

2015

**Utah Physicians for a Healthy Environment and Friends of Great Salt Lake, Petitioners, vs. Executive Director of the Department of Environmental Quality Et Al., Respondents.**

Utah Court of Appeals

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**IN THE UTAH COURT OF APPEALS**

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Utah Physicians for a Healthy Environment  
and FRIENDS of Great Salt Lake,

Petitioners,

vs.

Executive Director of the Department of  
Environmental Quality et al.,

Respondents.

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**Appeal No. 20150344-CA**

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**BRIEF OF RESPONDENT DEPARTMENT OF ENVIRONMENTAL QUALITY  
ET AL.**

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Appeal From the Utah Department of Environmental Quality  
Executive Director Amanda Smith  
Agency Decision No. N10123-0041 (DAQE-AN101230041-13)

---

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**ORAL ARGUMENT REQUESTED**

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**ORAL ARGUMENT REQUESTED**



## **LIST OF PARTIES**

### **Petitioners:**

Utah Physicians for a Healthy Environment  
FRIENDS of Great Salt Lake

### **Respondents:**

Utah Department of Environmental Quality  
Executive Director of the Utah Department of Environmental Quality  
Utah Division of Air Quality  
Director of the Utah Division of Air Quality  
Holly Refining & Marketing Company—Woods Cross LLC



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## **LIST OF ACRONYMS**

<b>AERMOD</b>	<b>Atmospheric Dispersion Modeling System</b>
<b>ALJ</b>	<b>Administrative Law Judge</b>
<b>AO</b>	<b>Approval Order</b>
<b>BACT</b>	<b>Best Available Control Technology</b>
<b>CAA</b>	<b>Clean Air Act</b>
<b>CO</b>	<b>Carbon Monoxide</b>
<b>EPA</b>	<b>United States Environmental Protection Agency</b>
<b>FCCU</b>	<b>Fluidized Catalytic Cracking Unit</b>
<b>GHG</b>	<b>Greenhouse Gas</b>
<b>ITA</b>	<b>Intent to Approve</b>
<b>NAAQS</b>	<b>National Ambient Air Quality Standards</b>
<b>NEI</b>	<b>National Emissions Inventory</b>
<b>NNSR</b>	<b>Nonattainment New Source Review</b>
<b>NSPS</b>	<b>New Source Performance Standards</b>
<b>NSR</b>	<b>New Source Review</b>
<b>NO<sub>2</sub></b>	<b>Nitrogen Dioxide</b>
<b>NO<sub>x</sub></b>	<b>Nitrogen Oxides</b>
<b>NOI</b>	<b>Notice of Intent</b>



NSPS	New Source Performance Standards
NNSR	Non-Attainment New Source Review
PM	Particulate Matter or Particulates (includes PM <sub>2.5</sub> and PM <sub>10</sub> )
PM <sub>2.5</sub>	Fine Particulate Matter (particles $\leq 2.5$ micrometers in diameter)
PM <sub>10</sub>	Coarse Particulate Matter (particles $\leq 10$ micrometers in diameter)
PSD	Prevention of Significant Deterioration
PTE	Potential to Emit
RFAA	Request for Agency Action
SIP	State Implementation Plan
SO <sub>2</sub>	Sulphur Dioxide
SO <sub>x</sub>	Sulphur Oxides
SPR	Source Plan Review
tpy	tons per year
UBR	Unavoidable Breakdown Rule
VOC	Volatile Organic Compounds

This case is an appeal of a highly technical decision by the Utah Department of Environmental Quality (UDEQ) and the Utah Division of Air Quality (UDAQ) to approve an expansion and modernization project at the Holly Refinery in Davis County. The agency made this decision in November of 2013 after a rigorous public comment, with almost 4,000 pages of comments submitted, and a subsequent administrative appeal. Utah Physicians for a Healthy Environment and FRIENDS of Great Salt Lake (Petitioners) now seek review of the decision made at the conclusion of the administrative proceedings, which approved Holly's project.

