (lb/lb-mole):	50.0000
Vapor Pressure at Daily Average Liquid	
Surface Temperature (psia):	2,5505
Annual Net Throughput (gal/yr.):	309,658,5924
Annual Turnovers:	73,0000
Turnover Factor:	0.5776
Maximum Liquid Volume (gal):	4,241,8985
Maximum Liquid Height (ft):	8.0000
Tank Diameter (ft):	9,5000
Working Loss Product Factor:	0.7500
Total Losses (lb):	566.1730

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## TANKS 4.0.9d Emissions Report - Detail Format Detail Calculations (AP-42)

# 100 bbl New Lube Oil Tank - Vertical Fixed Roof Tank Salt Lake City, Utah

Annual Emission Calcaulations	
Standing Losses (Ib):	158.8578
Vapor Space Volume (cu ft):	290,5431
Vapor Density (lb/cu ft)	0.0231
Vapor Space Expansion Factor:	0,1006
Vented Vapor Saturation Factor	0.6435
Task Maras Casas Makasa	
Tank Vapor Space Volume	000 5 101
Vapor Space Volume (cu ft):	290.5431
Tank Diameter (ft)	9.5000
Vapor Space Outage (ft):	4.0990
Tank Shell Height (ft):	8.0000
Average Liquid Height (ft).	4.0000
Roof Outage (ft)	0.0990
Roof Outage (Cone Roof)	
Roof Outage (ft)	0.0990
Roof Height (ft):	0.0000
Roof Slope (ft/ft):	0.0625
Shell Radius (ft):	4.7500
Vapor Density	
Vapor Density (lb/cu ft):	0.0231
Vapor Molecular Weight (lb/lb-mole):	50.0000
Vapor Pressure at Daily Average Liquid	
Surface Temperature (psia):	2.5505
Daily Avg. Liquid Surface Temp. (deg. R):	513,5939
Daily Average Ambient Temp. (deg. F): Ideal Gas Constant R	51.9625
(psia cuft / (lb-mol-deg R)):	10 704
Liquid Bulk Temperature (deg. R).	10.731
Tank Paint Solar Absorptance (Shell):	511.6525
Tank Paint Solar Absorptance (Snell).	0.1700
Daily Total Solar Insulation	0.1700
	4 450 4404
Factor (Btu/sqft day):	1,452.1184
Vapor Space Expansion Factor	
Vapor Space Expansion Factor:	0.1006
Daily Vapor Temperature Range (deg. R):	23.7301
Daily Vapor Pressure Range (psia):	0.6092
Breather Vent Press. Setting Range(psia):	0.0600
Vapor Pressure at Daily Average Liquid	0.70-0.000
Surface Temperature (psia):	2,5505
Vapor Pressure at Daily Minimum Liquid	5522335
Surface Temperature (psia):	2.2605
Vapor Pressure at Daily Maximum Liquid	
Surface Temperature (psia):	2.8697
Daily Avg. Liquid Surface Temp. (deg R):	513.5939
Daily Min. Liquid Surface Temp. (deg R)	507,6614
Daily Max, Liquid Surface Temp. (deg R):	519.5264
Daily Ambient Temp. Range (deg. R):	23.3583
/ented Vapor Saturation Factor	
Vented Vapor Saturation Factor:	0.6435
14	-14.144
Vapor Pressure at Daily Average Liquid:	

## TANKS 4.0.9d Emissions Report - Detail Format Liquid Contents of Storage Tank

#### 100 bbl New Lube Oil Tank - Vertical Fixed Roof Tank Salt Lake City, Utah

lixture/Component	Month	Da Tem Avg.	aily Liquid Si nperature (de Min.	urf. eg F) Max.	Liquid Bulk Temp (deg F)	Vapo Avg.	r Pressure ( Min.	psia) Max.	Vapor Mol. Weight.	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations
rude oil (RVP 5)	All	53.92	47.99	59.86	51.98	2.5505	2.2605	2.8697	50.0000			207.00	Option 4: RVP=5

## TANKS 4.0.9d Emissions Report - Detail Format Tank Indentification and Physical Characteristics

1.1	
Identification	
User Identification:	100 bbl New Lube Oil Tank
City:	Salt Lake City
State:	Utah
Company:	QEP Resources
Type of Tank:	Vertical Fixed Roof Tank
Description:	QEP Resources Wonsits Valley Compressor Station 100 bbl Tank New Lube Oil
Tank Dimensions	
Shell Height (ft):	8.00
Diameter (ft):	9.50
Liquid Height (ft) :	8.00
Avg. Liquid Height (ft):	4.00
Volume (gallons):	4.241.90
Turnovers:	73.00
Net Throughput(gal/yr):	309,658.59
Is Tank Heated (y/n):	N
is raik heated (ym).	N
Paint Characteristics	
Shell Color/Shade:	White/White
Shell Condition	Good
Roof Color/Shade:	White/White
Roof Condition:	Good
Roof Characteristics	
Type:	Cone
Height (ft)	
	0.00
Slope (ft/ft) (Cone Roof)	0.06
Breather Vent Settings	
Vacuum Settings (psig):	-0.03
Pressure Settings (psig)	0.03

Meterological Data used in Emissions Calculations: Salt Lake City, Utah (Avg Atmospheric Pressure = 12.64 psia)

## TANKS 4.0.9d Emissions Report - Detail Format Individual Tank Emission Totals

## **Emissions Report for: Annual**

# 100 bbl New EG Tank - Vertical Fixed Roof Tank Salt Lake City, Utah

	Losses(lbs)							
Components	Working Loss	Breathing Loss	Total Emissions					
Ethylene Glycol	0.01	0.02	0.03					

Vapor Space Outage (ft):	4.0990
Working Losses (Ib):	0.0077
Vapor Molecular Weight (lb/lb-mole): Vapor Pressure at Daily Average Liguid	62.0682
Surface Temperature (psia):	0.0005
Annual Net Throughput (gal/yr.):	10.604.7463
Annual Turnovers.	2.5000
Turnover Factor.	1.0000
Maximum Liquid Volume (gal):	4,241,8985
Maximum Liquid Height (ft):	8.0000
Tank Diameter (ft):	9,5000
Working Loss Product Factor	1.0000
Total Losses (Ib):	0.0321

## TANKS 4.0.9d Emissions Report - Detail Format Detail Calculations (AP-42)

#### 100 bbl New EG Tank - Vertical Fixed Roof Tank Salt Lake City, Utah

Annual Emission Calcaulations	
Standing Losses (Ib):	0.0244
Vapor Space Volume (cu ft).	290,5431
Vapor Density (lb/cu ft):	0.0000
Vapor Space Expansion Factor	0.0415
Vented Vapor Saturation Factor	0.9999
Tank Vapor Space Volume:	
Vapor Space Volume (cu ft):	290,5431
Tank Diameter (ft):	9.5000
Vapor Space Outage (ft):	4.0990
Tank Shell Height (ft):	8.0000
Average Liquid Height (ft):	4.0000
Roof Outage (ft)	0.0990
Roof Outage (Cone Roof)	
Roof Outage (ft):	0.0990
Roof Height (ft):	0.0000
Roof Slope (ft/ft)	0.0625
Shell Radius (ft):	4.7500
Vapor Density	
Vapor Density (lb/cu ft):	0,0000
Vapor Molecular Weight (lb/lb-mole): Vapor Pressure at Daily Average Liquid	62.0682
Surface Temperature (psia)	0,0005
Daily Avg. Liquid Surface Temp. (deg. R):	513,5939
Daily Average Ambient Temp. (deg. F): Ideal Gas Constant R	51,9625
(psia cuft / (lb-mol-deg R)):	10.731
Liquid Bulk Temperature (deg. R).	511.6525
Tank Paint Solar Absorptance (Shell):	0.1700
Tank Paint Solar Absorptance (Roof).	0.1700
Daily Total Solar Insulation	
Factor (Btu/sqft day):	1,452.1184
Vapor Space Expansion Factor	
Vapor Space Expansion Factor	0.0415
Daily Vapor Temperature Range (deg. R):	23.7301
Daily Vapor Pressure Range (psia):	0.0003
Breather Vent Press. Setting Range(psia):	0.0600
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	0.0005
Vapor Pressure at Daily Minimum Liquid Surface Temperature (psia):	1000
Vapor Pressure at Daily Maximum Liquid	0.0003
Surface Temperature (psia):	0.0007
Daily Avg. Liquid Surface Temp. (deg R)	513.5939
Daily Min. Liquid Surface Temp. (deg R):	507.6614
Daily Max. Liquid Surface Temp, (deg R):	519.5264
Dally Ambient Temp. Range (deg. R):	23.3583
Vented Vapor Saturation Factor	
Vented Vapor Saturation Factor:	0.9999
Vapor Pressure at Daily Average Liquid:	
Surface Temperature (psia):	0.0005

## TANKS 4.0.9d Emissions Report - Detail Format Liquid Contents of Storage Tank

100 bbl New EG Tank - Vertical Fixed Roof Tank Salt Lake City, Utah

ixture/Component	Month	Tem	ily Liquid Su perature (de Min.	urf. ig F) Max.	Liquid Bulk Temp (deg F)	Vapo Avg.	r Pressure ( Min.	psia) Max.	Vapor Mol. Weight.	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations
thylene Glycol	All	53.92	47,99	59.86	51.98	0.0005	0.0003	0.0007	62.0682			62.07	Option 2: A=8.0908, B=2088.9, C=203.5
				G									

## TANKS 4.0.9d Emissions Report - Detail Format Tank Indentification and Physical Characteristics

#### Identification

User Identification:	100 bbl New EG Tank
City:	Salt Lake City
State:	Utah
Company:	QEP Resources
Type of Tank:	Vertical Fixed Roof Tank
Description:	QEP Resources Wonsits Valley Compressor Station 100 bbl Tank Ethlylene Glycol
Tank Dimensions	
Shell Height (ft):	8.00
Diameter (ft):	9.50
Liquid Height (ft) :	8.00
Avg. Liquid Height (ft):	4.00
Volume (gallons):	4.241.90
Turnovers:	2.50
Net Throughput(gal/yr):	10,604.75
Is Tank Heated (y/n):	Ν
Paint Characteristics	
Shell Color/Shade:	White/White
Shell Condition	Good
Roof Color/Shade:	White/White
Roof Condition:	Good
Roof Characteristics	
Type:	Cone
Height (ft)	0.00
Slope (ft/ft) (Cone Roof)	0.06
Breather Vent Settings	
Vacuum Settings (psig):	-0.03
Pressure Settings (psig)	0.03

Meterological Data used in Emissions Calculations: Salt Lake City, Utah (Avg Atmospheric Pressure = 12.64 psia)

RVP @ 100 Spec. Gra	0F avity @ 100	[psia] )F	70.13 0.666	9.26 0.684	9.26 0.684	

Tot	al HAPs al HC	3.170 133.833	0.724 30.555	0.1 6.6	92	0.036 1.528		
	s, C2+	91.912	20.984	4.5		1.049		
voc	s, C3+	72.053	16.450	3.6	603	0.823		
Unc	ontrolled Recover	The Constant of the Constant o						
	Vapor	9.5300	[MSCFD]					
	HC Vapor	9.4300	[MSCFD]					
	GOR	158.83	[SCF/bbl	1				
	Emission Composit	tion						
No	Component	Uncontrolled	Uncontro.		trolled	Controlle	d	
		[ton/yr]	[lb/hr]		m/yr]	[lb/hr]		
1	H2S	0.000	0.000	0.0	000	0.000		
2	02	0.000	0.000	0.0	000	0.000		
3	CO2	1.830	0.418	1.8	130	0.418		
4	N2	0.200	0.046	0.2	00	0.046		
5	C1	41.921	9.571	2.0	96	0.479		
6	C2	19.859	4.534	0.9	93	0.227		
7	C3	25.171	5.747	1.2	:59	0.287		
8	i-C4	9.094	2.076	0.4	55	0.104		
9	n-C4	14.494	3.309	0.7	25	0.165		
10	i-C5	6.809	1.555	0.3		0.078		
11	n-C5	5.263	1.202	0.2		0.060		
12	C6	2.581	0.589	0.1		0.029		
13	C7	4.627	1.056	0.2		0.053		
14	C8	0.658	0.150	0.0		0.008		
15	C9	0.144	0.033	0.0		0.002		
16	C10+	0.039	0.009	0.0		0.000		
17	Benzene	0.538	0.123	0.0		0.006		
18	Toluene	0.427	0.097	0.0		0.005		
	E-Benzene	0.011	0.003	0.0		0.000		
	Xylenes	0.109	0.025	0.0		0.001		
21	Carlos and Children and Childre	1.767	0.403	0.0		0.020		
22		0.320	0.073	0.0		0.004		
	Total	135.862	31.019	6.7		1.551		
	Stream Data							
	Component	 MW	LP Oil			Flash Gas		
			mol %	mol %	mol %	mol %	mol %	mol %
1	H2S	34.80	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	02	32.00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	CO2	44.01	0.1648	0.0141	0.0141	0.9062	0.0000	0 0000
4	N2					0.9002	0.0000	0.9062
5		28.01	0.0264	0.0002	0.0002	0.1553	0.0000	0.1553
1.00	C1		0.0264 9.8520	0.0002	0.0002			
	C1 C2	28.01				0.1553	0.0000	0.1553
7		28.01 16.04	9.8520	0.2804	0.2804	0.1553 56.9557	0.0000	0.1553 56.9557
7	C2	28.01 16.04 30.07	9.8520 2.8039	0.2804 0.4485	0.2804 0.4485	0.1553 56.9557 14.3951	0.0000 0.0000 0.0000	0.1553 56.9557 14.3951
7 8	C2 C3	28.01 16.04 30.07 44.10	9.8520 2.8039 3.3353	0.2804 0.4485 1.4848	0.2804 0.4485 1.4848	0.1553 56.9557 14.3951 12.4420	0.0000 0.0000 0.0000 0.0000	0.1553 56.9557 14.3951 12.4420
7 8 9	C2 C3 i-C4	28.01 16.04 30.07 44.10 58.12	9.8520 2.8039 3.3353 1.5152	0.2804 0.4485 1.4848 1.1301	0.2804 0.4485 1.4848 1.1301	0.1553 56.9557 14.3951 12.4420 3.4103	0.0000 0.0000 0.0000 0.0000 0.0000	0.1553 56.9557 14.3951 12.4420 3.4103
7 8 9 10	C2 C3 i-C4 n-C4	28.01 16.04 30.07 44.10 58.12 58.12	9.8520 2.8039 3.3353 1.5152 3.1131	0.2804 0.4485 1.4848 1.1301 2.6412	0.2804 0.4485 1.4848 1.1301 2.6412	0.1553 56.9557 14.3951 12.4420 3.4103 5.4355	0.0000 0.0000 0.0000 0.0000 0.0000 0.0000	0.1553 56.9557 14.3951 12.4420 3.4103 5.4355
7 8 9 10 11	C2 C3 i-C4 n-C4 i-C5	28.01 16.04 30.07 44.10 58.12 58.12 72.15	9.8520 2.8039 3.3353 1.5152 3.1131 2.6843 2.7802	0.2804 0.4485 1.4848 1.1301 2.6412 2.8118 3.0220	0.2804 0.4485 1.4848 1.1301 2.6412 2.8118	0.1553 56.9557 14.3951 12.4420 3.4103 5.4355 2.0569 1.5900	0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000	0.1553 56.9557 14.3951 12.4420 3.4103 5.4355 2.0569 1.5900
7 8 9 10 11 12	C2 C3 i-C4 n-C4 i-C5 n-C5	28.01 16.04 30.07 44.10 58.12 58.12 72.15 72.15 86.16	9.8520 2.8039 3.3353 1.5152 3.1131 2.6843 2.7802 3.6946	0.2804 0.4485 1.4848 1.1301 2.6412 2.8118 3.0220 4.3092	0.2804 0.4485 1.4848 1.1301 2.6412 2.8118 3.0220 4.3092	0.1553 56.9557 14.3951 12.4420 3.4103 5.4355 2.0569 1.5900 0.6697	0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000	0.1553 56.9557 14.3951 12.4420 3.4103 5.4355 2.0569 1.5900 0.6697
7 8 9 10 11 12 13	C2 C3 i-C4 n-C4 i-C5 n-C5 C6	28.01 16.04 30.07 44.10 58.12 58.12 72.15 72.15 86.16 100.20	9.8520 2.8039 3.3353 1.5152 3.1131 2.6843 2.7802 3.6946 18.4092	0.2804 0.4485 1.4848 1.1301 2.6412 2.8118 3.0220 4.3092 21.9386	0.2804 0.4485 1.4848 1.1301 2.6412 2.8118 3.0220 4.3092 21.9386	0.1553 56.9557 14.3951 12.4420 3.4103 5.4355 2.0569 1.5900 0.6697 1.0398	0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000	0.1553 56.9557 14.3951 12.4420 3.4103 5.4355 2.0569 1.5900 0.6697 1.0398
7 8 9 10 11 12 13	C2 C3 i-C4 n-C4 i-C5 n-C5 C6 C7	28.01 16.04 30.07 44.10 58.12 58.12 72.15 72.15 86.16 100.20 114.23	9.8520 2.8039 3.3353 1.5152 3.1131 2.6843 2.7802 3.6946 18.4092 7.8836	0.2804 0.4485 1.4848 1.1301 2.6412 2.8118 3.0220 4.3092 21.9386 9.4593	0.2804 0.4485 1.4848 1.1301 2.6412 2.8118 3.0220 4.3092 21.9386 9.4593	0.1553 56.9557 14.3951 12.4420 3.4103 5.4355 2.0569 1.5900 0.6697 1.0398 0.1292	0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000	0.1553 56.9557 14.3951 12.4420 3.4103 5.4355 2.0569 1.5900 0.6697 1.0398 0.1292
7 9 10 11 12 13 14	C2 C3 i-C4 n-C4 i-C5 n-C5 C6 C7 C8 C9	28.01 16.04 30.07 44.10 58.12 58.12 72.15 72.15 86.16 100.20 114.23 128.28	9.8520 2.8039 3.3353 1.5152 3.1131 2.6843 2.7802 3.6946 18.4092 7.8836 4.9105	0.2804 0.4485 1.4848 1.1301 2.6412 2.8118 3.0220 4.3092 21.9386 9.4593 5.9031	0.2804 0.4485 1.4848 1.1301 2.6412 2.8118 3.0220 4.3092 21.9386 9.4593 5.9031	0.1553 56.9557 14.3951 12.4420 3.4103 5.4355 2.0569 1.5900 0.6697 1.0398 0.1292 0.0255	0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000	0.1553 56.9557 14.3951 12.4420 3.4103 5.4355 2.0569 1.5900 0.6697 1.0398 0.1292 0.0255
7 8 9 10 11 12 13 14 15	C2 C3 i-C4 n-C4 i-C5 n-C5 C6 C7 C8 C9 C10+	28.01 16.04 30.07 44.10 58.12 58.12 72.15 72.15 86.16 100.20 114.23 128.28 174.06	9.8520 2.8039 3.3353 1.5152 3.1131 2.6843 2.7802 3.6946 18.4092 7.8836 4.9105 27.4103	0.2804 0.4485 1.4848 1.1301 2.6412 2.8118 3.0220 4.3092 21.9386 9.4593 5.9031 32.9789	0.2804 0.4485 1.4848 1.1301 2.6412 2.8118 3.0220 4.3092 21.9386 9.4593 5.9031 32.9789	0.1553 56.9557 14.3951 12.4420 3.4103 5.4355 2.0569 1.5900 0.6697 1.0398 0.1292 0.0255 0.0049	0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000	0.1553 56.9557 14.3951 12.4420 3.4103 5.4355 2.0569 1.5900 0.6697 1.0398 0.1292 0.0255 0.0049
7 9 10 11 12 13 14 15 16	C2 C3 i-C4 n-C4 i-C5 n-C5 C6 C7 C7 C8 C9 C10+ Benzene	28.01 16.04 30.07 44.10 58.12 58.12 72.15 72.15 86.16 100.20 114.23 128.28 174.06 78.11	9.8520 2.8039 3.3353 1.5152 3.1131 2.6843 2.7802 3.6946 18.4092 7.8836 4.9105 27.4103 1.1333	0.2804 0.4485 1.4848 1.1301 2.6412 2.8118 3.0220 4.3092 21.9386 9.4593 5.9031 32.9789 1.3331	0.2804 0.4485 1.4848 1.1301 2.6412 2.8118 3.0220 4.3092 21.9386 9.4593 5.9031 32.9789 1.3331	0.1553 56.9557 14.3951 12.4420 3.4103 5.4355 2.0569 1.5900 0.6697 1.0398 0.1292 0.0255 0.0049 0.1501	0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000	0.1553 56.9557 14.3951 12.4420 3.4103 5.4355 2.0569 1.5900 0.6697 1.0398 0.1292 0.0255 0.0049 0.1501
7 8 9 110 112 113 114 115 116 117 118	C2 C3 i-C4 n-C4 i-C5 n-C5 C6 C7 C7 C8 C9 C10+ Benzene Toluene	28.01 16.04 30.07 44.10 58.12 58.12 72.15 72.15 86.16 100.20 114.23 128.28 174.06 78.11 92.13	9.8520 2.8039 3.3353 1.5152 3.1131 2.6843 2.7802 3.6946 18.4092 7.8836 4.9105 27.4103 1.1333 2.9510	0.2804 0.4485 1.4848 1.1301 2.6412 2.8118 3.0220 4.3092 21.9386 9.4593 5.9031 32.9789 1.3331 3.5301	0.2804 0.4485 1.4848 1.1301 2.6412 2.8118 3.0220 4.3092 21.9386 9.4593 5.9031 32.9789 1.3331 3.5301	0.1553 56.9557 14.3951 12.4420 3.4103 5.4355 2.0569 1.5900 0.6697 1.0398 0.1292 0.0255 0.0049 0.1501 0.1011	0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000	0.1553 56.9557 14.3951 12.4420 3.4103 5.4355 2.0569 1.5900 0.6697 1.0398 0.1292 0.0255 0.0049 0.1501 0.1011
7 8 9 110 112 113 114 115 115 115 115 115	C2 C3 i-C4 n-C4 i-C5 n-C5 C6 C7 C8 C9 C10+ Benzene Toluene E-Benzene	28.01 16.04 30.07 44.10 58.12 58.12 72.15 72.15 86.16 100.20 114.23 128.28 174.06 78.11 92.13 106.17	9.8520 2.8039 3.3353 1.5152 3.1131 2.6843 2.7802 3.6946 18.4092 7.8836 4.9105 27.4103 1.1333 2.9510 0.2203	0.2804 0.4485 1.4848 1.1301 2.6412 2.8118 3.0220 4.3092 21.9386 9.4593 5.9031 32.9789 1.3331 3.5301 0.2646	0.2804 0.4485 1.4848 1.1301 2.6412 2.8118 3.0220 4.3092 21.9386 9.4593 5.9031 32.9789 1.3331 3.5301 0.2646	0.1553 56.9557 14.3951 12.4420 3.4103 5.4355 2.0569 1.5900 0.6697 1.0398 0.1292 0.0255 0.0049 0.1501 0.1011 0.0023	0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000	0.1553 56.9557 14.3951 12.4420 3.4103 5.4355 2.0569 1.5900 0.6697 1.0398 0.1292 0.0255 0.0049 0.1501 0.1011 0.0023
7 8 9 10 11 12 13 14 15 16 17 18 19 20	C2 C3 i-C4 n-C4 i-C5 n-C5 C6 C7 C8 C9 C10+ Benzene Toluene E-Benzene Xylenes	28.01 16.04 30.07 44.10 58.12 58.12 72.15 72.15 86.16 100.20 114.23 128.28 174.06 78.11 92.13 106.17 106.17	9.8520 2.8039 3.3353 1.5152 3.1131 2.6843 2.7802 3.6946 18.4092 7.8836 4.9105 27.4103 1.1333 2.9510 0.2203 2.5216	0.2804 0.4485 1.4848 1.1301 2.6412 2.8118 3.0220 4.3092 21.9386 9.4593 5.9031 32.9789 1.3331 3.5301 0.2646 3.0294	0.2804 0.4485 1.4848 1.1301 2.6412 2.8118 3.0220 4.3092 21.9386 9.4593 5.9031 32.9789 1.3331 3.5301 0.2646 3.0294	0.1553 56.9557 14.3951 12.4420 3.4103 5.4355 2.0569 1.5900 0.6697 1.0398 0.1292 0.0255 0.0049 0.1501 0.1011 0.0023 0.0225	0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000	0.1553 56.9557 14.3951 12.4420 3.4103 5.4355 2.0569 1.5900 0.6697 1.0398 0.1292 0.0255 0.0049 0.1501 0.1011 0.0023 0.0225
7 8 9 10 11 12 13 14 15 16 17 18 19 20	C2 C3 i-C4 n-C4 i-C5 n-C5 C6 C7 C8 C9 C10+ Benzene Toluene E-Benzene	28.01 16.04 30.07 44.10 58.12 58.12 72.15 72.15 86.16 100.20 114.23 128.28 174.06 78.11 92.13 106.17	9.8520 2.8039 3.3353 1.5152 3.1131 2.6843 2.7802 3.6946 18.4092 7.8836 4.9105 27.4103 1.1333 2.9510 0.2203	0.2804 0.4485 1.4848 1.1301 2.6412 2.8118 3.0220 4.3092 21.9386 9.4593 5.9031 32.9789 1.3331 3.5301 0.2646	0.2804 0.4485 1.4848 1.1301 2.6412 2.8118 3.0220 4.3092 21.9386 9.4593 5.9031 32.9789 1.3331 3.5301 0.2646	0.1553 56.9557 14.3951 12.4420 3.4103 5.4355 2.0569 1.5900 0.6697 1.0398 0.1292 0.0255 0.0049 0.1501 0.1011 0.0023	0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000	0.1553 56.9557 14.3951 12.4420 3.4103 5.4355 2.0569 1.5900 0.6697 1.0398 0.1292 0.0255 0.0049 0.1501 0.1011 0.0023
6 7 8 9 10 11 12 13 14 15 16 17 18 9 20 21 22	C2 C3 i-C4 n-C4 i-C5 n-C5 C6 C7 C8 C9 C10+ Benzene Toluene E-Benzene Xylenes n-C6 224Trimethylp	28.01 16.04 30.07 44.10 58.12 58.12 72.15 72.15 86.16 100.20 114.23 128.28 174.06 78.11 92.13 106.17 106.17 86.18	9.8520 2.8039 3.3353 1.5152 3.1131 2.6843 2.7802 3.6946 18.4092 7.8836 4.9105 27.4103 1.1333 2.9510 0.2203 2.5216 3.2163 1.3747	0.2804 0.4485 1.4848 1.1301 2.6412 2.8118 3.0220 4.3092 21.9386 9.4593 5.9031 32.9789 1.3331 3.5301 0.2646 3.0294 3.7790 1.6416	0.2804 0.4485 1.4848 1.1301 2.6412 2.8118 3.0220 4.3092 21.9386 9.4593 5.9031 32.9789 1.3331 3.5301 0.2646 3.0294 3.7790 1.6416	0.1553 56.9557 14.3951 12.4420 3.4103 5.4355 2.0569 1.5900 0.6697 1.0398 0.1292 0.0255 0.0049 0.1501 0.1011 0.0023 0.0225 0.4468 0.0611	0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000	0.1553 56.9557 14.3951 12.4420 3.4103 5.4355 2.0569 1.5900 0.6697 1.0398 0.1292 0.0255 0.0049 0.1501 0.1011 0.0023 0.0225 0.4468 0.0611
7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	C2 C3 i-C4 n-C4 i-C5 n-C5 C6 C7 C8 C9 C10+ Benzene Toluene E-Benzene Xylenes n-C6 224Trimethylp	28.01 16.04 30.07 44.10 58.12 58.12 72.15 86.16 100.20 114.23 128.28 174.06 78.11 92.13 106.17 106.17 86.18 114.24	9.8520 2.8039 3.3353 1.5152 3.1131 2.6843 2.7802 3.6946 18.4092 7.8836 4.9105 27.4103 1.1333 2.9510 0.2203 2.5216 3.2163 1.3747 104.91	0.2804 0.4485 1.4848 1.1301 2.6412 2.8118 3.0220 4.3092 21.9386 9.4593 5.9031 32.9789 1.3331 3.5301 0.2646 3.0294 3.7790 1.6416	0.2804 0.4485 1.4848 1.1301 2.6412 2.8118 3.0220 4.3092 21.9386 9.4593 5.9031 32.9789 1.3331 3.5301 0.2646 3.0294 3.7790 1.6416	0.1553 56.9557 14.3951 12.4420 3.4103 5.4355 2.0569 1.5900 0.6697 1.0398 0.1292 0.0255 0.0049 0.1501 0.1011 0.0023 0.0225 0.4468 0.0611 29.61	0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000	0.1553 56.9557 14.3951 12.4420 3.4103 5.4355 2.0569 1.5900 0.6697 1.0398 0.1292 0.0255 0.0049 0.1501 0.1011 0.0023 0.0225 0.4468 0.0611 29.61
7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	C2 C3 i-C4 n-C4 i-C5 n-C5 C6 C7 C8 C9 C10+ Benzene Toluene E-Benzene Xylenes n-C6 224Trimethylp MW Stream Mole Rati	28.01 16.04 30.07 44.10 58.12 58.12 72.15 86.16 100.20 114.23 128.28 174.06 78.11 92.13 106.17 106.17 86.18 114.24	9.8520 2.8039 3.3353 1.5152 3.1131 2.6843 2.7802 3.6946 18.4092 7.8836 4.9105 27.4103 1.1333 2.9510 0.2203 2.5216 3.2163 1.3747	0.2804 0.4485 1.4848 1.1301 2.6412 2.8118 3.0220 4.3092 21.9386 9.4593 5.9031 32.9789 1.3331 3.5301 0.2646 3.0294 3.7790 1.6416	0.2804 0.4485 1.4848 1.1301 2.6412 2.8118 3.0220 4.3092 21.9386 9.4593 5.9031 32.9789 1.3331 3.5301 0.2646 3.0294 3.7790 1.6416	0.1553 56.9557 14.3951 12.4420 3.4103 5.4355 2.0569 1.5900 0.6697 1.0398 0.1292 0.0255 0.0049 0.1501 0.1011 0.0023 0.0225 0.4468 0.0611 29.61 0.1689	0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000	0.1553 56.9557 14.3951 12.4420 3.4103 5.4355 2.0569 1.5900 0.6697 1.0398 0.1292 0.0255 0.0049 0.1501 0.1011 0.0023 0.0225 0.4468 0.0611 29.61 0.1689
7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	C2 C3 i-C4 n-C4 i-C5 n-C5 C6 C7 C7 C8 C9 C10+ Benzene Toluene E-Benzene Xylenes n-C6 224Trimethylp MW Stream Mole Rati Heating Value	28.01 16.04 30.07 44.10 58.12 58.12 72.15 86.16 100.20 114.23 128.28 174.06 78.11 92.13 106.17 106.17 86.18 114.24	9.8520 2.8039 3.3353 1.5152 3.1131 2.6843 2.7802 3.6946 18.4092 7.8836 4.9105 27.4103 1.1333 2.9510 0.2203 2.5216 3.2163 1.3747 104.91	0.2804 0.4485 1.4848 1.1301 2.6412 2.8118 3.0220 4.3092 21.9386 9.4593 5.9031 32.9789 1.3331 3.5301 0.2646 3.0294 3.7790 1.6416	0.2804 0.4485 1.4848 1.1301 2.6412 2.8118 3.0220 4.3092 21.9386 9.4593 5.9031 32.9789 1.3331 3.5301 0.2646 3.0294 3.7790 1.6416	0.1553 56.9557 14.3951 12.4420 3.4103 5.4355 2.0569 1.5900 0.6697 1.0398 0.1292 0.0255 0.0049 0.1501 0.1011 0.0023 0.0225 0.4468 0.0611 29.61 0.1689 1710.12	0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000	0.1553 56.9557 14.3951 12.4420 3.4103 5.4355 2.0569 1.5900 0.6697 1.0398 0.1292 0.0255 0.0049 0.1501 0.1011 0.0023 0.0225 0.4468 0.0611 29.61 0.1689 1710.12
7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	C2 C3 i-C4 n-C4 i-C5 n-C5 C6 C7 C8 C9 C10+ Benzene Toluene E-Benzene Xylenes n-C6 224Trimethylp MW Stream Mole Rati	28.01 16.04 30.07 44.10 58.12 72.15 72.15 86.16 100.20 114.23 128.28 174.06 78.11 92.13 106.17 106.17 86.18 114.24 .0 [BTU/SCF] [Gas/Air]	9.8520 2.8039 3.3353 1.5152 3.1131 2.6843 2.7802 3.6946 18.4092 7.8836 4.9105 27.4103 1.1333 2.9510 0.2203 2.5216 3.2163 1.3747 104.91	0.2804 0.4485 1.4848 1.1301 2.6412 2.8118 3.0220 4.3092 21.9386 9.4593 5.9031 32.9789 1.3331 3.5301 0.2646 3.0294 3.7790 1.6416	0.2804 0.4485 1.4848 1.1301 2.6412 2.8118 3.0220 4.3092 21.9386 9.4593 5.9031 32.9789 1.3331 3.5301 0.2646 3.0294 3.7790 1.6416	0.1553 56.9557 14.3951 12.4420 3.4103 5.4355 2.0569 1.5900 0.6697 1.0398 0.1292 0.0255 0.0049 0.1501 0.1011 0.0023 0.0225 0.4468 0.0611 29.61 0.1689	0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000	0.1553 56.9557 14.3951 12.4420 3.4103 5.4355 2.0569 1.5900 0.6697 1.0398 0.1292 0.0255 0.0049 0.1501 0.1011 0.0023 0.0225 0.4468 0.0611 29.61 0.1689