### **STATEMENT OF JURISDICTION**

This Court has jurisdiction to review a “dispositive action in a permit review adjudicative proceeding” under Utah Code, Sections 19-1-301.5(14) (2014), *amended by* 2015 Utah Laws Ch. 379 (S.B. 282), 63G-4-403 (2015), and 78A-4-103(2)(a)(i)(B) (2014), *amended by* 2015 Utah Laws Ch. 441 (S.B. 173). The dispositive action is the Executive Director's Order Adopting Findings of Fact, Conclusions of Law, and Recommended Order on the Merits (Final Order) dated March 31, 2015. [ADJ011651-53.]<sup>1</sup>

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<sup>1</sup> ADJ refers to the adjudicative portion of the record, as explained in Section II.B., *infra*, pp. 10-11.

## STATEMENT OF ISSUES AND STANDARD OF REVIEW

**Issue 1:** Whether Petitioners can meet their burden on appeal where they decline to challenge the Final Order, as required by Section 19-1-301.5(14) of the Utah Code.

### **Standard of review:**

Where a lower tribunal could not have ruled on an issue, no standard of review applies. *Cf. Simmons Media Grp., LLC v. Waykar, LLC*, 2014 UT App 145, ¶ 13, 335 P.3d 885 (where claim does not require review of any district court ruling, no standard of review applies).

**Issue 2:** Whether the Executive Director abused her discretion or otherwise erred in evaluating Petitioners' claims challenging UDAQ's determinations relating to PM<sub>2.5</sub> emissions for the Modernization Project.



**Standard of review:<sup>2</sup>**

Utah Code § 19-1-301.5(14) governs judicial review of the Executive Director's final decision in a permit review adjudication. Utah Code § 19-1-301.5(14)(c) requires a reviewing court to "review all agency determinations in accordance with Subsection 63G-4-403(4), under which Petitioners must show that they have been "substantially prejudiced" by the agency's action. Utah Code Ann. § 63G-4-403(4) (2014). Under Section 19-1-301.5(14)(c), the Court must accept the

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<sup>2</sup> The Utah Legislature amended Section 19-1-301.5 during 2015 legislative session. See 2015 Utah Laws Ch. 379 (S.B. 282). The revisions became effective on May 12, 2015. The prior version of the statute applies because the parties' substantive rights (UDAQ issuance of the approval order on November 28, 2014) and the parties' procedural rights (the filing of this appeal on April 27, 2015) each vested before the effective date of the new statute. See *State v. Clark*, 2011 UT 23, ¶¶ 12-14, 251 P.3d 829. These revisions affect judicial standard of review. Cf. Utah Code Ann. § 19-1-301.5(15)(c)(ii) (2015) ("the appellate court shall: (ii) uphold all factual, technical, and scientific agency determinations that are not clearly erroneous based upon the petitioner's marshaling of the evidence") with Utah Code Ann. § 19-1-301.5(14)(c)(ii) (2012) ("the appellate court shall: (ii) uphold all factual, technical and scientific determinations that are supported by substantial evidence viewed in light of the record as a whole"). Even were this Court to determine that the new statute applies on appeal, however, the application of the standard of review under either version of the statute is essentially the same. The new statutory language includes some changes to the language in the applicable judicial standards of review, including an express requirement for marshaling and the imposition of a clearly erroneous standard. However, because the ALJ required Petitioners to marshal below, and because a clearly erroneous standard of review still requires a determination on substantial evidence, there is no substantive difference in the application of the two standards.

Executive Director's factual determinations (including technical and scientific determinations) as long as "they are supported by substantial evidence taken from the record as a whole." Utah Code Ann. § 19-1-301.5(14)(c). "An administrative law decision meets the substantial evidence test when 'a reasonable mind might accept as adequate' the evidence supporting the decision." *Martinez v. Media-Paymaster Plus/Church of Jesus Christ of Latter-Day Saints*, 2007 UT 42, ¶ 35, 164 P.3d 384 (quoting *Grace Drilling Co. v. Bd. of Review of Indus. Comm'n*, 776 P.2d 63, 68 (Utah App. 1989)). The burden of challenging the agency's factual, scientific, and technical determinations lies with Petitioners. *Utah Chapter of the Sierra Club v. Bd. of Oil, Gas, & Mining*, 2012 UT 73, ¶ 10, 289 P.3d 558 [hereinafter *Sierra Club*] ("the appealing party bears the burden of demonstrating that the agency's factual determinations are not supported by substantial evidence").

This Court reviews legal determinations of UDAQ's operative statutes and rules under the "clearly erroneous" standard because Section 19-1-301.5 expressly vests UDAQ with "substantial discretion to interpret its governing statutes and rules." Utah Code Ann. § 19-1-301.5(14)(c); *see e.g. Sierra Club*, 2012 UT 73, ¶ 10 (holding that where "[t]he Legislature has given the Board explicit authority and wide latitude in interpreting the operative provisions of the Mining Act," such legal

conclusions and interpretations can be set aside only if they are “based upon a clearly erroneous interpretation . . . of the law.”).

The power to interpret the agency’s governing laws under Section 19-1-301.5 is a clear statutory delegation of discretion, in contrast to a statutory grant of power to “administer a statute,” which most agencies have under their operating statutes.<sup>3</sup> This Court reviews general interpretations of law for correctness, granting little deference to the Executive Director. *See Sierra Club*, 2012 UT 73, ¶ 9.

Mixed questions of law and fact arise “when an agency or lower court must apply ‘a legal standard to a set of facts unique to a particular case.’” *Murray v. Utah Labor Comm’n*, 2013 UT 38, ¶ 33, 308 P.3d 461 (quoting *In re Adoption of Baby B.*, 2012 UT 35, ¶ 42, 308 P.3d 382). The Executive Director’s determinations on mixed questions “must be rationally based and are set aside only if they are

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<sup>3</sup> This Court’s analysis of the standard of review in *Sevier Citizens for Clean Air and Water, Inc. v. Dep’t of Env’tl. Quality*, 2014 UT App 257, 338 P.3d 831 is distinguishable. In *Sevier Citizens*, the issue was whether a petitioner filed a petition to intervene under Section 19-1-301.5, which is a jurisdictional requirement. *See id.* at ¶ 4. In ruling on intervention, this Court observed that the statutory grant of substantial discretion was a grant of authority to administer the statute, as opposed to authority to interpret the law. *Id.* at ¶ 5 (internal quotation marks omitted) (“[T]his grant of authority does not turn an agency’s application or interpretation of the law into the type of action that would warrant an abuse of discretion standard.”). In this case, the issues are technical and factual questions as opposed to jurisdictional determinations.



imposed arbitrarily and capriciously or are beyond the tolerable limits of reason.”

*Assoc. Gen. Contractors v. Bd. of Oil, Gas & Mining*, 2001 UT 112, ¶ 18, 38 P.3d 291 (quoting *Williams v. Pub. Serv. Comm’n of Utah*, 754 P.2d 41, 50 (Utah 1988)) (internal quotation marks omitted).

**Issue 3:** Whether the Executive Director abused her discretion in upholding UDAQ’s determination that Holly’s approval order met all the applicable permitting requirements regarding the National Ambient Air Quality Standards (NAAQS), National Standards of Performance for New Stationary Sources (NSPS), and the applicability of the Best Available Control Technology (BACT).

**Standard of review:**

The standard of review for Issue 3 is the same as for Issue 2.

**DETERMINATIVE STATUTES AND RULES**

1. Utah Code Ann. § 19-1-301.5(12), (13), (14);
2. Utah Code Ann. § 63G-4-403; and
3. Utah Admin. Code r. 307-401 (2015).