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Project		: Z:\458481_QEP_Part_71_Applications\Wonsits\Emission Calcs\Wonsits_60 bbl Tank Run									
Flowshee	et Selection	: Oil Tank with Separator									
Calculation Method		: RVP Distillation									
Control	Efficiency	: 95.0%									
Known Se	eparator Strea	am : Low Pressure Oil									
	J Air Composit										
Filed Na	me	: Uintah Basin									
Well Nam		: QEP - Wonsits Valley Compressor Station									
Well ID		: Wonsits Valley - 8/5/11									
Date		: 2012.09.07									
		******************									
	ata Input	•									
******	***********	*******************************									
	or Pressure	: 200.00[psig]									
	or Temperature										
	Pressure	: 12.00[psia]									
	Temperature	: 60.00[F]									
C10+ SG		: 0.7537									
C10+ MW		: 174.056									
Low H	Pressure Oil -										
No.	Component	mol %									
1	H2S	0.0000									
2	02	0.0000									
3	CO2	0.1648									
4	N2	0.0264									
5	C1	9.8520									
6	C2	2.8039									
7	C3	3.3353									
8	i-C4	1.5152									
9	n-C4	3.1131									
10	i-C5	2.6843									
11	n-C5	2.7802									
12	C6	3.6946									
13	C7	18.4092									
14	C8	7.8836									
15	C9	4.9105									
16	C10+	27.4103									
17	Benzene	1.1333									
18	Toluene	2.9510									
19	E-Benzene	0.2203									
20	Xylenes	2.5216									
21	n-C6	3.2163									
22	224Trimethy	lp 1.3747									
- Sales	0il										
		: 60[bb1/day]									
ays of		ion : 365 [days/year]									
PI Grav		: 68.6									
weid Vap	or Pressure	: 10.58[psia]									
		, sol i vezet simete ●● internet●									
*******	*********	************									
	lculation Res										
		***************************************									
	2										
	ton Cummaris -										
- Emiss tem	1997년 1월 1997년 1월 1997년 19	ncontrolled Uncontrolled Controlled Controlled									

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	(vol%)	(lb/hr)	
Methane	3.51e+001	1.31e-001	
	1.41e+001	9.83e-002	
	1.50e+001	1.53e-001	
	4.34e+000	5.85e-002	
	7.44e+000	1.00e-001	
II Ducane	7.110+000	1.000 001	
Isopentane	2.09e+000	3.50e-002	
n-Pentane	2.17e+000	3.63e-002	
n-Hexane	8.90e-001	1.78e-002	
Cyclohexane	2.34e+000	4.56e-002	
Other Hexanes	1.31e+000	2.62e-002	
	7.53e-001	1.75e-002	
Methylcyclohexane		4.17e-002	
2,2,4-Trimethylpentane	2.53e-002	6.70e-004	
Benzene	7.77e+000	1.41e-001	
Toluene	4.32e+000	9.22e-002	
Ethylbenzene	4.30e-002	1.06e-003	
	4.50e-001		
C8+ Heavies		1.61e-004	
Total Components	100.00	1.01e+000	

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Propane 3.72e-001 3.27e-001 Isobutane 3.02e-001 2.65e-001 n-Butane 7.65e-001 6.72e-001 Isopentane 7.61e-001 6.69e-001 n-Pentane 7.80e-001 6.86e-001 n-Hexane 1.17e+000 1.03e+000 Cyclohexane 4.32e+000 3.80e+000 Other Hexanes 1.18e+000 1.03e+000 Heptanes 3.39e+000 2.97e+000 Methylcyclohexane 8.34e+000 7.33e+000 2,2,4-Trimethylpentane 1.27e-001 1.12e-001 Benzene 1.62e+001 1.43e+001 Toluene 3.30e+001 2.90e+001 Ethylbenzene 1.33e+000 1.17e+000 Xylenes 1.64e+001 1.44e+001 C8+ Heavies 1.14e+001 1.00e+001 Total Components 100.00 8.79e+001

CONDENSER VENT STREAM

Temperature: 100.00 deg. F Pressure: 12.00 psia		
Flow Rate: 2.46e+002 scfh		
Tow Race. 2. Hoerooz Serin		
Component		Loading
	(vol%)	(lb/hr)
Wataw	7.99e+000	0 220 001
Carbon Dioxide		
	8.62e-002	
	2.52e+001	
	1.01e+001	
Propane	1.07e+001	3.06e+000
	3.11e+000	
n-Butane	5.33e+000	2.00e+000
Isopentane	1.50e+000	6.99e-001
n-Pentane	1.55e+000	7.25e-001
	6.37e-001	
Cyclohexane	1.67e+000	9.11e-001
Other Hexanes		
	5.39e-001	
Methylcyclohexane	1.31e+000	8.34e-001
2,2,4-Trimethylpentane	1.81e-002	1.34e-002
Benzene	5.56e+000	2.81e+000
	3.09e+000	
Ethylbenzene		
Xylenes	3.23e-001	2.22e-001
C8+ Heavies	2.92e-003	3.22e-003
Total Components	100.00	2.69e+001

#### COMBUSTION DEVICE OFF GAS STREAM

Temperature: 1000.00 deg. F Pressure: 14.70 psia Flow Rate: 8.79e+000 scfh Component Conc. Loading n-Hexane 1.11e-001 1.39e+000 Cyclohexane 3.85e-001 4.71e+000 Other Hexanes 1.24e-001 1.56e+000 Heptanes 2.28e-001 3.32e+000 Methylcyclohexane 5.72e-001 8.17e+000 2,2,4-Trimethylpentane 7.55e-003 1.25e-001 Benzene 1.51e+000 1.72e+001 Toluene 2.31e+000 3.09e+001 Ethylbenzene 7.72e-002 1.19e+000 Xylenes 9.47e-001 1.46e+001 C8+ Heavies 4.05e-001 1.00e+001 Total Components 100.00 3.48e+002 Page: 11

CONDENSER PRODUCED WATER STREAM

## Temperature: 100.00 deg. F Flow Rate: 4.67e-001 gpm

Component		Loading (lb/hr)	(ppm)
Water	9.99e+001	2.33e+002	999106.
Carbon Dioxide			182.
Nitrogen	1.12e-006	2.61e-006	0.
	3.77e-004		4.
	3.42e-004		3.
Propane	4.65e-004	1.09e-003	5.
	9.94e-005		1.
n-Butane	2.32e-004	5.41e-004	2.
Isopentane	5.87e-005	1.37e-004	1.
n-Pentane	6.63e-005	1.55e-004	1.
n-Hexane	2.81e-005	6.57e-005	Ο.
Cyclohexane			0. 4.
Other Hexanes	3.29e-005	7.68e-005	Ο.
Heptanes	1.58e-005	3.69e-005	0. 0.
Methylcyclohexane	1.94e-004	4.52e-004	2.
2,2,4-Trimethylpentane	3.97e-007	9.28e-007	0.
	4.20e-002		420.
	2.35e-002		235.
Ethylbenzene			2.
	3.13e-003		31.
C8+ Heavies	8.18e-008	1.91e-007	0.
Total Components	100.00	2.34e+002	1000000.

#### CONDENSER RECOVERED OIL STREAM

Temperature: 100.00 deg. F Flow Rate: 2.07e-001 gpm Component Conc. Loading (wt%) (lb/hr) Water 4.13e-002 3.63e-002 Carbon Dioxide 7.04e-002 6.18e-002 Nitrogen 1.10e-004 9.71e-005 Methane 1.01e-002 8.85e-003 Ethane 4.48e-002 3.94e-002

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Toluene 3.21e-001 3.36e+001 Ethylbenzene 1.27e-002 1.33e+000

Xylenes 1.60e-001 1.68e+001 C8+ Heavies 1.10e-001 1.15e+001 Total Components 100.00 1.05e+004

FLASH GAS EMISSIONS

Flow Rate: 3.14e+003 scfh Control Method: Combustion Device Control Efficiency: 95.00

Component mponent Conc. Loading (vol%) (lb/hr) Water 6.03e+001 8.98e+001 Carbon Dioxide 3.83e+001 1.40e+002 Nitrogen 6.90e-002 1.60e-001 Methane 9.78e-001 1.30e+000 Ethane 1.30e-001 3.23e-001 Propane 7.24e-002 2.64e-001 Isobutane 1.69e-002 8.13e-002 n-Butane 2.50e-002 1.20e-001 Isopentane 9.51e-003 5.68e-002 n-Pentane 8.18e-003 4.88e-002 n-Hexane 4.11e-003 2.93e-002 Cyclohexane 3.72e-003 2.59e-002 Other Hexanes 5.90e-003 4.20e-002 Heptanes 4.61e-003 3.82e-002 Methylcyclohexane 4.64e-003 3.76e-002 2,2,4-Trimethylpentane 2.87e-004 2.71e-003 Benzene 2.40e-003 1.55e-002 Toluene 2.59e-003 1.97e-002 Ethylbenzene 5.48e-005 4.81e-004 Xylenes 4.78e-004 4.20e-003 C8+ Heavies 2.38e-003 3.35e-002 ----- -----Total Components 100.00 2.32e+002

#### REGENERATOR OVERHEADS STREAM

Temperature: Pressure: Flow Rate:	212.00 14.70 5.51e+003	psīa		
	Component	t	Conc.	Loading

 
 Component
 Conc. (vol%)
 Loading (lb/hr)

 Water
 8.95e+001
 2.34e+002

 Carbon Dioxide
 9.22e-001
 5.90e+000

 Nitrogen
 3.87e-003
 1.57e-002

 Methane
 1.12e+000
 2.62e+000

 Ethane
 4.59e-001
 2.01e+000

 Propane
 5.28e-001
 3.39e+000

 Isobutane
 1.70e-001
 1.44e+000

 n-Butane
 3.17e-001
 2.68e+000

 Isopentane
 1.31e-001
 1.37e+000

 n-Pentane
 1.35e-001
 1.41e+000

Temperature: 165.00 deg. F		
Pressure: 99.70 psia Tlow Rate: 8.60e+002 scfh		
flow Rate: 8.60e+002 scfh		
Component	Conc. (vol%)	Loading (lb/hr)
	E 02- 001	0.000.001
Carbon Dioxide	5.83e-001	
	2.52e-001	
	7.14e+001	
	9.47e+000	
Benane	5.470+000	0.456+000
Propane	5.29e+000	5.28e+000
	1.23e+000	
	1.82e+000	
	6.94e-001	
n-Pentane	5.97e-001	9.76e-001
n-Hexane	3.00e-001	5.85e-001
Cyclohexane	2.72e-001	5.18e-001
Other Hexanes	4.30e-001	8.40e-001
Heptanes	3.36e-001	7.63e-001
Methylcyclohexane	3.38e-001	7.53e-001
2,2,4-Trimethylpentane	2.10e-002	5.43e-002
Benzene	1.75e-001	3.11e-001
Toluene	1.89e-001	3.94e-001
Ethylbenzene	4.00e-003	9.62e-003
Xylenes	3.49e-002	8.39e-002
C8+ Heavies	1.73e-001	6.70e-001
Total Components	100 00	5.56e+001

FLASH TANK GLYCOL STREAM

------------Temperature: 165.00 deg. F Flow Rate: 1.87e+001 gpm

- -

Component		Loading (lb/hr)
TEG	9.47e+001	9.91e+003
Water	4.17e+000	4.37e+002
Carbon Dioxide	5.63e-002	5.90e+000
Nitrogen	1.50e-004	1.57e-002
Methane	2.51e-002	2.62e+000
Ethane	1.92e-002	2.01e+000
Propane	3.24e-002	3.39e+000
Isobutane	1.37e-002	1.44e+000
	2.56e-002	
Isopentane	1.32e-002	1.38e+000
n-Pentane	1.36e-002	1.42e+000
n-Hexane	1.33e-002	1.40e+000
Cyclohexane		
Other Hexanes	1.51e-002	1.58e+000
Heptanes	3.20e-002	3.35e+000
Methylcyclohexane	8.16e-002	8.54e+000
2,2,4-Trimethylpentane		
	1.73e-001	

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TEG 9.79e+001 9.91e+003 Water 2.00e+000 2.02e+002 Carbon Dioxide 1.21e-011 1.23e-009 Nitrogen 1.73e-013 1.75e-011 Methane 9.49e-018 9.60e-016 Ethane 3.95e-008 3.99e-006 Propane 3.49e-009 3.53e-007 Isobutane 9.07e-010 9.18e-008 n-Butane 1.24e-009 1.26e-007 Isopentane 1.24e-004 1.26e-002 n-Pentane 1.19e-004 1.20e-002 n-Hexane 9.79e-005 9.91e-003 Cyclohexane 1.71e-003 1.73e-001 Other Hexanes 2.39e-004 2.42e-002 Heptanes 2.03e-004 2.05e-002 Methylcyclohexane 3.67e-003 3.72e-001 2,2,4-Trimethylpentane 2.70e-005 2.74e-003 Benzene 9.09e-003 9.20e-001 Toluene 2.65e-002 2.68e+000 Ethylbenzene 1.38e-003 1.40e-001 Xylenes 2.16e-002 2.18e+000 C8+ Heavies 1.44e-002 1.46e+000 Total Components 100.00 1.01e+004

RICH GLYCOL STREAM

Temperature: 98.00 deg. F Pressure: 914.70 psia Flow Rate: 1.88e+001 gpm NOTE: Stream has more than one phase.

Component Conc. Loading (wt%) (lb/hr) ----- ----- ------TEG 9.42e+001 9.91e+003 Water 4.15e+000 4.37e+002 Carbon Dioxide 1.17e-001 1.23e+001 Nitrogen 1.67e-003 1.76e-001 Methane 2.72e-001 2.86e+001 Ethane 8.04e-002 8.46e+000 Propane 8.24e-002 8.67e+000 Isobutane 2.91e-002 3.06e+000 n-Butane 4.83e-002 5.08e+000 Isopentane 2.39e-002 2.52e+000 n-Pentane 2.28e-002 2.40e+000 n-Hexane 1.88e-002 1.98e+000 Cyclohexane 5.13e-002 5.40e+000 Other Hexanes 2.30e-002 2.42e+000 Heptanes 3.91e-002 4.11e+000 Methylcyclohexane 8.83e-002 9.29e+000 2,2,4-Trimethylpentane 1.73e-003 1.82e-001 Benzene 1.75e-001 1.84e+001 Toluene 3.23e-001 3.40e+001 Ethylbenzene 1.27e-002 1.34e+000 Xylenes 1.60e-001 1.69e+001 C8+ Heavies 1.16e-001 1.22e+001 ----- ----Total Components 100.00 1.05e+004

Isobutane 4.10e-001 2.62e+003 n-Butane 5.21e-001 3.33e+003 Isopentane 2.11e-001 1.68e+003 n-Pentane 1.58e-001 1.25e+003 n-Hexane 6.85e-002 6.49e+002 Cyclohexane 4.21e-002 3.90e+002 Other Hexanes 1.08e-001 1.03e+003 Heptanes 6.93e-002 7.64e+002 Methylcyclohexane 5.81e-002 6.28e+002 2,2,4-Trimethylpentane 6.29e-003 7.91e+001 Benzene 1.74e-002 1.49e+002 Toluene 1.88e-002 1.90e+002 Ethylbenzene 4.99e-004 5.83e+000 Xylenes 4.49e-003 5.25e+001 C8+ Heavies 3.37e-002 6.31e+002 ----- ------ -----------Total Components 100.00 2.04e+005

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DRY GAS STREAM

Cemperature: 9	8.00 deg. F		
Pressure: 91 Flow Rate: 4.17e	4.70 psia		
10w Rate: 4.17e	+006 scih		
Comp	onent		Loading
		(vol%)	(lb/hr)
	Water	r 7.14e-003	1.41e+001
C	arbon Dioxide		
	Nitrogen	n 2.83e-001	8.72e+002
		e 9.01e+001	
		e 4.71e+000	
	Propane	e 2.07e+000	1.00e+004
		e 4.10e-001	
		e 5.21e-001	
		e 2.11e-001	
		e 1.58e-001	
	n-Hexane	e 6.84e-002	6.47e+002
	Cyclohexane	e 4.16e-002	3.85e+002
	Other Hexanes		
		6.90e-002	
Meth	ylcycloĥexane	e 5.74e-002	6.19e+002
2,2,4-Tri	methylpentane	e 6.29e-003	7.89e+001
	Benzene	e 1.54e-002	1.32e+002
	Toluene	e 1.57e-002	1.59e+002
	Ethylbenzene	e 3.97e-004	4.63e+000
	Xylenes	3.24e-003	3.78e+001
	C8+ Heavies	3.31e-002	6.20e+002
Tot	al Components	100.00	2.04e+005
TINCOT CODDAM			

LEAN GLYCOL STREAM Temperature: 98.00 deg. F Flow Rate: 1.80e+001 gpm Component Conc. Loading (wt%) (lb/hr)

		Page:	6	
Methylcyclohexane	91.90%	8.10%		
2,2,4-Trimethylpentane	70.25%	29.75%		
Benzene	98.31%	1.69%		
Toluene	98.84%	1.16%		
Ethylbenzene	99.28%	0.72%		
Xylenes	99.50%	0.50%		
C8+ Heavies	94.49%	5.51%		

#### REGENERATOR

No Stripping Gas used in regenerator.

Component	Remaining in Glycol	Distilled Overhead	
Water	46.35%	53.65%	
Carbon Dioxide	0.00%	100.00%	
Nitrogen	0.00%	100.00%	
Methane	0.00%	100.00%	
Ethane	0.00%	100.00%	
Propaga	0.00%	100 008	
Propane	0.00%	100.00%	
Isobutane	0.00%	100.00%	
n-Butane	0.00%	100.00%	
Isopentane	0.91%	99.09%	
n-Pentane	0.84%	99.16%	
n-Hexane	0.71%	99.29%	
Cyclohexane	3.54%	96.46%	
Other Hexanes	1.53%	98.47%	
Heptanes	0.61%	99.39%	
Methylcyclohexane	4.35%	95.65%	
2,2,4-Trimethylpentane	2.13%	97.87%	
Benzene	5.09%	94.91%	
Toluene	8.00%	92.00%	
Ethylbenzene	10.48%	89.52%	
Xylenes	12.99%	87.01%	
C8+ Heavies	12.71%	87.29%	

STREAM REPORTS:

	Page: 5
Calculated Absorber Stages:	1.46
Specified Dry Gas Dew Point:	3.39 lbs. H2O/MMSCF
Temperature:	98.0 deg. F
Pressure:	900.0 psig
Dry Gas Flow Rate:	100.0000 MMSCF/day
Glycol Losses with Dry Gas:	1.2391 lb/hr
Wet Gas Water Content:	Saturated
Calculated Wet Gas Water Content:	59.59 lbs. H2O/MMSCF
Calculated Lean Glycol Recirc. Ratio:	4.61 gal/lb H2O
Ret	maining Absorbed
	Dry Gas in Glycol
Water	5.68% 94.32%
water Guila Diali	5.00% 94.32%

Carbon Dioxide	99.76%	0.24%
Nitrogen	99.98%	0.02%
Methane	99.98%	0.02%
Ethane	99.95%	0.05%
Propane	99.91%	0.09%
Isobutane	99.88%	0.12%
n-Butane	99.85%	0.15%
Isopentane	99.85%	0.15%
n-Pentane	99.81%	0.19%
n-Hexane	99.70%	0.30%
Cyclohexane	98.66%	1.34%
Other Hexanes	99.77%	0.23%
Heptanes	99.46%	0.54%
Methylcyclohexane	98.58%	1.42%
2,2,4-Trimethylpentane	99.77%	0.23%
Benzene	88.29%	11.71%
Toluene	83.56%	16.44%
Ethylbenzene	79.40%	20.60%
Xylenes	71.99%	28.01%
C8+ Heavies	98.30%	1.70%

#### FLASH TANK

Flash Control Efficie Flash Temperat Flash Press	ure: 165	용
	Left in	Removed in
Component	Glycol	Flash Gas
Water	99.95%	0.05%
Carbon Dioxide	48.06%	
Nitrogen	8.96%	91.04%
Methane	9.18%	90.82%
Ethane	23.71%	76.29%
Propane	39.06%	60.94%
Isobutane	46.89%	53.11%
n-Butane	52.70%	47.30%
Isopentane	54.89%	45.11%
n-Pentane	59.32%	40.68%
n-Hexane	70.45%	29.55%
Cyclohexane	90.40%	9.60%
Other Hexanes	65.32%	34.68%
Heptanes	81.42%	18.58%

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				Page: 4
	n-Pentane	10.4560	0.3726	96.44
	n-Hexane	8.6353	0.2061	97.61
Cy	vclohexane	22.9007	0.3132	98.63
Othe	er Hexanes	10.5072	0.2988	97.16
	Heptanes	17.9057	0.2438	98.64
Methylcy	vclohexane	39.0675	0.3475	99.11
2,2,4-Trimeth	ylpentane	0.7870	0.0148	98.12
	Benzene	76.5612	0.6840	99.11
	Toluene	137.0442	0.4900	99.64
Eth	ylbenzene	5.2614	0.0067	99.87
	Xylenes	64.3721	0.0669	99.90
CE	8+ Heavies	46.8456	0.1474	99.69
Total	Emissions	687.1317	15.0966	97.80
Total Hydrocarbon	Emissions	687.1317	15.0966	97.80
Total VOC	Emissions	524.9254	6.9972	98.67
Total HAP	Emissions	292.6612	1.4686	99.50
Total BTEX	Emissions	283.2389	1.2477	99.56

EQUIPMENT REPORTS:

#### CONDENSER AND COMBUSTION DEVICE

Condenser Outlet Temperature:	100.00	deg. F
Condenser Pressure:	12.00	psia
Condenser Duty:	8.41e-002	MM BTU/hr
Hydrocarbon Recovery:	7.08	bbls/day
Produced Water:	16.01	bbls/day
Ambient Temperature:	60.00	deg. F
Excess Oxygen:	5.00	8
Combustion Efficiency:	95.00	8
Supplemental Fuel Requirement:	8.41e-002	MM BTU/hr

Component	Emitted	Destroyed	
Methane	4.98%	95.02%	
Ethane	4.90%	95.10%	
Propane	4.52%	95.48%	
Isobutane	4.07%	95.93%	
n-Butane	3.74%	96.26%	
Isopentane	2.56%	97.44%	
n-Pentane	2.57%	97.43%	
n-Hexane	1.28%	98.72%	
Cyclohexane	0.97%	99.03%	
Other Hexanes	1.68%	98.32%	
Heptanes	0.53%	99.47%	
Methylcyclohexane	0.51%	99.49%	
2,2,4-Trimethylpentane	0.53%	99.47%	
Benzene	0.82%	99.18%	
Toluene	0.30%	99.70%	
Ethylbenzene	0.09%	99.91%	
Xylenes	0.08%	99.92%	
C8+ Heavies	0.00%	100.00%	

10					Page: 3
	Oth	er Hexanes	0.8404	20.169	3.6808
		Heptanes	0.7635	18.324	3.3441
	Methylc	yclohexane	0.7529	18.070	3.2978
	2,2,4-Trimet	hylpentane	0.0543	1.303	0.2377
		Benzene	0.3105	7.452	1.3600
		Toluene	0.3943	9.463	1.7270
	Et	hylbenzene	0.0096	0.231	0.0422
		Xylenes	0.0839	2.014	0.3675
	C	8+ Heavies	0.6697	16.073	2.9334
	Total	Emissions	48.8107	1171.456	213.7908
Tota	1 Hydrocarbon	Emissions	48.8107	1171.456	213.7908
	Total VOC	Emissions	16.4047	393.712	71.8525
	Total HAP	Emissions	1.4381	34.514	6.2988
	Total BTEX	Emissions	0.7983	19.160	3.4968

#### COMBINED REGENERATOR VENT/FLASH GAS EMISSIONS

Component	lbs/hr	lbs/day	tons/yr
Methane	1.4282	34.277	6.2556
Ethane	0.4210	10.103	1.8438
Propane	0.4170	10.009	1.8266
Isobutane	0.1398		0.6123
n-Butane	0.2203	5.286	0.9647
Isopentane	0.0917	2.201	0.4018
n-Pentane	0.0851	2.042	0.3726
n-Hexane	0.0470	1.129	0.2061
Cyclohexane	0.0715	1.716	0.3132
Other Hexanes	0.0682	1.637	0.2988
Heptanes	0.0557	1.336	0.2438
Methylcyclohexane	0.0793	1.904	0.3475
2,2,4-Trimethylpentane	0.0034	0.081	0.0148
Benzene	0.1562	3.748	0.6840
Toluene	0.1119	2.685	0.4900
Ethylbenzene	0.0015	0.037	0.0067
Xylenes	0.0153	0.367	0.0669
C8+ Heavies	0.0336	0.808	0.1474
Total Emissions	3.4467	82.721	15.0966
Total Hydrocarbon Emissions	3.4467	82.721	15.0966
Total VOC Emissions	1.5975	38.341	6.9972
Total HAP Emissions	0.3353	8.047	1.4686
Total BTEX Emissions	0.2849	6.837	1.2477

#### COMBINED REGENERATOR VENT/FLASH GAS EMISSION CONTROL REPORT:

 
 Component
 Uncontrolled tons/yr
 Controlled tons/yr
 % Reduction

 Methane
 125.1548
 6.2556
 95.00

 Ethane
 37.0515
 1.8438
 95.02

 Propane
 37.9675
 1.8266
 95.19

 Isobutane
 13.4090
 0.6123
 95.43

 n-Butane
 22.2396
 0.9647
 95.66

 Isopentane
 10.9655
 0.4018
 96.34

		Page: 2	
1.5585	37.405	6.8264	A MERICAN LINE
3.3245	79.789	14.5615	
8.1666	195,998		
0.1254	3.010		
17.1692			
30.8943	741.464	135.3172	
1.1916	28.599	5.2192	
14.6129	350.710	64.0046	
10.0256	240.615	43.9123	
100 0607	2502 640	472 2400	
100.0007	2593.649	4/3.3409	
108.0687	2593.649	473.3409	
103.4413	2482.592	453.0730	
65.3796	1569.109		
63.8681	1532.833	279.7421	
	3.3245 8.1666 0.1254 17.1692 30.8943 1.1916 14.6129 10.0256 108.0687 108.0687 103.4413 65.3796	3.3245 79.789 8.1666 195.998 0.1254 3.010 17.1692 412.061 30.8943 741.464 1.1916 28.599 14.6129 350.710 10.0256 240.615 108.0687 2593.649 108.0687 2593.649 103.4413 2482.592 65.3796 1569.109	$\begin{array}{cccccccccccccccccccccccccccccccccccc$

#### FLASH GAS EMISSIONS

Component	lbs/hr	lbs/day	tons/yr
Methane	1.2976	31.142	5.6835
Ethane	0.3227	7.745	1.4134
Propane	0.2641	6.339	1.1569
Isobutane	0.0813	1.951	0.3561
n-Butane	0.1201	2.882	0.5260
Isopentane	0.0568	1.362	0.2486
n-Pentane	0.0488	1.171	0.213
n-Hexane	0.0293	0.703	0.128
Cyclohexane	0.0259	0.622	0.113
Other Hexanes	0.0420	1.008	0.1840
Heptanes	0.0382	0.916	0.167
Methylcyclohexane	0.0376	0.904	0.164
2,2,4-Trimethylpentane	0.0027	0.065	0.011
Benzene	0.0155	0.373	0.068
Toluene	0.0197	0.473	0.086
Ethylbenzene	0.0005	0.012	0.002
Xylenes	0.0042	0.101	0.018
C8+ Heavies	0.0335	0.804	0.146
Total Emissions	2.4405	58.573	10.689
Total Hydrocarbon Emissions	2.4405	58.573	10.6895
Total VOC Emissions	0.8202	19.686	3.5920
Total HAP Emissions	0.0719	1.726	0.314
Total BTEX Emissions	0.0399	0.958	0.1748

#### FLASH TANK OFF GAS

Component	lbs/hr	lbs/day	tons/yr
Methane	25.9520	622.849	113.6699
Ethane	6.4540	154.895	28.2684
Propane	5.2829	126.789	23.1390
Isobutane	1.6260	39.023	7.1217
n-Butane	2.4017	57.640	10.5193
Isopentane	1.1351	27.242	4.9717
n-Pentane	0.9760	23.424	4.2749
n-Hexane	0.5855	14.051	2.5643
Cyclohexane	0.5185	12.444	2.2710

Page: 1

GRI-GLYCalc VERSION 4.0 - AGGREGATE CALCULATIONS REPORT

Case Name: QEP - Wonsits Valley CS File Name: \\gecko\ebg\458481\_QEP\_Part\_71\_Applications\Wonsits\Emission Calcs\Wonsits\_100 scfd TEG Dehy 2012.ddf

Date: September 11, 2012

#### DESCRIPTION:

Description: 100 MMscf/d TEG Dehydration Unit Sample Date: 08/31/2012

Annual Hours of Operation: 8760.0 hours/yr

#### EMISSIONS REPORTS:

#### CONTROLLED REGENERATOR EMISSIONS

Component	lbs/hr	lbs/day	tons/yr
Methane	0.1306	3.135	0.5721
Ethane	0.0983	2.358	0.4304
Propane	0.1529	3.669	0.6696
Isobutane	0.0585	1.404	0.2562
n-Butane	0.1002	2.404	0.4387
Isopentane	0.0350	0.839	0.1532
n-Pentane	0.0363	0.871	0.1589
n-Hexane	0.0178	0.427	0.0779
Cyclohexane	0.0456	1.094	0.1996
Other Hexanes	0.0262	0.629	0.1147
Heptanes	0.0175	0.420	0.0766
Methylcyclohexane	0.0417	1.001	0.1826
2,2,4-Trimethylpentane	0.0007	0.016	0.0029
Benzene	0.1406	3.375	0.6160
Toluene	0.0922	2.212	0.4037
Ethylbenzene	0.0011	0.025	0.0046
Xylenes	0.0111	0.266	0.0485
C8+ Heavies	0.0002	0.004	0.0007
Total Emissions	1.0062	24.148	4.4070
Total Hydrocarbon Emissions	1.0062	24.148	4.4070
Total VOC Emissions	0.7773	18.655	3.4045
Total HAP Emissions	0.2634	6.321	1.1537
Total BTEX Emissions	0.2449	5.879	1.0729

#### UNCONTROLLED REGENERATOR EMISSIONS

Component	lbs/hr	lbs/day	tons/yr
Mathema			11 4040
Methane	2.6221	62.931	11,4848
Ethane	2.0053	48.126	8.7831
Propane	3.3855	81.252	14.8285
Isobutane	1.4355	34.451	6.2873
n-Butane	2.6759	64.220	11.7202
Isopentane	1.3684	32.843	5.9938
n-Pentane	1.4112	33.869	6.1811
n-Hexane	1.3861	33.266	6.0711
Cyclohexane	4.7100	113.040	20.6297

## QEP Field Services Company

## Wonsits Valley Compressor Station

Pilot Flow Calculator - Cimarron Combustor

Cub	Cubic Feet per Hour Flow Capacity @ 10 psig			
	Natural Gas		Butane	1
SG =	0.6	1.5	2	
Drill Size #70	21	13.4	11.6	scf/hr
(Discharge = 1.0) Calculated Flow Capacity =		11.77	10.19	scf/hr
Adjusted Flow Capacity for Discharge Coefficient =	13.84	8.83	7.64	scf/hr
Calculated Total Flow w/Input Discharge Coefficient =	13.84	8.83	7.64	scf/hr
	0.33	0.21	0.18	MSCFD
	15,622	22,709	24,650	BTU/hr

SG =	0.6	13.84	scf/hr
Input Flow	Pressure	7	psig
Input 1	Input Total Jets		orifices
Input Discharge C	oefficient	0.75	

#### SECTION IV

#### PERFORMANCE

The John Zink Vapor Combustion Unit will combust the hydrocarbon vapors from the incoming air/hydrocarbon vapor mixture in order to comply with guaranteed emission limits as stated below.

#### SUMMARY

GUARANTEED HYDROCARBON EMISSIONS LEVEL (See Section VI for Performance Guarantee)

95% Destruction Efficiency

### ESTIMATED SYSTEM PRESSURE DROPS

10 Inches W. C. estimated at maximum inlet flow conditions. (See Section II, Design Basis)

Pressure drop through 4" burner at 5 scfm is 0.312 inch W.C. Pressure drop through 4" burner at 150 scfm is 4.9 inch W.C.

#### UTILITY REQUIREMENTS

Pilot Gas ..... 21 SCFH Propane @ 4 PSIG or 54 SCFH of Natural Gas @ 7 PSIG per pilot

Assist Gas .... Will be provided by customr. Minimum flowrate will be 5 scfm.

Instrument Air .... None

## G3616

GAS COMPRESSION APPLICATION

ENGINE SPEED (rpm): COMPRESSION RATIO:

# GAS ENGINE SITE SPECIFIC TECHNICAL DATA

- 1844 (1951) - 1876 (1957) - 1877 - 1877 - 1877	sits Valley CS (C207)	soluce by the first a
1000	FUEL SYSTEM:	GAV
9:1 130	SITE CONDITIONS:	WITH AIR FUEL RATIO CONTROL
190	FUEL:	Gas Analysis
TA	FUEL PRESSURE RANGE(psig):	42.8-47.0

**CATERPILLAR°** 

CONTINUES OF TRATIO.	0.1		WITH AIR FUEL RATIO CONTROL
AFTERCOOLER WATER INLET (%):	130	SITE CONDITIONS:	
JACKET WATER OUTLET ( *):	190	FUEL:	Gas Analysis
ASPIRATION:	TA	FUEL PRESSURE RANGE(psig):	42.8-47.0
COOLING SYSTEM:	JW, OC+AC	FUEL METHANE NUMBER:	61.2
IGNITION SYSTEM:	CIS/ADEM3	FUEL LHV (Btu/scf):	1009
EXHAUST MANIFOLD:	DRY	ALTITUDE(ft):	6590
COMBUSTION:	Low Emission	MAXIMUM INLET AIR TEMPERATURE(%):	61
NOx EMISSION LEVEL (g/bhp-hr NOx):	0.7	STANDARD RATED POWER:	4735 bhp@1000rpm

				MAXIMUM	SITE RATING AT MAXIMUM INLET AIR TEMPERATURE		
RATING		NOTES	LOAD	100%	100%	75%	52%
ENGINE POWER (WITH	OUT FAN)	(1)	bhp	4686	4554	3416	2368
INLET AIR TEMPERATURE		.,	٩F	32	61	61	61
ENGINE DATA							
FUEL CONSUMPTION (LHV)		(2)	Btu/bhp-hr	6749	6781	7106	7694
FUEL CONSUMPTION (HHV)		(2)	Btu/bhp-hr	7469	7505	7865	8516
AIR FLOW (77°F, 14.7 psia)	(WET)	(3)(4)	scfm	11840	11537	8910	6347
AIR FLOW	(WET)	(3)(4)	lb/hr	52498	51154	39507	28144
INLET MANIFOLD PRESSURE		(5)	in Hg(abs)	71.3	69.4	53.6	39.6
EXHAUST TEMPERATURE - ENGINE OUTLET		(6)	٩F	878	883	927	996
EXHAUST GAS FLOW (@engine outlet temp, 14.5 psia)	(WET)	(7)(4)	ft3/min	31382	30689	24504	18366
EXHAUST GAS MASS FLOW	(WET)	(7)(4)	lb/hr	54024	52644	40678	29022
EMISSIONS DATA - ENGINE OUT							40
NOx (as NO2)		(8)(9)	g/bhp-hr	0.70	0.70	0.70	0.70
CO		(8)(9)	g/bhp-hr	2.50	2.50	2.50	2.50
THC (mol. wt. of 15.84)		(8)(9)	g/bhp-hr	6.01	6.04	6.28	6.49
NMHC (mol. wt. of 15.84)		(8)(9)	g/bhp-hr	1.26	1.26	1.31	1.36
NMNEHC (VOCs) (mol. wt. of 15.84)		(8)(9)(10)	g/bhp-hr	0.76	0.76	0.79	0.82
HCHO (Formaldehyde)		(8)(9)	g/bhp-hr	0.26	0.26	0.28	0.31
CO2		(8)(9)	g/bhp-hr	438	440	461	500
EXHAUST OXYGEN		(8)(11)	% DRY	11.7	11.7	11.5	11.1
HEAT REJECTION							
HEAT REJ. TO JACKET WATER (JW)		(12)	Btu/min	48122	47753	41503	34027
HEAT REJ. TO ATMOSPHERE		(12)	Btu/min	18600	18566	17594	16699
HEAT REJ. TO LUBE OIL (OC)		(12)	Btu/min	23937	23949	23178	22771
HEAT REJ. TO AFTERCOOLER (AC)		(12)(13)	Btu/min	37441	37441	14954	3356
COOLING SYSTEM SIZING CRITERIA							
TOTAL JACKET WATER CIRCUIT (JW)		(14)	Btu/min	52935			
TOTAL AFTERCOOLER CIRCUIT (OC+AC)		(13)(14)	Btu/min	68052			
A cooling system safety factor of 0% has been added to the cooling system sizing	criteria.						