## STATEMENT OF THE CASE

### I. NATURE OF THE CASE

Petitioners appeal the Final Order,<sup>4</sup> dismissing with prejudice each of Petitioners' claims. [ADJ011652.] Petitioners' Request for Agency Action (RFAA) challenged an approval order issued by UDAQ under the state's minor source permitting program, which authorized changes to Holly's Davis County Refinery. [IR009223-54.]

An administrative law judge (ALJ) reviewed the RFAA under Section 19-1-301.5 and recommended dismissal of all of Petitioners' claims on multiple grounds—lack of preservation, failure to marshal the evidence, and failure to meet the burden of proof on the merits. [ADJ011536-648.] The Executive Director adopted these findings and conclusions in her Final Order, now subject to this appeal. [ADJ011651-53]; *see also* Opening Br. 1, 12.

### II. STATEMENT OF FACTS

By statute, the appellate record includes two sets: (1) the administrative record prepared by UDAQ as it reviewed Holly's permit application (Permitting

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<sup>4</sup> The Final Order consists of two documents: (1) the Administrative Law Judge's Findings of Fact, Conclusions of Law, and Recommended Order on the Merits, which the Executive Director adopted, [ADJ011536-648], and (2) the Executive Director's Final Order of March 31, 2015. [ADJ011651-53.]

Record), and (2) the adjudicative record prepared as the ALJ and the Executive Director completed their review of UDAQ's permitting decision (Adjudicative Record). *See* Utah Code Ann. § 19-1-301.5(14)(b).

#### **A. Permitting Record**

In July 2012, Holly submitted a final permit application, or Notice of Intent (NOI), seeking permission to modernize certain equipment in order to increase the processing of black and yellow wax crude oil at its Davis County Refinery from 40,000 barrels per day to 60,000 barrels per day. [IR002798-3590.] The upgrades will result in a number of overall emission decreases from the refinery, and are collectively referred to as the Modernization Project. [IR008482; IR007575; ADJ011540.]

In April 2013, Holly submitted its final netting analysis to UDAQ. [IR008366-415.] The purpose of the netting analysis was to determine whether the Modernization Project would be a major or minor modification<sup>5</sup> based on estimated

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<sup>5</sup> Whether a modification is major or minor is determined on a pollutant-by-pollutant basis by ascertaining whether there would be a significant net emissions increase over a specific threshold. *See* 40 C.F.R. § 52.21(2)(i); 40 C.F.R. § 52.21(b)(23). The pollutants requiring review under the Clean Air Act (CAA) include Volatile Organic Compounds (VOC), Sulfur Dioxide (SO<sub>2</sub>), Carbon Monoxide (CO), Nitrogen Oxides (NO<sub>x</sub>), Particulate Matter of ten microns or less (PM<sub>10</sub>), Particulate Matter of 2.5 microns or less (PM<sub>2.5</sub>), and Greenhouse Gas

emissions from the modifications and other emission increases and decreases at the refinery. The only two pollutants that exceeded the thresholds were Carbon Monoxide (CO) and Greenhouse Gas emissions (GHGs), which are not at issue in this appeal. [*Id.*] The projected emissions for the remaining pollutants (including PM<sub>2.5</sub>) were reviewed under Utah's minor source program. [IR008566.]

Additionally, the project is expected to result in significant decreases in various pollutants, including 150.69 tons per year (tpy) of SO<sub>2</sub>, 21.53 tpy of NO<sub>x</sub>, and 17.02 tpy of VOCs. [IR007575.]

On June 5, 2013, UDAQ released a draft permit, or Intent to Approve (ITA) for public comment. [IR008449-79; IR008480-575 (UDAQ's Source Plan Review).] After the comment period closed, UDAQ consulted with Holly regarding issues raised in public comments. On November 6, 2013, UDAQ requested that Holly submit additional information in response to the public comments. [IR008021.] Holly did so the next day. [IR008022-52.]