CONDITIONS AND DEFINITIONS Engine rating obtained and presented in accordance with ISO 3046/1, adjusted for fuel, site altitude and site inlet air temperature. 100% rating at maximum inlet air temperature is the maximum engine capability for the specified fuel at site altitude and maximum site inlet air temperature. Max: rating is the maximum capability for the specified fuel at site altitude and reduced inlet air temperature. Lowest load point is the lowest continuous duty operating load allowed. No overload permitted at rating shown.

For notes information consult page three.

## DRESSER Waukesha

## WVCS - Title V App

Wonsits Valley CS - Uintah County, Utah

Gas Compression

QEP Field Services Ryan Robins		ryan.robi	ns@qepres.co	m	303.405.6688
FUEL COMPOSITION	A CONTRACTOR OF	1	1	1999 B. C. S.	
HYDROCARBONS:	Mole or V	Volume %		FUEL:	WVCS Fuel Gas
Methane	CH4	90,297		FUEL PRESSURE RANGE (psig):	45 - 60
Ethane	C2H6	4.7038		FUEL WKI:	79.7
Propane	C3H8	1.981			
Iso-Butane	I-C4H10	0.4325		FUEL SLHV (BTU/ft3):	987.56
Normal Butane	N-C4H10	0.5586		FUEL SLHV (MJ/Nm3):	38.83
Iso-Pentane	I-C5H12	0.2158		TOLE OLITY (MONTHINS).	00.00
Normal Pentane	N-C5H12	0.1673		FUEL LHV (BUT/ft3):	1005.05
Hexane	C6H14	C 2012 3 2017 1			
		0.1796		FUEL LHV (MJ/Nm3):	39.52
Heptane	C7H16	0.1436			
Ethene	C2H4	0		FUEL HHV (BUT/ft3):	1111.78
Propene	СЗН6	0		FUEL HHV (MJ/Nm3):	43.72
	SUM HYDROCARBONS	98.679		FUEL DENSITY (SG):	0.64
NON-HYDROCARBONS:					
Nitrogen	N2	0.2881		Standard Conditions per ASTM D3588-91 (60°F a	and 14.696psia] and ISO
Oxygen	02	0		6976:1996-02-01[25, V(0;101.325)]	
Helium	He	0		Based on the fuel composition, supply pressure a hydrocarbons may be present in the fuel. No liqui	
Carbon Dioxide	CO2	0.965		allowed in the fuel. The fuel must not contain any	
Carbon Monoxide	CO	0		Waukesha recommends both of the following:	
Hydrogen	H2	0		1) Dew point of the fuel gas to be at least 20°F (1	1°C) below the measured
Water Vapor	H2O	ŏ		temperature of the gas at the inlet of the engine f	
	1120	U		<ol><li>A fuel filter separator to be used on all fuels ex actual and</li></ol>	cept commercial quality
	TOTAL FUEL	99.932		natural gas. Refer to the 'Fuel and Lubrication' section of 'Tec	hnical Data' or contact the
	TOTAL FOEL	99,932		Dresser Waukesha Application Engineering Department for addition	
				information on fuels, or LHV and WKI ® calculation	ons.
FUEL CONTAMINANTS Total Sulfur Compounds		0	% volume	Total Sulfur Compounds	0 µg/BTU
Total Halogen as Cloride		0	% volume	Total Halogen as Cloride	0 µg/BTU
Total Ammonia		0	% volume	• • • • • • • • • • • • • • • • • • •	
Total Ammonia		U	% volume	Total Ammonia	0 µg/BTU
Siloxanes				Total Siloxanes	0 µg/BTU
Tetramethyl silane		0	% volume	and a statistic production of the	and the state of a
Trimethyl silanol		0	% volume		
Hexamethyldisiloxane (L2)		0	% volume	Calculated fuel contaminant analysis	will depend on the
Hexamethylcyclotrisiloxane (D3)		0	% volume	entered fuel composition and selecte	
Octamethyltrisiloxane (L3)		õ	% volume	Sinci con dei composition and selecte	a ongine model.
Octamethylcyclotetrasiloxane (D4)		0	% volume		
Decamethyltetrasiloxane (L4)		0	% volume		
Decamethyleuclenentaciloucne (L4)		U	76 Volume		

0

0

0

0

% volume

% volume

% volume

% volume

No water or hydrocarbon condensates are allowed in the engine. Requires liquids removal.

Data Generated by EngCalc Program Version 3.1, Dresser Inc., Dresser Waukesha 10/8/2012 9:26 AM

Decamethylcyclopentasiloxane (D5)

Dodecamethylcyclohexasiloxane (D6)

Dodecamethylpentasiloxane (L5)

Others



### WVCS - Title V App

Wonsits Valley CS - Uintah County, Utah

### ......

## 12V275GL

Gas Compression

QEP Field Services Ryan Robins	ryan.rob	ins@qepres.con	n			303.405.6688		
ENGINE SPEED (rpm): DISPLACEMENT (in3): COMPRESSION RATIO: IGNITION SYSTEM: EXHAUST MANIFOLD: COMBUSTION: ENGINE DRY WEIGHT (lbs): AIR/FUEL RATIO SETTING:	1000 13048 9:1 ESM Insulated Dry Type Lean Burn, Prechamber 50020 ESM	COOLING SYSTEM: INTERCOOLER WATER INLET (°F): JACKET WATER OUTLET (°F): JACKET WATER CAPACITY (gal): AUXILIARY WATER CAPACITY (gal): LUBE OIL CAPACITY (gal): MAX. EXHAUST BACKPRESSURE (in. H2O): MAX. AIR INLET RESTRICTION (in. H2O): NOx SELECTION (g/bhp-hr):				JW, IC + OC 130 180 100 30 220 20 15 1.5		
SITE CONDITIONS: FUEL: FUEL PRESSURE RANGE (psig): FUEL HHV (BTU/ft3): FUEL LHV (BTU/ft3):	WVCS Fuel Gas 45 - 60 1,111.8 1,005.1	altitude (ft): Maximum inle Fuel WKI:	et air tempei	RATURE (°F)		6000 77 79.7		
SITE SPECIFIC TECHNICAL DATA			MAX RATING AT 100 °F		G AT MAXIMU PERATURE OF			
POWER RATING		UNITS	AIR TEMP	100%	75%	54%		
CONTINUOUS ENGINE POWER OVERLOAD		BHP % 2/24 hr	3100 0	3100 0	2325	1687		
MECHANICAL EFFICIENCY (LHV) CONTINUOUS POWER AT FLYWHEE based on no auxiliary engine driven equipmen		% BHP	38.3 3100	38.2 3100	36.6 2325	34.4 1687		
FUEL CONSUMPTION								
FUEL CONSUMPTION (LHV) FUEL CONSUMPTION (HHV) FUEL FLOW	based on fuel analysis LHV	BTU/BHP-hr BTU/BHP-hr SCFM	6653 7359 359	6671 7380 360	6962 7701 282	7402 8188 217		
HEAT REJECTION					LUL	1 211		
JACKET WATER (JW) LUBE OIL (OC) INTERCOOLER (IC) EXHAUST RADIATION		BTU/hr x 1000 BTU/hr x 1000 BTU/hr x 1000 BTU/hr x 1000 BTU/hr x 1000 BTU/hr x 1000	2232 753 2275 7577 300	2181 745 2016 7860 392	1937 723 1165 6361 398	1716 734 539 5039 409		
EMISSIONS						100		
NOx (NO + NO2) CO THC NMHC NM, NEHC CO2		g/bhp-hr g/bhp-hr g/bhp-hr g/bhp-hr g/bhp-hr g/bhp-hr	1.5 2.2 3.6 0.80 0.51 415	1.5 2.2 3.6 0.80 0.51 416	1.5 2.5 4.0 0.86 0.55 434	1.5 2.6 4.2 0.91 0.58 462		
AIR INTAKE / EXHAUST GAS	State of the state of the state	gr +p	1 110 1	110	101	402		
INDUCTION AIR FLOW EXHAUST GAS MASS FLOW EXHAUST GAS FLOW EXHAUST GAS FLOW EXHAUST TEMPERATURE	at exhaust temp, 14.5 psia	SCFM Ib/hr ACFM °F	7703 33716 20052 893	8010 35058 20742 886	6032 26402 16108 928	4337 18981 12056 985		
HEAT EXHANGER SIZING								
TOTAL JACKET WATER CIRCUIT (JV TOTAL AUXILIARY WATER CIRCUIT		BTU/hr x 1000 BTU/hr x 1000	2531 3434					
COOLING SYSTEM WITH ENGINE	MOUNTED WATER PUMPS							
JACKET WATER PUMP MIN. DESIGN JACKET WATER PUMP MAX. EXTER AUX WATER PUMP MIN. DESIGN FL(	NAL RESTRICTION	GPM psig GPM	430 15 410					
AUX WATER PUMP MAX. EXTERNAL	THE REPORT OF A PROVIDENCE OF A	psig	17					

All data provided per the condtions listed in the notes section on page three.

Data Generated by EngCalc Program Version 3.1, Dresser Inc., Dresser Waukesha 10/8/2012 9:26 AM

## G3612

GAS COMPRESSION APPLICATION

### GAS ENGINE SITE SPECIFIC TECHNICAL DATA Wonsits Valley CS (C202, C203, C204)



ENGINE SPEED (rpm):	1000	FUEL SYSTEM:	GAV
COMPRESSION RATIO:	9:1		WITH AIR FUEL RATIO CONTROL
AFTERCOOLER WATER INLET (°F):	130	SITE CONDITIONS:	
JACKET WATER OUTLET (%):	190	FUEL:	Gas Analysis
ASPIRATION:	ТА	FUEL PRESSURE RANGE(psig):	42.8-47.0
COOLING SYSTEM:	JW, OC+AC	FUEL METHANE NUMBER:	61.2
IGNITION SYSTEM:	CIS/ADEM3	FUEL LHV (Btu/scf):	1009
EXHAUST MANIFOLD:	DRY	ALTITUDE(ft):	6590
COMBUSTION:	Low Emission	MAXIMUM INLET AIR TEMPERATURE("F):	61
NOx EMISSION LEVEL (g/bhp-hr NOx):	0.7	STANDARD RATED POWER:	3550 bhp@1000rpm

				MAXIMUM	Contract (1997)	TING AT M	
RATING		NOTES	LOAD	100%	100%	75%	52%
	WITHOUT FAN)	(1)	bhp	3505	3406	2554	1775
INLET AIR TEMPERATURE			۴	32	61	61	61
ENGINE DATA							
FUEL CONSUMPTION (LHV)		(2)	Btu/bhp-hr	6776	6809	7124	7650
FUEL CONSUMPTION (HHV)		(2)	Btu/bhp-hr	7499	7535	7885	8467
AIR FLOW (77°F, 14.7 psia)	(WET)	(3)(4)	scfm	8991	8753	6712	4775
AIR FLOW	(WET)	(3)(4)	lb/hr	39867	38813	29761	21174
INLET MANIFOLD PRESSURE		(5)	in Hg(abs)	70.9	69.1	53.5	38.2
EXHAUST TEMPERATURE - ENGINE OUTLET		(6)	۹F	860	864	902	946
EXHAUST GAS FLOW (@engine outlet temp, 14.5 psia)	(WET)	(7)(4)	ft3/min	23499	22954	18123	13343
EXHAUST GAS MASS FLOW	(WET)	(7)(4)	lb/hr	41013	39932	30639	21829
EMISSIONS DATA - ENGINE OUT							
NOx (as NO2)		(8)(9)	g/bhp-hr	0.70	0.70	0.70	0.70
CO		(8)(9)	g/bhp-hr	2.50	2.50	2.50	2.50
THC (mol. wt. of 15.84)		(8)(9)	g/bhp-hr	6.15	6.17	6.32	6.50
NMHC (mol. wt. of 15.84)		(8)(9)	g/bhp-hr	1.29	1.29	1.32	1.36
NMNEHC (VOCs) (mol. wt. of 15.84)		(8)(9)(10)	g/bhp-hr	0.78	0.78	0.80	0.82
HCHO (Formaldehyde)		(8)(9)	g/bhp-hr	0.26	0.27	0.28	0.31
CO2		(8)(9)	g/bhp-hr	440	442	462	497
EXHAUST OXYGEN		(8)(11)	% DRY	12.5	12.4	11.7	10.7
HEAT REJECTION							1.1
HEAT REJ. TO JACKET WATER (JW)		(12)	Btu/min	36460	36082	31673	29348
HEAT REJ. TO ATMOSPHERE		(12)	Btu/min	13995	13966	13220	12448
HEAT REJ. TO LUBE OIL (OC)		(12)	Btu/min	18014	18020	17421	16975
HEAT REJ. TO AFTERCOOLER (AC)		(12)(13)	Btu/min	30381	30381	14197	2266
COOLING SYSTEM SIZING CRITERIA	-						
TOTAL JACKET WATER CIRCUIT (JW)		(14)	Btu/min	40106			
TOTAL AFTERCOOLER CIRCUIT (OC+AC)		(13)(14)	Btu/min	53524			
A cooling system safety factor of 0% has been added to the cooling system si	izing criteria	1.41.1					

CONDITIONS AND DEFINITIONS Engine rating obtained and presented in accordance with ISO 3046/1, adjusted for fuel, site altitude and site inlet air temperature. 100% rating at maximum inlet air temperature is the maximum engine capability for the specified fuel at site altitude and maximum site inlet air temperature. Max, rating is the maximum capability for the specified fuel at site altitude and reduced inlet air temperature. Lowest load point is the lowest continuous duty operating load allowed. No overload permitted at rating shown.

For notes information consult page three.

Supporting Use the Later I for Emissions Cale Differs -5

# APPENDIX C Supporting Documentation for Emissions Calculations

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Wonsits Valley Compressor Station

**Emissions Inventory - PTE** 

## Gas Analysis Calculation Sheet Sample Date: Average of 2017 samples

								LHV Content		HHV Content
Component	Mole %	Mole Frac.	Lb/Lb mole	MW	voc	HAP	Btu/scf	Btu/scf*Mole Frac	Btu/scf	Btu/scf*Mole Frac
Carbon Dioxide	0.997900789	0.0100	44.01	0.44			0.0	0.00	0.0	0.00
Hydrogen Sulfide	0	0.0000	34.08	0.00			586.8	0.00	637.1	0.00
Nitrogen	0.278778519	0.0028	28.02	0.08			0.0	0.00	0.0	0.00
Methane	90.0995672	0.9010	16.04	14.45			909.4	819.37	1010.0	910.01
Ethane	4.701248283	0.0470	30.07	1.41			1618.7	76.10	1769.6	83.19
Propane	2.158413553	0.0216	44.09	0.95	0.95		2314.9	49.97	2516.1	54.31
Isobutane	0.434084966	0.0043	58.12	0.25	0.25		3000.4	13.02	3251.9	14.12
n-butane	0.599283509	0.0060	58.12	0.35	0.35		3010.8	18.04	3262.3	19.55
Isopentane	0.215817386	0.0022	72.15	0.16	0.16		3699.0	7.98	4000.9	8.63
n-pentane	0.176911941	0.0018	72.15	0.13	0.13		3706.9	6.56	4008.9	7.09
Hexanes	0.165100273	0.0017	86.18	0.14	0.14	0.14	4404.1	7.27	4750.2	7.84
Heptanes	0.112168714	0.0011	100.21	0.11	0.11		5100.3	5.72	5500.4	6.17
C8+ Heavies	0.060724867	0.0006	315.00	0.19	0.19		5796.3	3.52	5794.1	3.52
Totals	100.00	1.0000		18.6645	2.2816	0.1423		1007.60		1114.43

VOC wt%	1222.40%
Non-Methane VOC wt%	5416.14%
HAP wt%	76.23%

Wonsits Valley Compressor Station Emissions Inventory - PTE

#### Waste Gas BTU Content

#### 100-MMscfd Dehydrator (D-1) Condenser Heat of **Flash Tank** Vent **Heat Content** Combustion Component Formula Loading Loading [Btu/hr] [Btu/lb] [lb/hr] [lb/hr] Water H20 0 7.70E-01 1.59E-01 0.77 0 CO2 CO2 4.84E+00 5.86E+00 4.84 0 Nitrogen N2 1.35E-02 1.49E-01 0.01 Methane CH4 21502 2.17E+00 2.35E+01 526801.17 Ethane C2H6 20416 1.66E+00 5.81E+00 139034.62 Propane C3H8 19929 2.40E+00 4.54E+00 110409.06 Isobutane C4H10 19614 9.25E-01 1.38E+00 46682.25 n-Butane C4H10 19665 1.60E+00 2.04E+00 59783.20 Isopentane C5H12 19451 5.65E-01 9.44E-01 37813.31 n-Pentane C5H12 19499 5.91E-01 8.15E-01 35391.28 19001 n-Hexane C5H10 2.98E-01 4.82E-01 28159.78 C6H14 19391 Cyclohexane 8.05E-01 4.34E-01 27807.50 Other Hexanes C6H12 18846 4.35E-01 6.92E-01 31887.87 Heptanes C6H14 19200 2.97E-01 6.15E-01 31008.30 C7H16 19250 Methylcyclohexane 7.26E-01 6.11E-01 31012.48 2,2,4-Trimethylpentane C7H14 18797 1.11E-02 4.29E-02 19603.40 Benzene C6H6 17446 2.37E+00 2.56E-01 21914.55 Toluene C7H8 17601 1.54E+00 3.13E-01 23111.65 Ethylbenzene C8H10 17752 1.69E-02 7.25E-03 17880.72 **Xylenes** C8H10 17723 1.72E-01 6.21E-02 18823.77 C8+Heavies 19000 2.49E-03 4.68E-01 27892.00

Note: From GLYCalc 4.0 data for Condenser Vent Stream & Flash Tank Off Gas Stream.

Total: 1,235,023 Btu/hr

Dehy Waste Gas Streams:		
Flash Tank Off Gas Stream	772.0	scf/hr
Condenser Vent Stream	203.0	scf/hr
Total Waste Gas Flow =	975.0	scf/hr
Waste Gas Btu Content =	1267	Btu/scf

## **Andeavor Field Services, LLC**

8/5/2011

Wonsits Valley Compressor Station **Emissions Inventory - PTE** 

### Liquid Analysis

Sample Date:

Component	Mole %	Mole Frac.	lb/lb-mol	MW	VOC	Weight %
H2S	0.000	0.00000	34.08	0.00		C
Helium	0	0	4.00	0.00		0
Oxygen	0	0	32.00	0.00		0
CO2	0.165	0.001648	44.01	0.07		0.0692
N2	0.0264	0.000264	28.02	0.01		0.0071
Methane	9.852	0.09852	16.04	1.58		1.5088
Ethane	2.804	0.028039	30.07	0.84		0.8049
Propane	3.335	0.033353	44.09	1.47	1.4705	1.404
Isobutane	1.515	0.015152	58.12	0.88	0.8806	0.8408
n-Butane	3.113	0.031131	58.12	1.81	1.8093	1.7274
Isopentane	2.684	0.026843	72.15	1.94	1.9367	1.8489
n-Pentane	2.780	0.027802	72.15	2.01	2.0059	1.915
Cyclopentane	0.000	0	70.13	0.00	0.0000	
n-Hexane	3.216	0.032163	86.18	2.77	2.7718	2.6461
Cyclohexane	0.000	0.00000	84.16	0.00	0.0000	
Other Hexanes	3.695	0.03695	85.00	3.14	3.1404	3.0396
Heptanes	18.409	0.184092	100.20	18.45	18.4460	16.8698
Methycyclohexane	0.000	0.00000	98.18	0.00	0.0000	1
2,2,4 Trimethylpentane	1.375	0.01375	114.22	1.57	1.5702	1.4991
Benzene	1.133	0.01133	78.11	0.89	0.8852	0.8452
Toluene	2.951	0.02951	92.14	2.72	2.7191	2.5958
Ethylbenzene	0.220	0.002203	106.17	0.23	0.2339	0.2233
Xylenes	2.522	0.025216	106.17	2.68	2.6772	2.5558
C8+ Heavies	40.204	0.402044	120.00	48.25	48.2453	59.5994
Total	100.00	1.000		91.30	88.7922	100.00

VOC wt%	97.26%
HAP wt%	12.23%
CO2/VOC fraction (wt%)	0.08%
CH4/VOC fraction (wt%)	1.78%

Wonsits Valley\_PTE Emissions\_2018-04-05

Wonsits Valley Compressor Station Emissions Inventory - PTE

## Wet Gas Analysis

Sample Date: August 31, 2012

Component	Mole %	Mole Frac.	Ib/Ib-mol	MW	VOC
H2S	0.000	0.00000	34.08	0.00	
Helium		0	4.00	0.00	
Oxygen	0	0	32.00	0.00	
CO2	1.079	0.010785	44.01	0.47	
N2	0.2834	0.002834	28.02	0.08	
Methane	90.130	0.901296	16.04	14.46	
Ethane	4.712	0.047115	30.07	1.42	
Propane	2.068	0.020675	44.09	0.91	0.9116
Isobutane	0.411	0.004107	58.12	0.24	0.2387
n-Butane	0.522	0.005215	58.12	0.30	0.3031
Isopentane	0.212	0.002116	72.15	0.15	0.1527
n-Pentane	0.158	0.001578	72.15	0.11	0.1139
Cyclopentane	0.000	0	70.13	0.00	0.0000
n-Hexane	0.069	0.000686	86.18	0.06	0.0591
Cyclohexane	0.042	0.00042	84.16	0.04	0.0355
Other Hexanes	0.108	0.00108	85.00	0.09	0.0921
Heptanes	0.069	0.000694	100.20	0.07	0.0695
Methycyclohexane	0.058	0.00058	98.18	0.06	0.0571
2,2,4 Trimethylpentane	0.006	0.00006	114.22	0.01	0.0072
Benzene	0.017	0.00017	78.11	0.01	0.0136
Toluene	0.019	0.000188	92.14	0.02	0.0173
Ethylbenzene	0.001	0.000005	106.17	0.00	0.0005
Xylenes	0.005	0.000045	106.17	0.00	0.0048
C8+ Heavies	0.034	0.000337	120.00	0.04	0.0404
Total	100.000	1.000		18.54	2.1171

VOC wt%	11.42%
HAP wt%	4.84%
CO2/VOC fraction (wt%)	22.42%
CH4/VOC fraction (wt%)	682.86%

### Wonsits Valley Compressor Station

**Emissions Inventory - PTE** 

#### Venting during Pig Receiving and Launching

Launcher/receiver #1			Launcher/receiver #2		
Volume	41.60	cf	Volume	5.90	cf
Pressure	1030	psi	Pressure	1030	psi
Number of Vents/yr	+	vents/yr	Number of Vents/yr	0	vents/yr
Vent Volume	3455.48	scf/vent	Vent Volume	490.08	scf/vent
Annual Vent Volume	3455.48	scf/yr	Annual Vent Volume	0.00	scf/yr

Launcher/receiver #3 Volume	46.60	cf
	40.00	
Pressure	1030	psi
Number of Vents/yr	12	vents/y
Vent Volume	3870.81	scf/vent
Annual Vent Volume	46449.68	scf/yr

Launcher/receiver #4		
Volume	10.20	cf
Pressure	1030	psi
Number of Vents/yr	15	vents/yr
Vent Volume	847.26	scf/vent
Annual Vent Volume	12708.87	scf/yr

Gas Vent Rate (scf/year)	Pollutant	Fraction (lb/lb mol)	lb/yr	lb/hr	tpy
62614.03	VOC	2.12	349.76	0.040	0.175
62614.03	HAPs	0.10	16.94	0.002	0.008

Notes: Receiver volume based on engineering calculations

Vented volume (scf/release) = Receiver volume (cf) \* Receiver pressure (psi) \* 1/atmospheric pressure (psi)

Ib VOC/yr = vented volume (scf/release) \* # of releases \* Ibmol/379 \* Molecular Weight of Gas (Ib gas/lb-mol) \* % VOC (Ib voc/lb gas)

GHG Emissions	tpy
CO2	0.04
CH₄ (as CO₂e)	29.85
CO <sub>2</sub> e	29.9

Notes: CO2 is based on fraction of CO2/VOC in liquid (see gas analysis) CH4 is based on fraction of CH4/VOC in liquid (see gas analysis) CO2e emissions reported per 40 CFR Part 98, 98.3(b)(4)(i) and Eq. A-1

Wonsits Valley\_PTE Emissions\_2018-04-05

Wonsits Valley Compressor Station Emissions Inventory - PTE

	- ALLERIA			Ac	tual Emissions (Ton	is/Year)				
Emissions Unit ID	HAP1 2,2,4 Tri	HAP2 Acetaldehyde	HAP3 Acrolein	HAP4 Benzene	HAP5 Ethylbenzene	HAP6 HCHO	HAP7 Methanol	HAP8 n-C6	HAP9 Toluene	HAP10 Xylene
C202		0.5	0.3	0.0	0.0	1.6	0.1	0.1	0.0	0.0
C203		0.5	0.3	0.0	0.0	1.6	0.1	0.1	0.0	0.0
C204		0.5	0.3	0.0	0.0	1.6	0.1	0.1	0.0	0.0
C206		0.42	0.26	0.02	0.00	2.69	0.13	0.06	0.02	0.01
C207		0.6	0.4	0.0	0.0	2.2	0.2	0.1	0.0	0.0
D-1	0.0			1.5	0.1			0.3	2.0	0.8
T-1	0.00			0.00	0.00			0.02	0.00	0.00
EL	0.0			0.0	0.0			0.1	0.1	0.1
FL-1				0.0		0.0	1	0.0	0.0	1
C-1				0.0		0.0		0.0	0.0	
C-2				0.0		0.0		0.0	0.0	1
CB	3.4E-02			6.5E-02	2.5E-03			2.8E-01	8.2E-02	2.3E-02
										$\vdash$
SUBTOTALS	0.1	2.5	1.5	1.7	0.1	9.8	0.7	1.0	2.3	0.9



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Misc Tanks

## **Andeavor Field Services, LLC**

## Wonsits Valley Compressor Station

**Emissions Inventory - PTE** 

### Misc Storage Tank Emissions

### Uncontrolled

		Capacity		VOC			HAPs		CO2	CH <sub>4</sub> (as CO <sub>2</sub> e)	CO <sub>2</sub> e
Source ID	Description	barrels	lb/hr	lb/yr	tpy	lb/hr	lb/yr	tpy	tpy	tpy	tpy
T-2	New EG	100	3.42E-06	0.03	1.50E-05	3.42E-06	3.00E-02	1.50E-05	4	-	-
T-3	New Oil	100	0.06	566	0.28	0.01	57	0.03	-	-	-
T-4	Used Oil	100	0.02	200	0.10	0.002	20	0.01	4	-	+
T-5	Used EG	100	3.42E-06	0.03	1.50E-05	3.42E-06	3.00E-02	1.50E-05		-	-
T-6	TEG	65	-	-	-	-		-	-	-	-
T-7	Water	100	-	-	-	-	-	-		-	-
T-8	Dehy Drip Tank	100	0.08	736	0.37	0.004	31	0.02	0.013	7.29	7
T-9	Dehy Drip Tank	100	0.08	736	0.37	0.004	31	0.02	0.013	7.29	7
	Total	765.00	0.26	2237.8	1.12	0.02	138.28	0.07	0.03	14.58	15

Note: Emissions calculated using EPA Tanks v 4.0.9d

CO2e emissions reported per 40 CFR Part 98, 98.3(b)(4)(i) and Eq. A-1

## Wonsits Valley Compressor Station

**Emissions Inventory - PTE** 

Unit ID	Vent Rate scf/event	# Events event/yr	VOC Fraction Ib/Ib-mol	VOC Ib/yr	VOC tpy	HAPs tpy	CH <sub>4</sub> (as CO <sub>2</sub> e)	CO <sub>2</sub> tpy	CO <sub>2</sub> e tpy
C202	400	32	2.12	71.50	0.036	0.002	6.10	0.008	6.11
C203	400	36	2.12	80.44	0.040	0.002	6.87	0.009	6.88
C204	400	38	2.12	84.91	0.042	0.002	7.25	0.010	7.26
C206	400	43	2.12	96.08	0.048	0.002	8.20	0.011	8.21
C207	400	47	2.12	105.02	0.053	0.003	8.96	0.012	8.98
	And the second second	Total			0.22	0.011	37.38	0.05	37.43

### Engine Startup Emissions (Insignificant Emissions)

### Compressor Blowdowns (Significant Emissions)

Unit ID	Vent Rate scf/event	# Events event/yr	VOC Fraction Ib/Ib-mol	VOC lb/yr	VOC tpy	HAPs tpy	CH <sub>4</sub> (as CO <sub>2</sub> e)	CO <sub>2</sub> tpy	CO <sub>2</sub> e tpy
C202	12000	60	2.12	4021.94	2.01	0.10	343.30	0.451	343.75
C203	12000	60	2.12	4021.94	2.01	0.10	343.30	0.451	343.75
C204	12000	60	2.12	4021.94	2.01	0.10	343.30	0.451	343.75
C206	12000	60	2.12	4021.94	2.01	0.10	343.30	0.451	343.75
C207	12000	60	2.12	4021.94	2.01	0.10	343.30	0.451	343.75
	and a start of the	Total		And the second second	10.05	0.49	1716.51	2.25	1718.76

### Emergency Shutdowns (Insignificant Emissions)

Vent Rate scf/event	# Events event/yr	VOC Fraction Ib/Ib-mol	VOC lb/yr	VOC	HAPs tpy	CH <sub>4</sub> (as CO <sub>2</sub> e)	CO <sub>2</sub> tpy	CO <sub>2</sub> e
12000	2	2.12	134.06	0.067	0.003	11.44	0.015	11.46

Note: All emissions based on conservatively estimated vent rate and representative gas content (%VOC, %CH4, etc)

CO2e emissions reported per 40 CFR Part 98, 98.3(b)(4)(i) and Eq. A-1

Loading

## **Andeavor Field Services, LLC**

Wonsits Valley Compressor Station

**Emissions Inventory - PTE** 

#### Truck Loading Emissions

AP-42 Chapter 5.2 (1/95) - Transportation and Marketing of Petroleum Liquids AP-42 Table 5.2-5 Total Uncontrolled Organic Emission Factors for Petroleum Liquid Rail Tank Cars and Tank Trucks (Transit)

L<sub>L</sub> = 12.46 \* S \* P \* M/T

- L<sub>L</sub> = Loading loss, lb/1000 gal or liquid loaded
- S = Saturation factor
- P = True vapor pressure, psia
- M = Molecular weight of tank vapors, lb/lb-mole
- T = Temperature, °R (°F + 460)

From Table 5.2-1, typical saturation factor = 0.6 for submerged loading From Table 7.1-2, liquid classified at gasoline RVP=7 at  $60^{\circ}$ F, M = 68, P = 3.5

L<sub>L</sub> (lb/1000 gal)= 12.46 \* 0.6 \* 3.5 psia \* 68 lb/lb-mole \* 1/(60 + 460)  $^{\rm o}{\rm R}$  L<sub>L</sub> = 3.42 lb/1000 gal

Emission factor = Loading rate = 3.42 lb/1000 gal ( based on gasoline, submerged loading, dedicated normal service)
60.0 barrels per day
21,900.0 barrels per year
2,520 gallons per day (on average)

Emissions	lb/yr	lb/hr	tpy
VOC	3147	0.36	1.57

Emission calculation:	lb	x	bbl	x	42 gal	=	lb/yr
	1000 gal		year		bbl		
	lb	x	ton	=	tpy		
	year		2000 lb				

#### C-2 Dehy Backup Combustor

#### Andeavor Field Services, LLC

Wonsits Valley Compressor Station

Emissions Inventory - PTE

Dehydrator Backup Combustor (FL-901), C-2

Source ID Number	C-2	
Make/Model	22	Contraction of the local division of the loc
S/N	??	
Mfg. Date	??	
Fuel Heating Value	1114	Btu/scf
Pilot Flow Rate <sup>1</sup>	51	scf/hr
Flare Heat Input	0.06	MMBtu/hr
Hours Running with Flare Down	266	hr/yr
Actual Operation	8,477	hr/yr

Pilot design rate assumed the same as the flare (FL-1)

#### Vents to Backup Combustor

Vent ID	Description	Number of Units	Gas Emitted (Mscfd)	Flow Rate (scf/yr)	Vent Heating Value (Btu/scf) (HHV)	Annual Heat Input to Combustor (MMBtu/yr)
D-1	Dehy Vents	1	23.4	259,350.0	1,579.9	409.7

Emissions from Pilot and Igniter

Pollutant	Emissio	n Factor	Nominal	Hrs of	Estimated	1 Emissions	Source of
	(Ib/MMscf)	(Ib/MMBtu) (HHV)	Rating (MMBtu/hr)	Operation (hrs/yr)	(lb/hr)	(tpy)	Emission
NOx	100.00	0.09	0.06	8477	5.10E-03	0.02	AP-421
со	84.00	0.08	0.06	8477	4.28E-03	1.8E-02	AP-421
voc	5.50	0.00	0.06	8477	2.81E-04	1.2E-03	AP-422
SO <sub>2</sub>	0.60	0.001	0.06	8477	3.06E-05	1.30E-04	AP-422
PM, PM <sub>10</sub> , PM <sub>2.5</sub> <sup>6</sup>	7.60	0.01	0.06	8477	3.88E-04	1.64E-03	AP-422
Benzene	2.1E-03	0.000002	0.06	8477	1.07E-07	4.54E-07	AP-423
Dichlorobenzene	1.2E-03	0.000001	0.06	8477	6.12E-08	2.59E-07	AP-423
Formaldehyde	7.5E-02	0.000067	0.06	8477	3.83E-06	1.62E-05	AP-423
Hexane	1.8E+00	0.001615	0.06	8477	9.18E-05	3.89E-04	AP-423
Toluene	3.4E-03	0.000003	0.06	8477	1.73E-07	7.35E-07	AP-423

<sup>1</sup> EPA AP-42, Volume I, Fifth Edition - July 1998, Table 1.4-1, Emission Factors for Nitrogen Oxides (NOx) and Carbon Monoxide (CO) from Natural Gas Combustion <sup>2</sup> EPA AP-42, Volume I, Fifth Edition - July 1998, Table 1.4-2, Emission Factors for Criteria Pollutants and Greenhouse Gases from Natural Gas

Combustion

<sup>3</sup> EPA AP-42, Volume I, Fifth Edition - July 1998, Table 1.4-3, Emission Factors for Speciated Organic Compounds from Natural Gas Combustion

<sup>6</sup> PM includes both condensible and filterable PM. All PM is assumed to be PM2.5, so PM = PM<sub>10</sub> = PM<sub>25</sub>

#### Emissions from Combustion of Waste Gas (NOx and CO)

Pollutant	Emission	Annual Heat	Heat Input	Hours of	Estimated	I Emissions	Source of
	Factor (Ib/MMBtu)	Input to Combustor (MMBtu/yr)	(MMBtu/hr)	Operation (hr/yr)	(ib/hr)	(tpy)	Emission
NOx CO	0.14 0.035	409.7 409.7	0.048	8477 8477	0.0068 0.0017	0.03 0.01	WY C6S2 <sup>7</sup> WY C6S2 <sup>7</sup>

<sup>7</sup> Emission Factors from Wyoming C6S2 - O&G Production Facilities Permitting Guidance.

#### Potential Controlled / Uncontrolled Emissions

Pollutant	Estimated	Emissions	Oteran
	(lb/hr)	(tpy)	Streams
NOx	0.0119	0.05	Pilot and Igniter, Waste Gas
со	0.0060	0.03	Pilot and Igniter, Waste Gas
VOC	0.0003	1.2E-03	Pilot and Igniter
SO <sub>2</sub>	0.0000	1.30E-04	Pllot and Igniter
PM, PM10, PM25	0.0004	1.64E-03	Pilot and Igniter
Benzene	1.07E-07	4.54E-07	Pilot and Igniter
Dichlorobenzene	6.12E-08	2.59E-07	Pilot and Igniter
Formaldehyde	3.83E-06	1.62E-05	Pilot and Igniter
Hexane	9.18E-05	3.89E-04	Pilot and Igniter
Toluene	1.73E-07	7.35E-07	Pilot and Igniter

Note: These emissions represent the pilot and ignitor gas combustion and emissions created in combustion of vented blowdown vapors. The emissions resulting from the combustion of other source streams routed to this flare for control are shown as the controlled emissions with each respective emission source.

Wonsits Valley Compressor Station Emissions Inventory - PTE

Tank Vapor Combustor (FL-4002), C-1

Source ID Number	C-1	
Make/Model	Cimarron 30	aa -
S/N	53000709	
Mfg. Date	February 20	12
Fuel Heating Value	1114	Btu/scf
Pilot Flow Rate <sup>1</sup>	13	scf/hr
Pilot Flow Rate 1	0.11	MMscf/yr
Flare Heat Input	0.01	MMBtu/hr
Actual Operation	8,760	hrs

#### Vents to Combustor

Vent ID	Description	Number of Units	Gas Emitted (Mscfd)	Flow Rate (scf/yr)	Vent Heating Value (Btu/scf) (HHV)		Heat Input to Combustor includes pilot (MMBtu/hr)
T-1 & T-2	Tank Vents	1	2.17	792,050.0	1,579.9	1,251.3	0.16

#### Emissions from Pilot and Igniter

Pollutant	Emissio	n Factor	Nominal	Hrs of	Estimated	f Emissions	Source of
	(Ib/MMscf)	(Ib/MMBtu) (HHV)	Rating (MMBtu/hr)	Operation (hrs/yr)	(ib/hr)	(tpy)	Emission Factor
NOx	100.00	0.09	0.01	8760	1.30E-03	0.01	AP-421
со	84.00	0.08	0.01	8760	1.09E-03	4.8E-03	AP-421
voc	5.50	0.00	0.01	8760	7.15E-05	3.1E-04	AP-422
SO <sub>2</sub>	0.60	0.001	0.01	8760	7.80E-06	3.42E-05	AP-422
PM, PM <sub>10</sub> , PM <sub>25</sub> <sup>6</sup>	7.60	0.01	0.01	8760	9.88E-05	4.33E-04	AP-422
Benzene	2.1E-03	0.000002	0.01	8760	2.73E-08	1.20E-07	AP-423
Dichlorobenzene	1.2E-03	0.000001	0.01	8760	1.56E-08	6.83E-08	AP-423
Formaldehyde	7.5E-02	0.000067	0.01	8760	9.75E-07	4.27E-06	AP-423
Hexane	1.8E+00	0.001615	0.01	8760	2.34E-05	1.02E-04	AP-423
Toluene	3.4E-03	0.000003	0.01	8760	4.42E-08	1.94E-07	AP-423

<sup>1</sup> EPA AP-42, Volume I, Fifth Edition - July 1998, Table 1.4-1, Emission Factors for Nitrogen Oxides (NOx) and Carbon Monoxide (CO) from Natural Gas Combustion

<sup>2</sup> EPA AP-42, Volume I, Fifth Edition - July 1998, Table 1.4-2, Emission Factors for Criteria Pollutants and Greenhouse Gases from Natural Gas Combustion

<sup>3</sup> EPA AP-42, Volume I, Fifth Edition - July 1998, Table 1.4-3, Emission Factors for Speciated Organic Compounds from Natural Gas Combustion

<sup>6</sup> PM includes both condensible and filterable PM. All PM is assumed to be PM2.5, so PM = PM<sub>10</sub> = PM<sub>25</sub>

#### Potential Emissions from Combustion (NOx and CO)

Pollutant	Emission	Annual Heat	Potential	Hrs of	Estimated	Emissions	Source of
	Factor (Ib/MMBtu)	Input to Heat Input Op Combustor	Operation (hrs/yr)	(lb/hr)	(tpy)	Emission	
NOx	0.14	1251.3	0.143	8760	0.0200	0.09	WY C6S27
со	0.035	1251.3	0.143	8760	0.0050	0.02	WY C6S27

<sup>7</sup> Emission Factors from Wyoming C6S2 - O&G Production Facilities Permitting Guidance.

#### Potential Controlled / Uncontrolled Emissions

Pollutant	Estimated	Emissions	
	(lb/hr)	(tpy)	
NOx	0.0213	0.09	
CO	0.0061	0.03	
VOC	0.0001	3.1E-04	
SO <sub>2</sub>	0.0000	3.42E-05	
PM, PM <sub>10</sub> , PM <sub>25</sub>	0.0001	4.33E-04	
Benzene	2.73E-08	1.20E-07	
Dichlorobenzene	1.56E-08	6.83E-08	
Formaldehyde	9.75E-07	4.27E-06	
Hexane	2.34E-05	1.02E-04	
Toluene	4.42E-08	1.94E-07	

Note: These emissions represent the pilot and ignitor gas combustion and emissions created in combustion of vented blowdown vapors. The emissions resulting from the combustion of other source streams routed to this flare for control are shown as the controlled emissions with each respective emission source.

#### Wonsits Valley Compressor Station Emissions Inventory - PTE

#### Dehydrator BTEX Flare

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Source ID Number FL-1 Fuel Heating Value 1114 Btu/scf Pilot Flow Rate 1 51 scf/hr Pilot Flow Rate 1 MMscf/yr 0.45 Flare Heat Input 0.06 MMBtu/hr Actual Operation 8760 hrs

Pilot design rate based on mfg data

#### Vents to Flare

Vent ID	Description	Number of Units	Gas Emitted (Mscfd)	Flow Rate (scf/yr)	Vent Heating Value (Btu/scf) (HHV)	Annual Heat Input to Flare (MMBtu/yr)	Heat Input to Flare, includes pilot (MMBtu/hr)
D-1	Dehy Vents	1	23.4	8,541,000	1,267	10,818.8	1.3

#### Potential Emissions from Pilot and Igniter

Pollutant	Emission Factor		Nominal Hrs of		Estimated	Source of	
	(lb/MMscf)	(Ib/MMBtu) (HHV)	Rating (MMBtu/hr)	Operation (hrs/yr)	(ib/hr)	(tpy)	Emission
NOx	100.00	0.09	0.06	8760	5.10E-03	0.02	AP-421
со	84.00	0.08	0.06	8760	4.28E-03	0.02	AP-421
VOC	5.50	0.00	0.06	8760	2.81E-04	0.00	AP-422
SO <sub>2</sub>	0.60	0.001	0.06	8760	3.06E-05	1.34E-04	AP-42 <sup>2</sup>
PM, PM <sub>10</sub> , PM <sub>2.5</sub> <sup>6</sup>	7.60	0.01	0.06	8760	3.88E-04	1.70E-03	AP-422
Benzene	2.1E-03	0.000002	0.06	8760	1.07E-07	4.69E-07	AP-423
Dichlorobenzene	1.2E-03	0.000001	0.06	8760	6.12E-08	2.68E-07	AP-423
Formaldehyde	7.5E-02	0.000067	0.06	8760	3.83E-06	1.68E-05	AP-423
Hexane	1.8E+00	0.001615	0.06	8760	9.18E-05	4.02E-04	AP-423
Toluene	3.4E-03	0.000003	0.06	8760	1.73E-07	7.59E-07	AP-423

<sup>1</sup> EPA AP-42, Volume I, Fifth Edition - July 1998, Table 1.4-1, Emission Factors for Nitrogen Oxides (NOx) and Carbon Monoxide (CO) from Natural Gas Combustion

<sup>2</sup> EPA AP-42, Volume I, Fifth Edition - July 1998, Table 1.4-2, Emission Factors for Criteria Pollutants and Greenhouse Gases from Natural Gas Combustion

<sup>3</sup> EPA AP-42, Volume I, Fifth Edition - July 1998, Table 1.4-3, Emission Factors for Speciated Organic Compounds from Natural Gas Combustion

<sup>4</sup> 40 CFR Part 98, Subpart C, Tables C-1 and C-2.

<sup>5</sup> 40 CFR Part 98, Subpart A, Table A-1, Global Warming Potentials (100-YearTime Horizon).

<sup>6</sup> PM includes both condensible and filterable PM. All PM is assumed to be PM2.5, so PM = PM<sub>0</sub> = PM<sub>2.5</sub>

#### Emissions from Combustion of Waste Gas (NOx and CO)

Pollutant	Emission	Annual Heat	Potential	Hrs of	Estimated	Emissions	Source of
	Factor (Ib/MMBtu)	Input to Flare (MMBtu/yr)	Heat Input (MMBtu/hr)	Operation (hrs/yr)	(ib/hr)	(tpy)	Emission Factor
NOx	0.14	10818.8	1.235	8760	0.1729	0.76	WY C6S27
со	0.035	10818.8	1.235	8760	0.0432	0.19	WY C6S27

<sup>7</sup> Emission Factors from Wyoming C6S2 - O&G Production Facilities Permitting Guidance.

#### Potential Controlled / Uncontrolled Emissions

Pollutant	Estimated Emissions				
	(lb/hr)	(tpy)			
NOx	0.1780	0.78			
co	0.0475	0.21			
VOC	0.0003	0.001			
SO <sub>2</sub>	0.0000	1.34E-04			
PM, PM <sub>10</sub> , PM <sub>25</sub>	0.0004	1.70E-03			
Benzene	1.07E-07	4.69E-07			
Dichlorobenzene	6.12E-08	2.68E-07			
Formaldehyde	3.83E-06	1.68E-05			
Hexane	9.18E-05	4.02E-04			
Toluene	1.73E-07	7.59E-07			

Note: These emissions represent the pilot and ignitor gas combustion and emissions created in combustion of vented blowdown vapors. The emissions resulting from the combustion of other source streams routed to this flare for control are shown as the controlled emissions with each respective emission source.