Upon evaluation of all permitting materials, public comments, and additional information submitted by Holly, UDAQ determined that Holly's NOI satisfied all

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emissions (GHG). Exceedance of the threshold for any of these pollutants triggers the more rigorous Prevention of Significant Deterioration (PSD) and Non-attainment New Source Review (NNSR) programs under the CAA.

applicable federal and state requirements. [IR009174-222.] On November 18, 2013, the Director issued approval order DAQE-AN101230041-13. [IR009223-54.]

## **B. Adjudicative Record**

On December 18, 2013, Petitioners filed their RFAA, initiating a permit review adjudicative proceeding. [ADJ009257-373.] On January 16, 2014, the ALJ issued pre-hearing orders, including a requirement for Petitioners to marshal all record evidence. [ADJ009612-15.]<sup>6</sup> On January 22, 2014, Petitioners requested a stay of the approval order. [ADJ009577-96.] The ALJ recommended that the Executive Director deny this request, [ADJ010798-820], and on May 8, 2014, the Executive Director adopted the ALJ's proposed order and denied the request for stay. [ADJ011035-39.]

The parties briefed the merits of the case; and on February 26, 2014, the ALJ heard oral argument. [ADJ011655.] As required by Section 19-1-301.5(12)(c), the ALJ issued a proposed dispositive action on March 11, 2015, finding that on each issue, Petitioners had failed to meet their burden on multiple grounds, including lack of preservation, lack of marshaling, and lack of meritorious arguments. [ADJ011536-648.] The proposed action recommended that the Executive Director

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<sup>6</sup> In a subsequent order, the ALJ waived the page limitation requirements for the parties' briefing. [ADJ009664-5.]

dismiss Petitioners' RFAA in its entirety. [ADJ011642.] On March 31, 2015,<sup>7</sup> the Executive Director issued the Final Order adopting the ALJ's recommended order, dismissing Petitioners' RFAA in its entirety. [ADJ011651-53.] On April 27, 2015, Petitioners filed a petition for review in this Court.

### **SUMMARY OF ARGUMENT**

Petitioners cannot meet their burden on appeal because they fail to challenge the Final Order, which by statute is the only dispositive action subject to the jurisdiction of this Court. Consequently, their appeal must be dismissed.

Moreover, even if the Court were to look beyond this substantive failure and address Petitioners' claims on the merits, the Court must still dismiss those claims because the Executive Director rationally determined that certain issues were not preserved, that UDAQ properly justified its decisions regarding the Modernization Project's PM<sub>2.5</sub> increases, and that the Executive Director properly determined that both UDAQ's determinations relating to PM<sub>2.5</sub> emissions and its compliance with the permitting requirements of the Utah Admin. Code r. 307-401-8 were reasonable and supported by the record as a whole.

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<sup>7</sup> Petitioners incorrectly state the date of the Final Order as November 17, 2014. *See* Opening Br. 4.

## ARGUMENT

### **I. BY FAILING TO ADDRESS THE FINAL ORDER, PETITIONERS CANNOT MEET THEIR BURDEN ON APPEAL**

Under Section 19-1-301.5(12)(c), the ALJ prepared a 113-page proposed order for the Executive Director's consideration. [ADJ011536-648.] The Executive Director adopted the ALJ's recommended order in full. [ADJ011651-53.] No party to this case disputes that the resulting Final Order is a "dispositive action." Utah Code Ann. § 19-1-301.5(1)(a). Likewise, no party disputes that the only order subject to judicial review in this case is the Final Order. *See* Pet. for Review 2 ("Petitioners hereby appeal the March 31, 2015 Order Adopting Finding of Fact, Conclusions of Law, and Recommended Order on the Merits in its entirety."<sup>8</sup> Consequently, because Section 19-1-301.5(14)(a) limits this Court's jurisdiction to a review of dispositive actions, and because the only dispositive action at issue in

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<sup>8</sup> The Petition for Review also seeks review of "any final order on Petitioners' December 20, 2013 Motion and Memorandum Requesting a Stay of Approval Order and/or their January 22, 2013 Amended Motion and Memorandum Requesting a Stay of Approval Order." Pet. for Review 2. However, Petitioners never appealed the denial of the Motion for Stay within 30 days. *See* Utah Code Ann. § 19-1-301.5(15)(e). In addition, despite claiming to challenge the denial of the stay, Opening Br. 12, at no point in their briefing do Petitioners actually challenge that decision.

this case is the Final Order, Petitioners must limit their arguments to showing that the Final Order is deficient.