## Wonsits Valley Compressor Station

**Emissions Inventory - PTE** 

### R-1 - Dehydrator Reboiler

#### **Emission Factors**

NOx:	100	lb/MMscf
CO:	84	lb/MMscf
VOC:	5.5	lb/MMscf
PM:	7.6	lb/MMscf
SOx	0.6	lb/MMscf
NOX: CO: VOC: PM: SO <sub>x</sub> : CO <sub>2</sub> : CH <sub>4</sub> : N <sub>2</sub> O:	53.0	kg/MMBtu
CH₄:	1.0E-03	kg/MMBtu
N <sub>2</sub> O:	1.0E-04	kg/MMBtu

Notes: Emission Factors provided by AP-42, Tables 1.4-1 & 1.4-2 (7/1998) PM Emission Factor includes condensible and filterable; and PM=PM $_0$ =PM $_2$ s

GHG Emission Factors as per 40 CFR Part 98, Tables C-1 & C-2

CO2e emissions reported per 40 CFR Part 98, 98.3(b)(4)(i) and Eq. A-1

Fuel Heating Value (Btu/scf, HHV)	1,114	Btu/scf
Operating Hours	8760	hr/yr
Fuel Rate	1.00	MMBtu/hr
Annual Fuel Use	7.86	MMscf/yr

#### Emission Rate (lb/hr)

Unit ID	Unit Tune	Fuel Rate	Op Hrs	NOx	CO	VOC	PM10	SOx
Unitit	Unit Type	MMBTU/hr	hrs	lb/hr	ib/hr	lb/hr	lb/hr	lb/hr
R-1	Dehy Reboiler	1.00	8760	0.09	0.08	0.00	0.01	0.00

#### Annual Emissions (tpy)

Unit ID	Unit Type	Fuel Rate	Op Hrs	NOx	co	VOC	PM10	SOx	HAPs
Ontrio	One type	MMBTU/hr	hrs	tpy	tpy	tpy	tpy	tpy	tpy
R-1	Dehy Reboiler	1.00	8760	0.39	0.33	0.02	0.03	0.00	0.01

#### Annual CO 2 e Emissions (tpy)

Unit ID	Unit Type	Fuel Rate	Op Hrs	CO2	CH <sub>4</sub> (as CO <sub>2</sub> e)	N <sub>2</sub> O (as CO <sub>2</sub> e)	CO2e
Unitio	Ontrype	MMBTU/hr	hrs	tpy	tpy	tpy	tpy
R-1	Dehy Reboiler	1.00	8760	511.97	0.24	0.29	513

#### Annual HAP Emissions (tpy)

Pollutant	Emission Factor (Ib/MMSCF)	Emission Factor (Ib/MMBtu)	Emissions (tpy)
Benzene	2.1E-03	2.1E-06	9.0E-06
Formaldehyde	7.5E-02	7.4E-05	3.2E-04
Hexane	1.8E+00	1.8E-03	7.7E-03
Toluene	3.4E-03	3.3E-06	1.5E-05
Total			0.01

Note: Emission Factors provided by AP-42, Table 1.4-3 (7/2000)

Emission factors converted from Ib/MMscf to Ib/MMBtu by dividing by 1,020 Btu/scf per footnote of EPA AP-42, Table 1.4-3

#### Heaters

Wonsits Valley\_PTE Emissions\_2018-04-05

## Andeavor Field Services, LLC

## Wonsits Valley Compressor Station

Emissions Inventory - PTE

### R-1 - Dehydrator Reboiler

### **Emission Factors**

NOX:	100	lb/MMscf
CO:	84	lb/MMscf
VOC:	5.5	lb/MMscf
PM:	7.6	lb/MMscf
SO <sub>x</sub> :	0.6	lb/MMscf
NOx: CO: VOC: PM: SO <sub>x</sub> : CO <sub>2</sub> : CH <sub>4</sub> : N <sub>2</sub> O:	53.0	kg/MMBtu
CH₄:	1.0E-03	kg/MMBtu
N <sub>2</sub> O:	1.0E-04	kg/MMBtu

Notes: Emission Factors provided by AP-42, Tables 1.4-1 & 1.4-2 (7/1998)

PM Emission Factor includes condensible and filterable; and  $PM=PM_{10}=PM_{2.5}$ GHG Emission Factors as per 40 CFR Part 98, Tables C-1 & C-2

 $CO_2e$  emissions reported per 40 CFR Part 98, 98.3(b)(4)(i) and Eq. A-1

Fuel Heating Value (Btu/scf, HHV)	1,114	Btu/scf
Operating Hours	8760	hr/yr
Fuel Rate	1.00	MMBtu/hr
Annual Fuel Use	7.86	MMscf/yr

#### Emission Rate (lb/hr)

Unit ID	Unit Type	Fuel Rate	Op Hrs	NOx	CO	VOC	PM10	SOx
Officio	ome type	MMBTU/hr	hrs	lb/hr	lb/hr	lb/hr	lb/hr	lb/hr
R-1	Dehy Reboiler	1.00	8760	0.09	0.08	0.00	0.01	0.00

#### Annual Emissions (tpy)

Unit ID	Unit Tuno	Fuel Rate	Op Hrs	NOx	CO	VOC	PM10	SOx
Onicio	Unit Type	MMBTU/hr	hrs	tpy	tpy	tpy	tpy	tpy
R-1	Dehy Reboiler	1.00	8760	0.39	0.33	0.02	0.03	0.00

#### Annual CO 2 e Emissions (tpy)

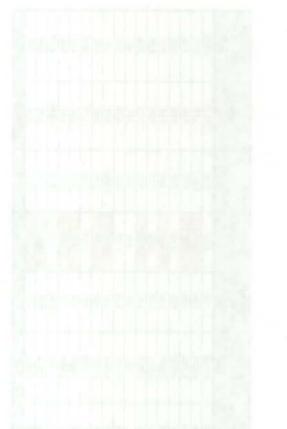
Unit ID	Unit Tung	Fuel Rate	Op Hrs	CO2	CH <sub>4</sub> (as CO <sub>2</sub> e)	N <sub>2</sub> O (as CO <sub>2</sub> e)	CO <sub>2</sub> e
Official	Unit Type	MMBTU/hr	hrs	tpy	tpy	tpy	tpy
R-1	Dehy Reboiler	1.00	8760	511.97	0.24	0.29	513

#### Annual HAP Emissions (tpy)

Pollutant	Emission Factor (Ib/MMSCF)	Emission Factor (Ib/MMBtu)	Emissions (tpy)	
Benzene	2.1E-03	2.1E-06	9.0E-06	
Formaldehyde	7.5E-02	7.4E-05	3.2E-04	
Hexane	1.8E+00	1.8E-03	7.7E-03	
Toluene	3.4E-03	3.3E-06	1.5E-05	
Total			0.01	

Note: Emission Factors provided by AP-42, Table 1.4-3 (7/2000)

Emission factors converted from Ib/MMscf to Ib/MMBtu by dividing by 1,020 Btu/scf per footnote of EPA AP-42, Table 1.4-3



Heaters

### Wonsits Valley Compressor Station

Emissions Inventory - PTE

#### Fugitive Emissions

Component - Service	Emission Factor <sup>1</sup>	Emission Factor	Source Count <sup>2</sup>	Percent VOC <sup>3</sup>	Hours of Operation	Total HC Emission Rate	Total HC Emission Rate	Total VOC Emission Rate	Total VOC Emission Rate	Total HAP Emission Rate	CO <sub>2</sub> *	CH <sub>4</sub> (as CO <sub>2</sub> e) <sup>6</sup>	Total COge Emission Rate *
	kg/hr/source	lb/hr/source		wt %	hr/yr	lb/hr	tpy	lb/hr	tpy	tpy	tpy	tpy	tpy
Valves - Gas/Vapor	4.5E-03	9.9E-03	217	11.42%	8760	2.1526	9.43	0.2458	1.08	0.05	0.24	183.75	184.00
Valves - Light Liquids	2.5E-03	5.5E-03	73	100.00%	8760	0.4022	1.76	0.4022	1.76	0.18	0.001	0.78	0.79
Valves - Heavy Liquids	8.4E-06	1.9E-05	0	100.00%	8760	0.0000	0.00	0.0000	0.00	0.00	0.00	0.00	0.00
Relief Valves - Gas/Vapor	8.8E-03	1.9E-02	0	11.42%	8760	0.0000	0.00	0.0000	0.00	0.00	0.00	0.00	0.00
Relief Valves - Light Liquids	7.5E-03	1.7E-02	0	100.00%	8760	0.0000	0.00	0.0000	0.00	0.00	0.00	0.00	0.00
Compressors	8.8E-03	1.9E-02	5	11.42%	8760	0.0970	0.42	0.0111	0.05	0.002	0.01	8.28	8.29
Pump Seals - Light Liquids	1.3E-02	2.9E-02	0	100.00%	8760	0.0000	0.00	0.0000	0.00	0.00	0.00	0.00	0.00
Pump Seals - Heavy Liquids	NA	NA	0	100.00%	8760	NA	NA	NA	NA	N/A	N/A	N/A	N/A
Open-End - Gas/Vapor	2.0E-03	4.4E-03	24	11,42%	8760	0.1058	0.46	0.0121	0.05	0.003	0.01	9.03	9.05
Open-End - Light Liquid	1.4E-03	3.1E-03	1	100.00%	8760	0.0031	0.01	0.0031	0.01	0.001	0.00001	0.01	0.01
Open-End - Heavy Liquid	1.4E-04	3.1E-04	0	100.00%	8760	0.0000	0.00	0.0000	0.00	0.00	0.00	0.00	0.00
Connectors - Gas/Vapor	2.0E-04	4.4E-04	324	11.42%	8760	0.1426	0.62	0.0163	0.07	0.003	0.02	12.17	12.19
Connectors - Light Liquids	2.1E-04	4.6E-04	Ö	100.00%	8760	0.0000	0.00	0.0000	0.00	0.00	0.00	0.00	0.00
Connectors - Heavy Liquids	7.5E-06	1.7E-05	0	100.00%	8760	0.0000	0.00	0.0000	0.00	0.00	0.00	0.00	0,00
Flanges - Gas/Vapor	3.9E-04	8.6E-04	2000	11.42%	8760	1.7200	7.53	0.1964	0.86	0.04	0.19	146.82	147.02
Flanges - Light Liquids	1.1E-04	2.4E-04	850	100.00%	8760	0.2066	0.90	0.2066	0.90	0.09	0.001	0.40	0.40
Flanges - Heavy Liquids	3.9E-07	8.6E-07	0	100.00%	8760	0.0000	0.00	0.0000	0.00	0.00	0.00	0.00	0.00
		Totals				4.83	21,16	1.09	4.79	0.38	0.48	361.25	361,73

Emission Factors provided by EPA-453.

<sup>2</sup> Source count based on 2008 Title V Application

<sup>3</sup> Gas analysis based on worst case percent VOC

<sup>4</sup> CO<sub>2</sub> is based on fraction of CO<sub>2</sub>/VOC in liquid (see liquid analysis)

<sup>5</sup> CH<sub>4</sub> is based on fraction of CH<sub>4</sub>/VOC in liquid (see liquid analysis)

<sup>6</sup> CO2e emissions reported per 40 CFR Part 98, 98.3(b)(4)(i) and Eq. A-1

Fugitives

Wonsits Valley Compressor Station Emissions Inventory - PTE

Unit ID:	T-1	
Unit Descrip:	One (1) 500-L	bl Condensate Tank
Unit Make:	Sivalls	
Unit S/N:	98424	
Annual Days:	365	
Annual Hours:	8760	
Annual Throughput:	21900	bbls per year
Daily Avg. Throughput:	60.00	
Waste Gas:	2.17	Mscfd
Vapor Heating Value:	1,580	Btu/scf
Combustor Operation:	8,760	hr/yr
Combustor Control:	95%	

#### Uncontrolled

Pollutant		Emissions		
Pollutant	lb/hr	lb/yr	tpy	
VOC	3.00	26,240	13.12	4.81 lb/bbl (from 2017 actuals
n-Hexane	0.07	630	0.3150	
Benzene	0.02	184	0.0920	
Toluene	0.02	136	0.0680	
Ethylbenzene	0.00	4	0.0020	more set
Xylenes	0.00	32	0.0160	and the second s
2,2,4 Trimethylpentane	0.01	112	0.0560	
Total HAPs	0.13	1098	0.5490	

Note: Emissions calculated using E&P TANKS v 3.0 and site specific liquids anlysis  $CO_2e$  emissions reported per 40 CFR Part 98, 98.3(b)(4)(i) and Eq. A-1

True vapor pressure of liquid and molar weight of vapors based on engineering estimation of liquid RVP.

#### Controlled

Dellutent		tpy w/		
Pollutant	lb/hr	lb/yr	tpy	downtime*
VOC	0.15	1,312	0.656	0.66
n-Hexane	0.00	32	0.0158	0.02
Benzene	0.00	9	0.0046	0.00
Toluene	0.00	7	0.0034	0.00
Ethylbenzene	0.00	0	0.0001	0.00
Xylenes	0.00	2	0.0008	0.00
2,2,4 Trimethylpentane	0.00	6	0.0028	0.00
Total HAPs	0.01	55	0.0275	0.03

Note: Controlled Emissions from the condensate tank using a combustor, which has a 95% destruction efficiency CO<sub>2</sub>e emissions reported per 40 CFR Part 98, 98.3(b)(4)(i) and Eq. A-1

True vapor pressure of liquid and molar weight of vapors based on engineering estimation of liquid RVP.

\*Combustor annual downtime: 0.00 hrs

Wonsits Valley Compressor Station Emissions Inventory - PTE

> Unit ID: D-1 Unit Descrip: 100 MMscf/d TEG Dehydrator Unit Make: Gas Conditioners Inc. Unit S/N: 39-1-08

D-1		
Annual Rate (MMscfd)	100.0	
Glycol Pump Type	Electric	
Glycol Pump Rate (gpm)	18.0	
Operating Hours	8760.0	
Flare & Backup Combustor Downtime (hr/yr)	140	Permit Limitation

#### Uncontrolled

Pollutant	Regenerator (lb/hr)	Flash Tank Off Gas (lb/hr)	Total (lb/hr)	Total (tpy)
Benzene	12.9317	0.2557	13.187	57.761
Toluene	22.686	0.3133	22.999	100.737
Ethylbenzene	0.8366	0.0073	0.844	3.696
Xylenes	9.9629	0.0621	10.025	43.910
n-Hexane	1.0546	0.4816	1.536	6.729
2,2,4-Trimethylpentane	0.093	0.0429	0.136	0.595
Total HAP	47.5648	1.1629	48.728	213.427
VOC	76.0714	13.7061	89.778	393.225

Notes: Emissions calculated using actual operating parameters and GRI GLYCalc v 4.0.

Uncontrolled emissions include emissions from flash tank off gas and uncontrolled regenerator emissions.

CO2e emissions reported per 40 CFR Part 98, 98.3(b)(4)(i) and Eq. A-1

#### Controlled

Pollutant	Regenerator (lb/hr)	Flash Gas (Ib/hr)	Totai (lb/hr)	Total (tpy)	Total w/ downtime (tpy)*
Benzene	0.1186	0.0128	0.131	0.576	1.489
Toluene	0.0769	0.0157	0.093	0.406	2.009
Ethylbenzene	0.0008	0.0004	0.001	0.005	0.064
Xylenes	0.0086	0.0031	0.012	0.051	0.752
n-Hexane	0.0149	0.0241	0.039	0.171	0.276
2,2,4-Trimethylpentane	0.0006	0.0021	0.003	0.012	0.021
Total HAP	0.2204	0.0582	0.279	1.220	4.612
VOC	0.6374	0.6853	1.323	5.793	11.985

Notes: Controlled Emissions using a condenser and an enclosed flare; values from Flash Gas Emissions and Combustion Off Gas

Glycol pump rate based on actual data from monthly readups (engineering design is 16 gpm, maximum).

CO2e emissions reported per 40 CFR Part 98, 98.3(b)(4)(i) and Eq. A-1

# Wonsits Valley Compressor Station Emissions Inventory - PTE

Unit ID: C207 Unit Descrip: Caterpillar G3616LE Unit S/N: BLB00215 Unit Start-up: June, 2008 Unit Mfg Date: December 5, 2003 Reconstructed: 1/2014 Engine Type: 4SLB

#### **Emission Factors (uncontrolled)**

<b>Emission Factors (uncon</b>	Source			
Site-Rated Horsepower	4554	bhp	Mfg. data	
Name Plate Horsepower	4735	bhp	Mfg. data	
NOx	1.00	g/hp-hr	Mfg data	
CO	2.50	g/hp-hr	Mfg. data	
SO2:	5,88E-04	lb/MMBtu	AP-42	
VOC:	1.07	g/hp-hr	Mfg data	
PM:	9.99E-03	lb/MMBtu	AP-42	
нсно:	0.26	g/hp-hr	Mfg. data	

VOC Emission Factor includes NMNEHC from maufacturer data plus HCHO from manufacturer and acrolein and acetaldehyde from AP-42; manufacuter data does not include aldehydes

Exhaust Gas Flow (cfm)	24,273
Fuel Use Rate (scf/hr)	30,668
Annual Fuel Consumption (MMscf/yr)	268.7
Fuel Heating Value (Btu/scf, HHV)	1,114
BSFC @ 100% Load (Btu/hp-hr)	7,505
Heat Input (MMBtu/hr)	34.2
Site Rated Horsepower (bhp)	4,554
Operating Hours	8,760

Source Test Emission Factors					
NOx (g/hp-hr)	Tested 5/16/2017	0.59			
NOx (g/hp-hr)	Tested 11/28/2017	0.50			
NOx (g/hp-hr)	2017 Test Maximum	0.59			
NOx (g/hp-hr)	Permit Limit	1.00			
CO (g/hp-hr)	Tested 5/16/2017	0.01			
CO (g/hp-hr)	Tested 11/28/2017	0.02			
CO (g/hp-hr)	2017 Test Maximum	0.02			
CO (g/hp-hr)	Permit Limit	1.00			

	Uncontrolled Emissions											
Pollutant	EF Source	Emi	ssion Factor	Emissions (lb/hr)	Op. Hrs	tpy	Emissi	on Factor	Emissions (lb/hr)	Op. Hrs	tpy	
NO,	Manufacturer/Source Testing	1.00	g/hp-hr	10.04	8760	43.97	1.00	g/hp-hr	10.04	8760	43.97	
со	Manufacturer/Source Testing	2.50	g/hp-hr	25.10	8760	109.94	1.00	g/hp-hr	10.04	8760	43.97	60% control efficiency
SO <sub>2</sub>	AP-42, Table 3.2-2	5.88E-04	lb/MMBtu	0.02	8760	0.09	5.88E-04	lb/MMBtu	0.02	8760	0.09	
VOC	Manufacturer	1.07	g/hp-hr	10.70	8760	46.87	0.53	g/hp-hr	5.35	8760	23.44	50% control efficiency
PM	AP-42, Table 3.2-2	9.99E-03	lb/MMBtu	0.34	8760	1.50	9.99E-03	ib/MMBtu	0.34	8760	1.50	
нсно	Manufacturer	0.26	g/hp-hr	2.61	8760	11.43	0.05	g/hp-hr	0.50	8760	2.20	81% control efficiency
Acetaldehyde	AP-42, Table 3.2-2	8.36E-03	lb/MMBtu	0.29	8760	1.25	4.18E-03	Ib/MMBtu	0.14	8760	0.63	50% control efficiency
Acrolein	AP-42, Table 3.2-2	5.14E-03	lb/MMBtu	0.18	8760	0.77	2.57E-03	lb/MMBtu	0.09	8760	0.38	50% control efficiency
Benzene	AP-42, Table 3.2-2	4.40E-04	lb/MMBtu	0.015	8760	0.07	2.20E-04	lb/MMBtu	0.008	8760	0.03	50% control efficiency
Ethylbenzene	AP-42, Table 3.2-2	3.97E-05	lb/MMBtu	0.0014	8760	0.006	1.99E-05	lb/MMBtu	0.0007	8760	0.003	50% control efficiency
Toluene	AP-42, Table 3.2-2	4.08E-04	lb/MMBtu	0.014	8760	0.06	2.04E-04	lb/MMBtu	0.007	8760	0.03	50% control efficiency
Xylene	AP-42, Table 3.2-2	1.84E-04	Ib/MMBtu	0.006	8760	0.03	9.20E-05	lb/MMBtu	0.003	8760	0.01	50% control efficiency
Methanol	AP-42, Table 3.2-2	2.50E-03	Ib/MMBtu	0.09	8760	0.37	1.25E-03	lb/MMBtu	0.04	8760	0.19	50% control efficiency
n-Hexane	AP-42, Table 3.2-2	1.11E-03	lb/MMBtu	0.04	8760	0,17	5.55E-04	lb/MMBtu	0.02	8760	0.08	50% control efficiency
Total HAPs						14.16				_	3.56	

Notes: Controlled Emissions assumes oxidation catalyst removes 80% HCHO, and 50% VOC & other HAPs;

Controlled EFs for NO, & CO from Consent Decree 2:08-CV-00167-TS-PMW;

PM Emission Factor includes condensible and filterable; and  $\rm PM=PM_{10}=PM_{2.5}$ 

HAP Emission Factors provided by AP-42, Table 3.2-2 (7/2000).

#### **Greenhouse Gas Emissions**

Pollutant	Emission	actor	Emissions (lb/fir)	Op. Hrs	tpy	EF Source
CO2	53.02	kg/MMBtu	3995.00	8,760	17498	EPA MRR Table C-1
CH4 (as CO2e)	0.001	kg/MMBtu	1.88	8,760	8.25	EPA MRR Table C-2
N <sub>2</sub> O (as CO <sub>2</sub> e)	0.0001	kg/MMBtu	2.25	8,760	9.83	EPA MRR Table C-2
COze			3999.13		17516	1

Notes: Emission Factors as per 40 CFR Part 98, Tables C-1 & C-2 CO<sub>2</sub>e emissions reported per 40 CFR Part 98, 98.3(b)(4)(i) and Eq. A-1

Wonsits Valley Compressor Station Emissions Inventory - PTE

Unit ID: C206 Unit Descrip: Waukesha 12V AT 27GL Unit S/N: C-13271/2 Unit Start-up: March, 2001 Unit Mfg Date: December 7, 2000 Reconstructed: 5/2007 Engine Type: 4SLB

#### Emission Factors (uncontrol

Liniaalon i actora funco	in oneu)		Jource
Site-Rated Horsepower	3100	bhp	Mfg data
Name Plate Horsepower	3295	bhp	Mfg data
NOr	1.30	g/hp-hr	Mfg data
co	2 20	g/hp-hr	Mfg data
SO <sub>2</sub>	5 88E-04	lb/MMBtu	AP-42
voc	0.73	g/hp-hr	Mfg. data
PM:	9 99E-03	Ib/MMBtu	AP-42
нсно	5.28E-02	Ib/MMBtu	AP-42

sible and filterable, and PM=PM 10=PM25

VOC Emission Factor includes NMNEHC from maufacturer data plus HCHO, acrolein and acetaldehyde from AP-42; manufa s not include aldehydes

Exhaust Gas Flow (cfm)	24.273
Fuel Use Rate (scf/hr)	20,529
Annual Fuel Consumption (MMscf/yr)	179.8
Fuel Heating Value (Btu/scf, HHV)	1,114
BSFC @ 100% Load (Btu/hp-hr, HHV)	7,380
BSFC @ 100% Load (Btu/hp-hr, LHV)	6,671
Heat Input (MMBtu/hr)	22.9
Site Rated Horsepower (bhp)	3,100
Operating Hours	8,700

Source Test Emission Factors						
NOx (g/hp-hr)	Tested 5/15/2017	0.55				
NOx (g/hp-hr)	2017 Test Maximum	0.55				
NOx (g/hp-hr)	Permit Limit	1.30				
CO (g/hp-hr)	Tested 5/15/2017	0.04				
CO (g/hp-hr)	2017 Test Maximum	0.04				
CO (g/hp-hr)	Permit Limit	1.00				