In addition, Utah Rule of Appellate Procedure 24(a)(9) (Rule 24(a)(9)), requires Petitioners to marshal all record evidence in support of the findings they challenge in the Final Order, with analysis showing how the Executive Director abused her discretion. Despite acknowledging that the permit review adjudication proceeded as required by statute, with one minor exception, Petitioners fail to address the Final Order.<sup>9</sup> Instead, they make superficial references to the Final Order in footnotes without any context or analysis. Opening Br. 31 n.17; 34 n.19; 40 n.23; 45 n.28.

This Court has held that “[a]n inadequately briefed claim is by definition insufficient to discharge an appellant’s burden to demonstrate trial court error.” *Simmons*, 2014 UT App 145, ¶ 37. The Utah Supreme Court also recently ruled that “appellants who fail to follow rule 24’s substantive requirements will likely fail to persuade the court of the validity of their position.” *State v. Roberts*, 2015 UT 24, ¶

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<sup>9</sup> There is one instance in the entire Opening Brief where Petitioners attempt to address the Final Order. See Opening Br. 46-48 (addressing the Final Order’s conclusions on the modeling issue). The Executive Director addresses that point in Section III.A, *infra*, pp. 50-52.



18, 345 P.3d 1226. If an appellant that fails to comply with Rule 24 will be *unlikely* to meet its burden of persuasion, surely an appellant who refuses to address the most pertinent aspect of the record on appeal *cannot* meet its burden of persuasion. In contrast to *Roberts* and consistent with *Simmons*, Petitioners' refusal to address the Final Order represents a substantive failure to meet their burden, and not a procedural misstep that this Court, in its Rule 24 discretion, may choose to ignore or tolerate. *See State v. Nielsen*, 2014 UT 10, ¶¶ 40-41, 326 P.3d 645 (noting Rule 24(a)(9) is essential to a party's ability to meet its burden of persuasion on appeal, "as a party who fails to identify and deal with supportive evidence will never persuade an appellate court to reverse under the deferential standard that applies to such issues[ ]").

Seeking to justify its failure to undertake any meaningful analysis, Petitioners attempt to dismiss the relevance of the Final Order by claiming that the order is due no deference from this Court. Opening Br. 4. Petitioners wrongly claim that such deference is unnecessary because the Court can undertake its own review based on UDAQ's administrative record and the same standard of review applied by the ALJ. *See id.* Petitioners fail to acknowledge that by statute the record on appeal also contains the Adjudicative Record, which is "the record made by the administrative law judge and the executive director during the permit review adjudicative

proceeding.” Utah Code Ann. § 19-1-301.5(14)(b)(ii). By failing to address the complete record on review, Petitioners cannot meet their burden of persuasion. *See Nielsen*, 2014 UT 10, ¶¶ 41, 45.

By claiming that the Final Order is due no deference, Petitioners ask this Court to duplicate the review already undertaken by the Executive Director. However, such an approach would in effect be a direct appeal to this Court from UDAQ and would render Section 19-1-301.5’s permit review adjudicative process meaningless.<sup>10</sup> Nothing in Sections 19-1-301.5 or 63G-4-403 permits the Court to evaluate *de novo* the exact claims that Petitioners raised during the permit review adjudicative proceeding without regard to the lengthy and thorough review undertaken by the Executive Director.

For these reasons, the Court should reject Petitioners’ claims for their failure to address the Final Order.