				Uncontrolled Emiss	ons	1 - D - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -			Controlled Emissio	ns		1
Pollutant	EF Source	Emi	ssion Factor	Emissions (lb/hr)	Op. Hrs	tpy	Emissi	on Factor	Emissions (lb/hr)	Op. Hrs	tpy	
NO,	Manufacturer/Source Testing	1 30	g/hp-hr	8.88	8760	38.91	1 30	g/hp-hr	8.88	8760	38.91	
со	Manufacturer/Source Testing	2.20	g/hp-hr	15.04	8760	65.85	1.00	g/hp-hr	6 83	8760	29 93	55% control efficiency
SO <sub>2</sub>	AP-42, Table 3 2-2	5.88E-04	Ib/MMBtu	0.01	8760	0.06	5.88E-04	Ib/MMBtu	0.01	8760	0.06	
VOC	Manufacturer	0.73	g/hp-hr	5.00	8760	21.91	0.37	g/hp-hr	2.50	8760	10 96	50% control efficiency
PM	AP-42, Table 3 2-2	9.99E-03	Ib/MMBtu	0.23	8760	1.00	9.99E-03	Ib/MMBtu	0.23	8760	1.00	
HCHO	AP-42, Table 3 2-2	0.05	Ib/MMBtu	1.21	8760	5.291	0.09	g/hp-hr	0.62	8760	2.69	
Acetaldehyde	AP-42, Table 3 2-2	8.36E-03	Ib/MMBtu	0.19	8760	0.84	4 18E-03	Ib/MMBtu	0 10	8760	0.42	50% control efficiency
Acrolein	AP-42, Table 3 2-2	5.14E-03	Ib/MM8tu	0 12	8760	0 52	2 57E-03	Ib/MMBtu	0.06	8760	0.26	50% control efficiency
Benzene	AP-42, Table 3 2-2	4 40E-04	Ib/MM8tu	0.010	8760	0.04	2 20E-04	Ib/MMBtu	0 005	8760	0.02	50% control efficiency
Ethylbenzene	AP-42, Table 3 2-2	3 97E-05	Ib/MMBtu	0.0009	8760	0 004	1.99E-05	Ib/MMBtu	0 0005	8760	0.002	50% control efficiency
Toluene	AP-42, Table 3 2-2	4 08E-04	Ib/MMBtu	0.009	8760	0.04	2.04E-04	Ib/MMBtu	0.005	8760	0.02	50% control efficiency
Xylene	AP-42, Table 3 2-2	1 84E-04	Ib/MMBtu	0.004	8760	0.02	9.20E-05	Ib/MMBtu	0.002	8760	0.01	50% control efficiency
Methanol	AP-42, Table 3.2-2	2.50E-03	Ib/MMBtu	0.06	8760	0.25	1.25E-03	Ib/MMBtu	0.03	8760	0.13	50% control efficiency
n-Hexane	AP-42, Table 3 2-2	1 11E-03	Ib/MMBtu	0.03	8760	0.11	5.55E-04	Ib/MMBtu	0.01	8760	0.06	50% control efficiency
Total HAPs						7.11					3.61	

Notes Controlled Emissions assumes oxidation catalyst removes 45% HCHO, and 50% VOC & other HAPs, Controlled EFs for NO, & CO from Consent Decree 2:08-CV-00167-TS-PMW,

PM Emission Factor includes condensible and filterable, and PM=PM  $_{\rm 10}{=}{\rm PM_{2.5}}$ 

HAP Emission Factors provided by AP-42, Table 3 2-2 (7/2000)

Pollutant	Emission I	Factor	Emissions (lb/hr)	Op. Hrs	tpy	EF Source
CO2	53.02	kg/MMBtu	2674 19	8,760	11713	EPA MRR Table C-1
CH <sub>4</sub> (as CO <sub>2</sub> e)	0.001	kg/MMBtu	1.26	8,760	5 52	EPA MRR Table C-2
N <sub>2</sub> O (as CO <sub>2</sub> e)	0 0001	kg/MMBtu	15 03	8,760	65.83	EPA MRR Table C-2
COze			2690.48		11784	

Notes: Emission Factors as per 40 CFR Part 98, Tables C-1 & C-2 CO<sub>2</sub>e emissions reported per 40 CFR Part 98, 98 3(b)(4)(i) and Eq. A-1

Wonsits Valley Compressor Station Emissions Inventory - PTE

Unit ID:	C204
Unit Descrip:	Caterpillar G3612LE
Unit S/N:	1YG00034
Unit Start-up:	Spetember, 2007
Unit Mfg Date:	May 12, 1993
Reconstructed:	9/2007
Engine Type:	4SLB

#### **Emission Factors (uncontrolled)**

3408	bhp	Mfg. data	-
3550	bhp	Mfg. data	
1.00	g/hp-hr	Mfg data	
2.50	g/hp-hr	Mfg data	
5.88E-04	Ib/MMBtu	AP-42	
1.09	g/hp-hr	Mfo data	
9.99E-03	lb/MMBtu	AP-42	
0.26	g/hp-hr	Mfg data	
	3406 3550 1.00 2.50 5.88E-04 1.09 9.99E-03	3406 bhp 3550 bhp 1.00 g/hp-hr 2.50 g/hp-hr 5.88E-04 ib/MMBu 1.09 g/hp-hr 9.9E-03 ib/MMBu	3550         bhp         Mfg data           1.00         g/hp-hr         Mfg data           2.50         g/hp-hr         Mfg data           5.86E-04         Ib/MMBtu         AP-42           1.09         g/hp-hr         Mfg data           9.99E-03         Ib/MMBtu         AP-42

VOC Emission Factor includes NMNEHC from maufacturer data plus HCHO from manufacturer and acrolein and acetaldehyde from AP-42; manufacuter data does not include aldehydes

Source

Exhaust Gas Flow (cfm)	24,273
Fuel Use Rate (scf/hr)	23.029
Annual Fuel Consumption (MMscf/yr)	201.7
Fuel Heating Value (Btu/scf, HHV)	1,114
BSFC @ 100% Load (Btu/hp-hr)	7,535
Heat Input (MMBtu/hr)	25.7
Site Rated Horsepower (bhp)	3,406
Operating Hours	8,760

Source Test Emission Factors							
NOx (g/hp-hr)	Tested 5/15/2017	0.45					
NOx (g/hp-hr)	Tested 11/27/2017	0.74					
NOx (g/hp-hr)	2017 Test Maximum	0,74					
NOx (g/hp-hr)	Permit Limit	1.00					
CO (g/hp-hr)	Tested 5/15/2017	0.01					
CO (g/hp-hr)	Tested 11/27/2017	0.02					
CO (g/hp-hr)	2017 Test Maximum	0.02					
CO (g/hp-hr)	Permit Limit	1.00					

				Uncontrolled Emission	ns				Controlled Emission	ns		1
Pollutant	EF Source	En	hission Factor	Emissions (ibihr)	Op. Hrs	tpy	Emissi	on Factor	Emissions (lb/hr)	Op. Hrs	tpy	
NO <sub>x</sub>	Manufacturer/Source Testing	1.00	g/hp-hr	7.51	8760	32.89	1.00	g/hp-hr	7.51	8760	32.89	
CO	Manufacturer/Source Testing	2.50	g/hp-hr	18.77	8760	82.22	1.00	g/hp-hr	7.51	8760	32.89	60% control efficiency
SO <sub>2</sub>	AP-42, Table 3.2-2	5.88E-04	lb/MMBtu	0.02	8760	0.07	5.88E-04	Ib/MMBtu	0.02	8760	0.07	
VOC	Manufacturer	1.09	g/hp-hr	8.16	8760	35.72	0.54	g/hp-hr	4.08	8760	17.86	50% control efficiency
PM	AP-42, Table 3.2-2	9.99E-03	lb/MMBtu	0.26	8760	1.12	9.99E-03	Ib/MMBtu	0.26	8760	1.12	and the design of entirestering
нсно	Manufacturer	0.26	g/hp-hr	1.95	8760	8.55	0.05	g/hp-hr	0.38	8760	1.64	81% control efficiency
Acetaldehyde	AP-42, Table 3.2-2	8.36E-03	lb/MMBtu	0.21	8760	0.94	4.18E-03	Ib/MMBtu	0.11	8760	0.47	50% control efficiency
Acrolein	AP-42, Table 3.2-2	5.14E-03	Ib/MMBtu	0.13	8760	0.58	2.57E-03	Ib/MMBtu	0.07	8760	0.29	50% control efficiency
Benzene	AP-42, Table 3.2-2	4.40E-04	Ib/MMBtu	0.011	8760	0.05	2.20E-04	Ib/MMBtu	0.006	8760	0.02	50% control efficiency
Ethylbenzene	AP-42, Table 3.2-2	3.97E-05	Ib/MMBtu	0.0010	8760	0.004	1.99E-05	Ib/MMBtu	0.0005	8760	0.002	50% control efficiency
Toluene	AP-42, Table 3.2-2	4.08E-04	lb/MMBtu	0.010	8760	0.05	2.04E-04	Ib/MMBtu	0.005	8760	0.02	50% control efficiency
Xylene	AP-42, Table 3.2-2	1.84E-04	Ib/MMBtu	0.005	8760	0.02	9.20E-05	Ib/MMBtu	0.002	8760	0.01	58% control efficiency
Methanol	AP-42, Table 3.2-2	2.50E-03	lb/MMBtu	0.06	8760	0.28	1.25E-03	Ib/MMBtu	0.03	8760	0.14	50% control efficiency
n-Hexane	AP-42, Table 3.2-2	1.11E-03	ib/MMBtu	0.03	8760	0.12		Ib/MMBtu	0.01	8760	0.06	50% control efficiency
Total HAPs						10.59		1			2.67	

Notes: Controlled Emissions assumes oxidation catalyst removes 80% HCHO, and 50% VOC & other HAPs; Controlled EFs for NO, & CO from Consent Decree 2:08-CV-00167-TS-PMW;

PM Emission Factor includes condensible and filterable; and  $\text{PM=PM}_{10}\text{=}\text{PM}_{25}$ 

HAP Emission Factors provided by AP-42, Table 3.2-2 (7/2000).

#### Greenhouse Gas Emissions

Pollutant	Emission F	actor	Emissions (ib/hr)	Op. Hrs	tpy	EF Source	
CO <sub>2</sub>	53.02 kg/MMBtu		2999.86	8,760	13139	EPA MRR Table C-1	
CH <sub>4</sub> (as CO <sub>2</sub> e)	0.001	kg/MMBtu	1,41	8,760	6.20	EPA MRR Table C-2	
N <sub>2</sub> O (as CO <sub>2</sub> e)	0.0001	kg/MMBtu	1.69	8,760	7.39	EPA MRR Table C-2	
co <sub>z</sub> e			3002.96		13153		

Notes: Emission Factors as per 40 CFR Part 98, Tables C-1 & C-2 CO-e emissions reported per 40 CFR Part 98, 98.3(b)(4)(i) and Eq. A-1

C204 - Cat 3612

Wonsits Valley Compressor Station Emissions Inventory - PTE

Unit ID:	C203
Unit Secrip:	Caterpillar G3612LE
Unit S/N:	1YG00022
Unit Start-up:	September, 2007
Unit Mfg Date:	October 10, 1991
Reconstructed:	9/2007
Engine Type:	4SLB

#### Emission Factors (uncontrolled)

<b>Emission Factors (uncont</b>		Source		
Site-Rated Horsepower Name Plate Horsepower	3406 3550	bhp bhp	Mfg data Mfg data	
NO,: CO: SO <sub>2</sub> : VOC:	1.00	g/hp-hr	Mfg data	
CO:	2.50	g/hp-hr	Mfg data	
SO <sub>2</sub> :	5.88E-04	Ib/MMBtu	AP-42	
VOC: PM: HCHO:	1.09 9.99E-03 0.26	g/hp-hr lb/MMBtu g/hp-hr	Mfg. data AP-42 Mfg. data	

VOC Emission Factor includes NMNEHC from maufacturer data plus HCHO from manufacturer and acrolein and acetaidehyde from AP-42; manufacuter data does not include aldehydes

Exhaust Gas Flow (cfm Fuel Use Rate (scf/hr) Annual Fuel Consump Fuel Heating Value (Bt BSFC @ 100% Load ( Heat Input (MMBtu/hr) Site Rated Horsepowe Operating Hours	iion (MMsct/yr) w/scf, HHV) Btu/hp-hr, HHV)	24,273 23,029 201.7 1,114 7,515 25.7 3,406 8,760
State and state and		
Source Yest Emission	TO THE PARTY OF TH	1 1 1 1
Source Yest Emission NOx (g/hp-hr)	Tested 5/17/2017	0.28
Source Yest Emission NOx (g/hp-hr) NOx (g/hp-hr)	Tested 5/17/2017 Tested 11/29/2017	0.38
Source Yest Emission NOx (g/hp-hr) NOx (g/hp-hr) NOx (g/hp-hr)	Tested 5/17/2017 Tested 11/29/2017 2017 Test Maximum	0.38
Source Yest Emission NOx (g/hp-hr) NOx (g/hp-hr) NOx (g/hp-hr) NOx (g/hp-hr)	Tested 5/17/2017 Tested 11/29/2017 2017 Test Maximum Permit Limit	0.38
Source Yest Emission NOx (g/hp-hr) NOx (g/hp-hr) NOx (g/hp-hr) NOx (g/hp-hr) CO (g/hp-hr)	Tested 5/17/2017 Tested 11/29/2017 2017 Test Maximum	0.38
NOx (g/hp-hr) NOx (g/hp-hr) NOx (g/hp-hr) NOx (g/hp-hr)	Tested 5/17/2017 Tested 11/29/2017 2017 Test Maximum Permit Limit	0.38
NOx (g/hp-hr) NOx (g/hp-hr) NOx (g/hp-hr) NOx (g/hp-hr) CO (g/hp-hr)	Tested 5/17/2017 Tested 11/29/2017 2017 Test Maximum Permit Limit Tested 5/17/2017	0.38

				Uncontrolled Emissio	ns		-		Controllad Emission	S		1
Pollutant	EF Source	En	ission Factor	Emissions (lb/hr)	Op. Hrs	tpy	Emissi	on Factor	Emissions (Ib/hr)	Op. Hrs	tay	
NO,	Manufacturer/Source Testing	1.00	g/hp-hr	7.51	8760	32.89	1.00	g/hp-hr	7.51	8760.00	32.89	
co	Manufacturer/Source Testing	2.50	g/hp-hr	18.77	8760	82.22	1.00	g/hp-hr	7.51	8760.00	32.89	60% control efficiency
SO2	AP-42, Table 3.2-2	5.88E-04	lb/MMBtu	0.02	8760	0.07	5.88E-04	ib/MMBtu	0.02	8760.00	0.07	
VOC	Manufacturer	1.09	g/hp-hr	8.16	8760	35.72	0.54	g/hp-hr	4.08	8760	17.86	50% control efficiency
PM	AP-42, Table 3.2-2	9.99E-03	lb/MMBtu	0.26	8760	1.12	9.99E-03	lb/MMBtu	0.26	8760	1.12	- Constant of the second second
НСНО	Manufacturer	0.26	g/hp-hr	1.95	8760	8.55	0.05	a/hp-hr	0.38	8760	1.64	81% control efficiency
Acetaldehyde	AP-42, Table 3.2-2	8.36E-03	lb/MMBtu	0.21	8760	0.94	4.18E-03	lb/MMBtu	0.11	8760	0.47	50% control efficiency
Acrolein	AP-42, Table 3.2-2	5.14E-03	Ib/MMBtu	0.13	8760	0.58	2.57E-03	Ib/MMBtu	0.07	8760	0.29	50% control efficiency
Benzene	AP-42, Table 3.2-2	4.40E-04	lb/MMBtu	0.011	8760	0.05	2.20E-04	ib/MMBtu	0.006	8760	0.02	50% control efficiency
Ethylbenzene	AP-42, Table 3.2-2	3.97E-05	Ib/MMBtu	0.0010	8760	0.004	1.99E-05	Ib/MMBtu	0.0005	8760	0.002	50% control efficiency
Toluene	AP-42, Table 3.2-2	4.08E-04	lb/MMBtu	0.010	8760	0.05	2.04E-04	lb/MMBtu	0.005	8760	0.02	50% control efficiency
Xylene	AP-42, Table 3.2-2	1.84E-04	lb/MMBtu	0.005	8760	0.02	9.20E-05	Ib/MMBtu	0.002	8760	0.01	50% control efficiency
Methanol	AP-42, Table 3.2-2	2.50E-03	Ib/MMBtu	0.06	8760	0.28	1.25E-03	ib/MMBtu	0.03	8760	0.14	50% control efficiency
n-Hexane	AP-42, Table 3.2-2	1.11E-03	Ib/MMBtu	0.03	8760	0.12	5.55E-04	Ib/MMBtu	0.01	8760	0.06	50% control efficiency
Total HAPs						10.59	-				2.67	1

Total HAPs Notes: Controlled Emissions assumes oxidation catalyst removes 80% HCHO, and 50% VOC & other HAPs; Controlled EFs for NO, & CO from Consent Decree 2:08-CV-00167-TS-PMW; PM Emission Factor includes condensible and filterable; and PM=PM<sub>10</sub>=PM<sub>2.5</sub> HAP Emission Factors provided by AP-42, Table 3.2-2 (7/2000).

1

#### Greenhouse Gas Emissions

Pollutant	Emission F	actor	Emissions (lb/hr)	Op. Hys	tpy	EF Source
CO <sup>3</sup>	53.02	kg/MMBtu	2999.86	8,760	13139	EPA MRR Table C-1
CH <sub>4</sub> (as CO <sub>2</sub> e)	0.001	kg/MMBtu	1.41	8,760	6.20	EPA MRR Table C-2
N <sub>2</sub> O (as CO <sub>2</sub> e)	0.0001	kg/MMBtu	1.69	8,760	7.39	EPA MRR Table C-2
co <sup>3</sup> e			3002.96		13153	
Notes Preission Feature as a	10 OFD Day 00 Tables O	1100			a	

Notes: Emission Factors as per 40 CFR Part 98, Tables C-1 & C-2 CO<sub>2</sub>e emissions reported per 40 CFR Part 98, 98.3(b)(4)(i) and Eq. A-1

### Wonsits Valley Compressor Station

**Emissions Inventory - PTE** 

Unit ID: C202 Unit Descrip: Caterpillar G3612LE Unit S/N: 1YG00023 Unit Start-up: September, 2007 Unit Mfg Date: October 21, 1991 Reconstructed: 9/2007 Engine Type: 4SLB

#### **Emission Factors (uncontrolled)**

Site-Rated Horsepower	3406	bhp	Mfg. data	_
Name Plate Horsepower	3550	bhp	Mfg. data	
NO <sub>x</sub> :	1.00	g/hp-hr	Mfg. data	-
CO:	2.50	g/hp-hr	Mfg. data	
co so <sub>2</sub> : voc:	5.88E-04	Ib/MMBtu	AP-42	
VOC:	1.09	g/hp-hr	Mfg. data	
РМ: НСНО:	9.99E-03	Ib/MMBtu	AP-42	- 1
HCHO:	0.26	g/hp-hr	Mfg. data	

VOC Emission Factor includes NMNEHC from maufacturer data plus HCHO from manufacturer and acrolein and acetaldehyde from AP-42; manufacuter data does not include aldehydes

Source

Exhaust Gas Flow (cfm)	24,273
Fuel Use Rate (scf/hr)	23,029
Annual Fuel Consumption (MMscf/yr)	201.7
Fuel Heating Value (Btu/scf, HHV)	1,114
BSFC @ 100% Load (Btu/hp-hr, HHV)	7,535
Heat Input (MMBtu/hr)	25.7
Site Rated Horsepower (bhp)	3,406
Operating Hours	8,760

Source Test Emiss	ion Factors	
NOx (g/hp-hr)	Tested 5/17/2017	0.40
NOx (g/hp-hr)	Tested 11/29/2017	0.71
NOx (g/hp-hr)	2017 Test Maximum	0.71
NOx (g/hp-hr)	Permit Limit	1.00
CO (g/hp-hr)	Tested 5/17/2017	0.01
CO (g/hp-hr)	Tested 11/29/2017	0.01
CO (g/hp-hr)	2017 Test Maximum	0.01
CO (g/hp-hr)	Permit Limit	1.00

		Uncontrolled Emissions Controlled Emissions						Controlled Emissio	ns	-	1	
Pollutant	EF Source	Emi	asion Factor	Emissions (lb/hr)	Op. Hrs	tpy	Emissio	n Factor	Emissions (lb/hr)	Op. Hrs	tpy	
NO <sub>x</sub>	Manufacturer/Source Testing	1.00	g/hp-hr	7.51	8760	32.89	1.00	g/hp-hr	7.51	8760	32.89	1
CO	Manufacturer/Source Testing	2.50	g/hp-hr	18.77	8760	82.22	1.00	g/hp-hr	7.51	8760	32.89	60% control efficiency
SO <sub>2</sub>	AP-42, Table 3.2-2	5.88E-04	Ib/MMBtu	0.02	8760	0.07	5.88E-04	Ib/MMBtu	0.02	8760	0.07	-
VOC	Manufacturer	1.09	g/hp-hr	8.16	8760	35.72	0.54	g/hp-hr	4.08	8760	17.86	50% control efficiency
PM	AP-42, Table 3.2-2	9.99E-03	Ib/MMBtu	0.26	8760	1.12	9.99E-03	Ib/MMBtu	0.26	8760	1.12	-
НСНО	Manufacturer	0.26	g/hp-hr	1.95	8760	8.55	0.05	g/hp-hr	0.38	8760	1.64	81% control efficiency
Acetaldehyde	AP-42, Table 3.2-2	8.36E-03	Ib/MMBtu	0.21	8760	0.94		Ib/MMBtu	0.11	8760	0.47	50% control efficiency
Acrolein	AP-42, Table 3.2-2	5.14E-03	Ib/MMBtu	0.13	8760	0.58	2.57E-03	Ib/MMBtu	0.07	8760	0.29	50% control efficiency
Benzene	AP-42, Table 3.2-2	4.40E-04	Ib/MMBtu	0.011	8760	0.05	2.20E-04	Ib/MMBtu	0.006	8760	0.02	50% control efficiency
Ethylbenzene	AP-42, Table 3.2-2	3.97E-05	Ib/MMBtu	0.0010	8760	0.004	1.99E-05	lb/MMBtu	0.0005	8760	0.002	50% control efficiency
Toluene	AP-42, Table 3.2-2	4.08E-04	Ib/MMBtu	0.010	8760	0.05	2.04E-04	Ib/MMBtu	0.005	8760	0.02	50% control efficiency
Xylene	AP-42, Table 3.2-2	1.84E-04	Ib/MMBtu	0.005	8760	0.02	9.20E-05	Ib/MMBtu	0.002	8760	0.01	50% control efficiency
Methanol	AP-42, Table 3.2-2	2.50E-03	Ib/MMBtu	0.06	8760	0.28	1.25E-03	Ib/MMBtu	0.03	8760	0.14	50% control efficiency
n-Hexane	AP-42, Table 3.2-2	1.11E-03	Ib/MMBtu	0.03	8760	0.12	5.55E-04	Ib/MMBtu		8760	0.06	50% control efficiency
Total HAPs		1				10.59					2.67	1

Notes: Controlled Emissions assumes oxidation catalyst removes 80% HCHO, and 50% VOC & other HAPs; Controlled EFs for NO, & CO from Consent Decree 2:08-CV-00167-TS-PMW;

PM Emission Factor includes condensible and filterable; and PM=PM10=PM25

HAP Emission Factors provided by AP-42, Table 3.2-2 (7/2000).