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<sup>10</sup> Utah courts interpret statutory provisions in harmony with other related statutes. *See e.g., Utah Dep’t of Pub. Safety v. Robot Aided Mfg. Ctr.*, 2005 UT App 199, ¶ 13, 113 P.3d 1014 (“We also follow the rule that a statute should not be construed in a piecemeal fashion but as a comprehensive whole . . . Thus, we . . . interpret its provisions in harmony with other statutes in the same chapter and related chapters.”) (citation omitted) (internal quotation marks omitted).

## **II. THE EXECUTIVE DIRECTOR REASONABLY EXERCISED HER DISCRETION IN EVALUATING PETITIONERS' CLAIMS RELATING TO PM<sub>2.5</sub> EMISSIONS FOR THE MODERNIZATION PROJECT**

Should the Court decide to reach the merits of Petitioners' claims, those claims also fail on the merits. In Section I, Petitioners argue whether UDAQ adequately supported its determination that the Modernization Project did not constitute a major modification for PM<sub>2.5</sub>. Opening Br. 23-42. Specifically, Petitioners attack UDAQ's approval of NEI emissions factors, its allowance of a 2.19 tpy credit for the decommissioning of the propane pit flare, and its estimation of the FCCU25's<sup>11</sup> PM<sub>2.5</sub> emissions. *Id.* The Executive Director addresses each in turn.

### **A. The Executive Director Properly Upheld UDAQ's Approval of the NEI Emissions Factors as Adequately Justified and Supported by Substantial Evidence**

Petitioners first contend that UDAQ "improperly adopted a National Emissions Inventory (NEI) constant . . . to estimate PM<sub>2.5</sub> [potential to emit] for an arbitrary subset of Holly's heaters and boilers." *Id.* 24. Petitioners allege that the UDAQ Director did so by "deviat[ing] from his prior practice and arriv[ing] at an

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<sup>11</sup> A Fluid Catalytic Cracking Unit (FCCU) is a piece of equipment used to break down crude molecules into different components.

emissions rate out-of-sync with sources he deemed reliable.” *Id.* 25. Petitioners also claim that UDAQ “did not provide a fair or reasonable basis” for the use of the NEI factor. *Id.* 31.

These arguments fail because the record on appeal shows that UDAQ did not abuse its discretion in allowing use of the NEI emission factors in the first instance, nor did the Executive Director abuse her discretion in affirming UDAQ’s reliance on the NEI emission factors. Further, the record as a whole contains substantial, technical evidence that Petitioners failed to marshal before the Executive Director and likewise fail to marshal and address before this Court.

**1. Understanding Potential to Emit, AP-42, and NEI Emission Factors**

As a preliminary matter, UDAQ’s approval of the NEI emission factor is a highly technical issue, requiring a brief foundational discussion of emission factors and their role in the air permitting process.

“An emission factor attempts to estimate the quantity of a pollutant released into the atmosphere with an activity associated with the release of that pollutant.” [ADJ011631 (citing 47 Fed. Reg. 52723-01, 52724 (Oct. 14, 2009)).] When reviewing a permit application, UDAQ employs an emission factor to verify the “maximum capacity,” or potential of a source to emit a pollutant consistent with the source’s “physical and operational design,” and impose a corresponding emission

limit. [ADJ011637-38]; *see also* 40 C.F.R. § 52.21(b)(4) (2015); *see also* Utah Admin. Code r. 307-403-2(1)(d) (2015) (incorporating the same definition of PTE from 40 C.F.R. § 51.165(a)(1)(iii)); Utah Admin. Code r. 307-101-2 (same definition).

This case addresses the differences between the EPA-published AP-42<sup>12</sup> emission factors and the NEI-derived factors. The AP-42 factor was developed “using a ‘stack test impinger method,’ which draws a gas sample through a heated filter and then a series of iced ‘impingers.’” [ADJ011631; IR007240.] By contrast, the NEI factors were developed using a newer dilution method “derived by EPA staff from data contained in GE EER’s<sup>13</sup> comprehensive test reports published from 2002-2004,” together with “detailed supporting test data.” [ADJ011635 (quoting IR008032).]