#### Greenhouse Gas Emissions

Pollutant	Emission Fi	actor	Emissions (lb/hr)	Op. Hrs	tpy	EF Source
CO2	53.02	kg/MMBtu	2999.86	8,760	13139	EPA MRR Table C-1
CH <sub>4</sub> (as CO <sub>2</sub> e)	0.001	kg/MMBtu	1.41	8,760	6.20	EPA MRR Table C-2
N <sub>2</sub> O (as CO <sub>2</sub> e)	0.0001	kg/MMBtu	1.69	8,760	7.39	EPA MRR Table C-2
CO2e			3002.96		13,153	

Notes: Emission Factors as per 40 CFR Part 98, Tables C-1 & C-2 CO<sub>2</sub>e emissions reported per 40 CFR Part 98, 98.3(b)(4)(i) and Eq. A-1

## Wonsits Valley Compressor Station

**Emissions Inventory - PTE** 

#### **Uncontrolled Emissions**

Emission Source ID	Emission Source Description	NOx	со	VOC	PM	SO2	Total HAPs
Source ID		tpy	tpy	tpy	tpy	tpy	tpy
C202	Caterpillar G3612LE	32.89	82.22	35.72	1.12	0.07	10.59
C203	Caterpillar G3612LE	32.89	82.22	35.72	1.12	0.07	10.59
C204	Caterpillar G3612LE	32.89	82.22	35.72	1.12	0.07	10.59
C206	Waukesha 12V AT 27GL	38.91	65.85	21.91	1.00	0.06	7.11
C207	Caterpillar G3616LE	43.97	109.94	46.87	1.50	0.09	14.16
D-1	100-MMscfd TEG Dehydration Unit	-		393.23	-	-	213.43
R-1	1.0-MMBtu/hr Dehydrator Reboiler	0.39	0.33	0.02	0.03	0.002	0.01
T-1	500-bbl Condensate Tank	-	-	13.12	-	-	0.55
T-2 - T-9	Misc Chemical Tanks	-	-	1.12		-	0.07
EL	Fugitive Equipment Leaks	-	-	4.79	-	-	0.38
FL-1	Flare Emissions from Dehy Control	0.02	0.02	-	-	-	-
C-1	Combustor Emissions from Tank Control	0.01	0.005	-	-	-	-
C-2	Backup Combustor Emissions from Dehy Control	0.05	0.03	0.00	1.64E-03	1.30E-04	4.07E-04
LO	Truck Load Out	100 C	-	1.57		100 BALL	1.1.1.4
ES	Engine Start-ups	*		0.22		-	0.01
СВ	Compressor Blowdowns		-	10.05	-	-	0.49
ESD	Emergency Shutdowns		-	0.067		-	0.003
PG	Pigging Emissions	1		0.17			0.01
tal		182.03	422.84	600.32	5.90	0.35	268.00

Note: PM Emission Factor includes condensible and filterable; and PM=PM10=PM25

Uncontrolled emissions from FL-1 and C-1 only include pilot emissions as tanks and dehdrator are not sent to Flare/Combustor when uncontrolled. Units shaded in blue are insignificant.

#### **Controlled Emissions**

Emission Source ID	Emission Source Description	NO <sub>x</sub>	со	voc	РМ	SO2	Total HAPs
Bouloo IB		tpy	tpy	tpy	tpy	tpy	tpy
C202	Caterpillar G3612LE	32.89	32.89	17.86	1.12	0.07	2.67
C203	Caterpillar G3612LE	32.89	32.89	17.86	1.12	0.07	2.67
C204	Caterpillar G3612LE	32.89	32.89	17.86	1.12	0.07	2.67
C206	Waukesha 12V AT 27GL	38.91	29.93	10.96	1.00	0.06	3.61
C207	Caterpillar G3616LE	43.97	43.97	23.44	1.50	0.09	3.56
D-1	100-MMscfd TEG Dehydration Unit		-	11.99	250	-	4.61
T-1	500-bbl Condensate Tank		-	0.66	1.	=	0.03
EL	Fugitive Equipment Leaks	-	-	4.79	-	÷.	0.38
FL-1	Flare Emissions from Dehy Control	0.02	0.02				
C-1	Combustor Emissions from Tank Control	0.01	0.00				
C-2	Backup Combustor Emissions from Dehy Control	0.05	0.03	0.00	0.00	0.00	0.00
CB	Compressor Blowdowns	-	-	10.05	22		0.49
tal		181.63	172.62	115.46	5.87	0.35	20.67

Note: PM Emission Factor includes condensible and filterable; and PM=PM10=PM2.5.

APPENDIX 8 Emission Calculation

# APPENDIX B Emission Calculations

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### D. SCHEDULE FOR SUBMISSION OF COMPLIANCE CERTIFICATIONS

This section must be completed once by every source. Indicate when you would prefer to submit compliance certifications during the term of your permit (at least once per year).

Frequency of submittal Annual Beginning 1 / 31 / TBD

#### E. COMPLIANCE WITH ENHANCED MONITORING & COMPLIANCE CERTIFICATION REQUIREMENTS

This section must be completed once by e must be able to certify compliance for eve compliance certification at every unit.			
Enhanced Monitoring Requirements:	<u>NA</u> In Compliance	Not In Compliance	
Compliance Certification Requirements:	X In Compliance	Not In Compliance	

### B. SCHEDULE OF COMPLIANCE

Unit(s)	Requirement
Reason for Nonco that future-effective	<b>liance</b> . Briefly explain reason for noncompliance at time of permit issuance or uirement will not be met on a timely basis:
Narrative Descript achieving compliance	of how Source Compliance Will be Achieved. Briefly explain your plan for
5 ,	
Schedule of Comp	nce. Provide a schedule of remedial measures, including an enforceable th milestones, leading to compliance, including a date for final compliance.
Schedule of Comp	nce. Provide a schedule of remedial measures, including an enforceable th milestones, leading to compliance, including a date for final compliance. Remedial Measure or Action Date to be Achieved
Schedule of Comp	th milestones, leading to compliance, including a date for final compliance.
Schedule of Comp	th milestones, leading to compliance, including a date for final compliance.
Schedule of Comp	th milestones, leading to compliance, including a date for final compliance.

### C. SCHEDULE FOR SUBMISSION OF PROGRESS REPORTS

Only complete this section if you are required to submit one or more schedules of compliance in section B or if an applicable requirement requires submittal of a progress report. If a schedule of compliance is required, your progress report should start within 6 months of application submittal and subsequently, no less than every six months. One progress report may include information on multiple schedules of compliance.

Contents of Progress Report (describe):
First Report// Frequency of Submittal
Contents of Progress Report (describe):
First Report// Frequency of Submittal

Emission Unit ID(s): TEG Dehydrator (D-1) and Flare (FL-1)
Applicable Requirement (Description and Citation): 40 CFR Part 63 – Subpart HH per Consent Decree No. 2:08-CV-00167-TS-PMW
§60.5400a; §60.485a [equipment leak GHG and VOC standards applicable to affected facilities at an onshore natural gas processing plant]
Compliance Methods for the Above (Description and Citation): Monitoring, recordkeeping, and reporting: per 40 CFR Part 63, Subparts A and HH. Flare (FL-1) is designed and operated per 40 CFR §63.11 meeting 95% control of VOC, with no more than 140 hours downtime per year.
Compliance Status:
X In Compliance: Will you continue to comply up to permit issuance? X Yes No
Not In Compliance: Will you be in compliance at permit issuance?YesNo
Future-Effective Requirement: Do you expect to meet this on a timely basis?YesNo



# Federal Operating Permit Program (40 CFR Part 71) INITIAL COMPLIANCE PLAN AND COMPLIANCE CERTIFICATION (I-COMP)

#### SECTION A - COMPLIANCE STATUS AND COMPLIANCE PLAN

Complete this section for each unique combination of applicable requirements and emissions units at the facility. List all compliance methods (monitoring, recordkeeping and reporting) you used to determine compliance with the applicable requirement described above. Indicate your compliance status at this time for this requirement and compliance methods and check "YES" or "NO" to the follow-up question.

Emission Unit ID(s): C202, C203, C204, C206, C207
Applicable Requirement (Describe and Cite): Subpart JJJJ—Standards of Performance for Stationary Spark Ignition Internal Combustion Engines
Monitoring, recordkeeping, and reporting: per 40 CFR Part 60, Subparts A and JJJJ.
Table 1; Emissions limits for NOx, CO, and VOC: 1.0, 2.0, and 0.7, respectively (g/hp-hr) and 160, 540, and 86, respectively, (ppmvd at $15\% O_2$ ).
§60.4243; Conduct annual performance emissions testing for NOx, CO, and VOC.
Compliance Methods for the Above (Description and Citation): These engines operate under an internally developed maintenance plan.
Compliance Status:
X In Compliance: Will you continue to comply up to permit issuance? X Yes No
Not In Compliance: Will you be in compliance at permit issuance?YesNo
Future-Effective Requirement: Do you expect to meet this on a timely basis?YesNo



# Federal Operating Permit Program (40 CFR Part 71) INSIGNIFICANT EMISSIONS (IE)

On this page list each insignificant activity or emission unit. In the "number" column, indicate the number of units in this category. Descriptions should be brief but unique. Indicate which emissions criterion of part 71 is the basis for the exemption.

Number	Description of Activities or Emissions Units	RAP (except HAP)	HAP
1	R-1, 1.0-MMBtu/hr TEG Reboiler	x	х
1	T-2, 100-bbl New Glycol	х	Х
1	T-3, 100-bbl New Lube Oil	х	Х
1	T-4, 100-bbl Used Lube Oil	х	Х
1	T-5, 100-bbl Used Glycol	X	х
1	T-6, 65-bbl Glycol	х	Х
1	T-7, 100-bbl Produced Water (slop tank T-201)	x	Х
1	T-8, 100-bbl Dehydrator Drip Tank	X	Х
1	T-9, 100-bbl Dehydrator Drip Tank	x	Х
1	LO, Truck Loadout (condensate)	X	Х
1	PG, Pigging Operations	х	Х
1	ES, Engine Startups	x	Х
1	CB, Compressor Blowdowns	X	Х
1	ESD, Emergency Shutdowns	x	х



# Federal Operating Permit Program (40 CFR Part 71) POTENTIAL TO EMIT (PTE)

For each emissions unit at the facility, list the unit ID and the PTE of each air pollutant listed below and sum the values to determine the total PTE for the facility. It may be helpful to complete form **EMISS** before completing this form. Report each pollutant at each unit to the nearest tenth (0.1) of a ton; values may be reported with greater precision (i.e., more decimal places) if desired. Report facility total PTE for each listed pollutant on this form and in section **J** of form **GIS**. The HAP column is for the PTE of all HAPs for each unit. You may use an attachment to show any pollutants that may be present in major amounts that are not already listed on the form (this is not common).

	Regulated Air Pollutants and Pollutants for which Source is Ma (PTE in tons/yr)						
Emissions Unit ID	NOx	voc	SO2	PM10	со	Lead	HAF
C202	32.9	17.9	0.1	1.1	32.9		2.7
C203	32.9	17.9	0.1	1.1	32.9		2.7
C204	32.9	17.9	0.1	1.1	32.9		2.7
C206	38.9	11.0	0.1	1.0	29.9		3.6
C207	44.0	23.4	0.1	1.5	44.0		3.6
D-1		15.3		- 744			6.1
T-1		3.6					0.2
EL		4.8					0.4
СВ		10.0					0.5
FL-1	0.7				0.2		
C-1	0.4				0.1		
FACILITY TOTALS:	182.7	121.8	0.5	5.8	172.9	0.0	22.5

Note: Fugitive emissions of criteria pollutants do not count toward applicability.



# Federal Operating Permit Program (40 CFR Part 71) EMISSION CALCULATIONS (EMISS)

Calculate potential to emit (PTE) for applicability purposes and actual emissions for fee purposes for each emissions unit, control device, or alternative operating scenario identified in section I of form **GIS**. If form **FEE** does not need to be submitted with the application, do not calculate actual emissions.

#### A. Emissions Unit ID <u>C-1</u>

#### B. Identification and Quantification of Emissions

		_		Emission Rat	es	
			Actual	Potenti	ial to Emit	
Air Pollutants			Annual Emissions (tons/yr)	Hourly (lb/hr)	Annual (tons/yr)	CAS No.
NOx			NA **	0.1	0.4	11104-93-1
со			NA **	0	0.1	630-08-0
			-			
		P				
E.	0.0	1.211	n t		1.50	- 14 (10 C C C C C C C C C C C C C C C C C C C



## Federal Operating Permit Program (40 CFR Part 71) EMISSION CALCULATIONS (EMISS)

Calculate potential to emit (PTE) for applicability purposes and actual emissions for fee purposes for each emissions unit, control device, or alternative operating scenario identified in section I of form **GIS**. If form **FEE** does not need to be submitted with the application, do not calculate actual emissions.

# A. Emissions Unit ID \_\_\_\_\_\_

#### B. Identification and Quantification of Emissions

	Actual	Potent	ial to Emit		
Air Pollutants	Annual Emissions (tons/yr)	Hourly (lb/hr)	Annual (tons/yr)	CAS No.	
NOx	NA **	0.2	0.7	11104-93-1	
CO	NA **	0	0.2	630-08-0	
		<u> </u>			



# Federal Operating Permit Program (40 CFR Part 71) EMISSION CALCULATIONS (EMISS)

Calculate potential to emit (PTE) for applicability purposes and actual emissions for fee purposes for each emissions unit, control device, or alternative operating scenario identified in section I of form **GIS**. If form **FEE** does not need to be submitted with the application, do not calculate actual emissions.

#### A. Emissions Unit ID <u>CB</u>

#### B. Identification and Quantification of Emissions

	and the second se			
	Actual	Potent	ial to Emit	
Air Pollutants	Annual Emissions (tons/yr)	Hourly (lb/hr)	Annual (tons/yr)	CAS No.
VOC	NA **	2.3	10.0	NA
HAP	NA **	0.1	0.5	NA



# Federal Operating Permit Program (40 CFR Part 71) EMISSION CALCULATIONS (EMISS)

Calculate potential to emit (PTE) for applicability purposes and actual emissions for fee purposes for each emissions unit, control device, or alternative operating scenario identified in section I of form **GIS**. If form **FEE** does not need to be submitted with the application, do not calculate actual emissions.

#### A. Emissions Unit ID <u>EL</u>

#### B. Identification and Quantification of Emissions

	in the second seco			
	Actual Annual Emissions (tons/yr)	Potent	ial to Emit	
Air Pollutants		Hourly (lb/hr)	Annual (tons/yr)	CAS No.
VOC	NA **	1.1	4.8	NA
НАР	NA **	0.1	0.4	NA
10 Be .			1 Aut	
- 2 - 2 - 2				11-00-00
1000				
1.1419				waters of president size



# Federal Operating Permit Program (40 CFR Part 71) EMISSION CALCULATIONS (EMISS)

Calculate potential to emit (PTE) for applicability purposes and actual emissions for fee purposes for each emissions unit, control device, or alternative operating scenario identified in section I of form **GIS**. If form **FEE** does not need to be submitted with the application, do not calculate actual emissions.

#### A. Emissions Unit ID \_\_\_\_\_

#### **B.** Identification and Quantification of Emissions

	L. CONT				
	Actual Potential to		ial to Emit		
Air Pollutants	Annual Emissions (tons/yr)	Hourly (lb/hr)	Annual (tons/yr)	CAS No.	
VOC	NA **	0.8	3.6	NA	
n-Hexane	NA **	0	0.1	110-54-3	
Benzene	NA **	0	0	71-43-2	
Toluene	NA **	0	0	108-88-3	
Ethylbenzene	NA **	0	0	100-41-4	
Xylene	NA **	0	0	1330-20-7	
2,2,4 Trimethylpentane	NA **	0	0	540-84-1	

# **EXHIBIT 6**

Comments to U.S. EPA Region 8 in Response to Draft 2020 Title V Permit No. V-OU-000005-2000.00 from Thomas Gibbons (MPLX) (Jan. 13, 2020).

# **Gibbons**, Thomas

From:	Gibbons, Thomas
Sent:	Monday, <mark>January 13, 2020</mark> 3:33 PM
То:	Rao, Lohitaksha
Cc:	Pring, Daniel Daryl; Mitchell, Bradley L
Subject:	Wonsits Valley - Public Comments on Draft Title V Permit V-UO-000005-2018.00
Attachments:	20200113_Wonsits Valley_Draft Title V Permit_Public Comment Letter.pdf
Importance:	High

Dear Mr. Rao:

MPLX, operator of the Wonsits Valley Compressor Station located in Uintah County, Utah, is submitting the attached public comments on draft Part 71 Permit V-UO-000005-2018.00 (Docket ID: EPA-R08-OAR-2018-0349) on behalf of Andeavor

Field Services, LLC.

MPLX appreciates this opportunity to provide comments on the draft permit. Should you have any questions or need clarification regarding these comments, please feel free to contact me.

Best Regards, Tom

Thomas Gibbons HES Professional | HSE Environmental Logistics

MPLX 1515 Arapahoe Street, Tower 1, Suite 1600, Denver CO 80202 O: 303-454-6685 | M: 720-550-9730 THGibbons@marathonpetroleum.com



\*Please note that my mailing address has changed effective December 9, 2019.



January 13, 2020

via email (rao.lohitaksha@epa.gov)

Mr. Lohitaksha Rao U.S. Environmental Protection Agency Region 8 Air & Radiation Division Mail Code 8ARD-PM 1595 Wynkoop Street Denver, CO 80202-1129

# RE: Wonsits Valley Compressor Station (Uintah County, Utah) Public Comments on Draft Part 71 Permit V-UO-000005-2018.00 Docket ID: EPA-R08-OAR-2018-0349

Dear Mr. Rao:

MPLX, operator of the Wonsits Valley Compressor Station located in Uintah County, Utah, is submitting the following public comments on draft Part 71 Permit V-UO-000005-2018.00 on behalf of Andeavor Field Services, LLC.

# **Statement of Basis Comments**

# 1. Statement of Basis Comments:

- a) Section I.A Location: There is a new mailing address:
  - 1515 Arapahoe Street, Tower 1, Suite 1600, Denver CO 80202
- b) Section I.B Contact:
  - Facility Contact (name and address change):

Thomas Gibbons; HES Professional MPLX 1515 Arapahoe Street, Tower 1, Suite 1600; Denver, CO 80202

• Responsible Official (name and address change):

James O. Wakeley; Operations Senior Director 19100 Ridgewood Parkway; San Antonio, TX 78259

c) **Section I.B – Description of Operations:** This description is obsolete; please see the 2018 application, and Comment #3 below, for the current process description.

# d) Section II – Applicable Requirement Review:

• Subsection L. 40 CFR Part 63, Subpart HH: National Emission Standards for Hazardous Air Pollutants from Oil and Natural Gas Production Facilities: The description that states "The affected unit is the dehydration unit D-1 and control devices C-2 and FL-1 operating at the facility" is incorrect. Flare FL-1 is the only Subpart HH control device; a backup control device is not required by Subpart HH and C-2 is incorrectly described as a Subpart HH control device. Moreover, the information provided in the Part 71 permit renewal application did not describe C-2 as a Subpart HH control device.

# **Draft Permit Comments**

- 2. Section I.A: The current responsible official is James O. Wakeley; Operations Senior Director.
- 3. Section I.A: The process description is not correct (see application submitted to EPA, dated 4/10/2018).
  - a) There is three-phase separation at the inlet (gas, condensate, and produced water).
  - b) The separated condensate is pumped to the station discharge and sent off site to a gas plant.
  - c) The separated produced water is temporarily stored in the slop tank (unit T-1, controlled with combustor unit C-1). Liquids from the low-pressure scrubber (condensate and produced water) are also sent to T-1.
  - d) Liquids from the slop tank, T-1, are gravity fed off site to the Battery 4 facility.
  - e) Gas is compressed to approximately 1200 psig.
  - f) The vapors from the reboiler are routed to the BTEX condenser to remove liquids that drain into the distillate tank. Overhead vapors from the BTEX condenser and flash gas from the flash tank are sent to an emission control device (open flare, unit FL-1, with backup combustor, unit C-2).
  - g) Distillate tank liquids are pumped offsite to the Battery 4 facility.

# 4. Section I.B:

- a) The rating for Unit R-1 is listed incorrectly in the draft permit; the correct rating is 1.0 MMBtu/hr.
- b) Please state that C-2 is the "backup combustor" for Unit D-1.
- c) Unit T-1 is more aptly named a "slop tank" rather than a "condensate" tank because the tank stores mostly produced water.
- d) There is no truck loadout on site (delete Unit LO).
- e) Footnote to Table 2 has a typographical error; it should indicate "Burn" (not "Bur").
- 5. **Condition II.D.2:** Since the initial performance testing has already been completed for all engines, please delete reference to initial performance testing.
- 6. **Condition III.A:** Please delete reference to backup combustor C-2 in Section III since it is not a Subpart HH control device. Flare FL-1 is the only Subpart HH control device; a backup control device is not required by Subpart HH.

- 7. **Condition III.D.3:** Please delete reference to backup combustor C-2 in Section III since it is not a Subpart HH control device. Flare FL-1 is the only Subpart HH control device; a backup control device is not required by Subpart HH.
- 8. **Condition III.E:** Please delete reference to 40 CFR 63.772(f) since the applicable sections of (f) do not apply to this facility. 40 CFR §63.772(f) states "This paragraph applies to the demonstration of compliance with the control device performance requirements specified in §63.771(d)(1)(i), (e)(3), and (f)(1)" and none of these sections are applicable.
- 9. Condition III.E.3: Please delete reference to backup combustor C-2 in Section III since it is not a Subpart HH control device. Flare FL-1 is the only Subpart HH control device; a backup control device is not required by Subpart HH. §63.772(e)(1)(i) states that a flare is exempt from the requirements to conduct performance tests and design analyses under section §63.772(e). The only part of §63.772(e) that applies to the flare, FL-1, is §63.772(e)(2).
- 10. **Condition III.E.4:** Please delete this condition since 40 CFR 63.772(f) is not applicable to this facility. 40 CFR §63.772(f) states "This paragraph applies to the demonstration of compliance with the control device performance requirements specified in §63.771(d)(1)(i), (e)(3), and (f)(1)" and none of these sections are applicable to this facility.
- 11. **Condition III.F.2:** Please delete reference to backup combustor C-2 in Section III since it is not a Subpart HH control device. Flare FL-1 is the only Subpart HH control device; a backup control device is not required by Subpart HH.
- 12. **Condition III.H.3:** Please delete this condition since the Notification of Compliance Status Report (a one-time requirement) has already been completed.
- 13. **Condition IV.D.1:** Please delete this condition since the initial performance testing and other compliance demonstrations have already been completed for all engines.
- 14. **Condition IV.D.5:** Please delete this condition since initial compliance with the emission limitations, operating limitations, and other requirements has already been demonstrated for all engines.
- 15. Condition V.B.1.(a): For timeframe clarification, please add "per calendar year" after "140 hours".
- 16. **Condition V.C.1.(a):** Please delete this condition since this requirement to connect the "condensate" storage tank, identified as T-1 in this permit, to an existing or new combustor at the facility has already been completed.
- 17. **Condition V.C.1.(b):** Please delete this condition since this requirement to certify to the EPA that the design of the conveyance systems from the condensate storage tank to the combustor does not, under normal operating conditions, cause or contribute to a release of VOCs from the condensate storage tank through thief hatches or pressure relief valves has already been completed.

- 18. Condition V.D.1.(c).(i): Please delete this condition since this requirement to conduct initial performance tests for  $NO_x$  and CO emissions on each RICE has already been completed.
- 19. Condition VI.B.1: This condition states: "The Permittee shall submit to the EPA all reports of any required monitoring under this permit semiannually. The first report shall cover the period from the effective date of this permit through December 31, 2019." Since the effective date of the permit will be after December 31, 2019, the first semiannual report will likely cover the 6-month period ending June 30, 2020, assuming that the final permit is issued in the first half of 2020.
- 20. Condition VII.C.3.(a): For current Permit V-UO-000005-2000.00, Condition VII.C.3.(a), the annual Compliance Certification that is due January 31, 2020, for CY2019. Assuming EPA issues Permit V-UO-000005-2018.00 such that the effective date is April 1, 2020, or earlier, the permit should include a clarification regarding Condition VII.C.3.(a) that the first Compliance Certification is due April 1, 2021, for the 12-month period ending December 31, 2020.

If you have any questions regarding these public comments, please contact me at (303) 454-6685 or THGibbons@marathonpetroleum.com.

Sincerely,

Thoma A. Siblom

Thomas H. Gibbons HES Professional