## **2. The Executive Director’s Review of UDAQ’s Approval of the NEI Factor**

The Executive Director determined that Petitioners’ claim that UDAQ mistakenly relied on the NEI emission factors instead of AP-42 to calculate PTE for

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<sup>12</sup> “AP-42” is an EPA report number and common shorthand for EPA’s Compilation of Emission Factors. [IR007239.]

<sup>13</sup> GE EER stands for the Energy and Environmental Research Corporation (EER) that was later acquired by General Electric Company (GE).

Holly's NSPS heaters and boilers presented a mixed question of law and fact, [ADJ011625], and determined that UDAQ's decision was supported by substantial evidence. [ADJ011636-37.] Because whether UDAQ is authorized to use an emission factor other than AP-42 is a question of law and because UDAQ has statutory discretion to make such an interpretation, Utah Code Ann. § 19-1-301.5(14)(c)(i), the Executive Director determined that the clearly erroneous standard of review applied. [ADJ011625-26.]

Just as the question of UDAQ's use of the NEI factor presents a mixed question of law and fact, so too does Petitioners' claim on appeal, Opening Br. 24, that UDAQ deviated from prior practice without an adequate justification when it approved use of the NEI factor. However, the questions of whether UDAQ deviated from prior practice and whether it was justified are subsumed in the question of whether UDAQ (and ultimately the Executive Director) reasonably approved the NEI factor in the first place. This is so because if the record as a whole supports UDAQ's technical determination, Petitioners cannot show that they were substantially prejudiced as a factual matter. Additionally, because UDAQ has substantial discretion to interpret the requirements of the program it administers, Utah Code Ann. § 19-1-301.5(14)(c)(i), Petitioners cannot show substantial prejudice unless UDAQ's determination was unreasonable, regardless of any

previous agency practice. In both cases, Petitioners fail to show substantial prejudice.

**3. The Executive Director Properly Found That UDAQ's Approval of the NEI Emission Factor Was Reasonable**

In Subsection I.A.2. of their brief, Petitioners argue that UDAQ has not justified an alleged deviation from prior practice. Opening Br. 31. However, Petitioners can only show that they have been substantially prejudiced by a deviation from prior practice if they demonstrate that UDAQ did not provide "facts and reasons that demonstrate a fair and rational basis" for its decision. Utah Code Ann. § 63G-4-403(4)(h)(iii). UDAQ's explanation for its reliance on the NEI factors must be considered in conjunction with the agency's substantial discretion to interpret the statutes and rules governing the air permitting process. Utah Code Ann. § 19-1-301.5(15)(c)(i). The Executive Director determined that regardless of any previous or concurrent use of AP-42, UDAQ had given a thorough explanation for the exercise of its statutory discretion to rely on the NEI emission factor. [ADJ011627-38.] Consequently, Petitioners have not been substantially prejudiced by UDAQ's reliance on the NEI factor.

For the newer heaters and boilers at issue in this case, Holly proposed and UDAQ ultimately approved the use of a PM<sub>2.5</sub> emission factor derived from more accurate testing methodology, and imposed a PM<sub>2.5</sub> emission limit based on the use

of that emission factor. [IR008558 (“Holly Refinery is proposing to utilize PM<sub>10</sub> and PM<sub>2.5</sub> emission factors for new (NSPS) combustion sources based on the 2006 EPA published National Emissions Inventory (NEI) Information”); ADJ011622-38.] The Executive Director determined that the data used to derive the NEI emission factor was more accurate than the AP-42 emission factor. [ADJ011630-38; *see also* ADJ008558, DAQ Source Plan Review (“the NEI documents state that EPA believes that the current AP-42 factors for condensable emissions are too high based on some limited data from a pilot-scale dilution sampling method that is similar to EPA’s CTM 39”).]

Notwithstanding these findings in the Final Order, Petitioners argue that at the initial stage of the review process, UDAQ and Holly had fixed upon using the AP-42 emission factors for the Modernization Project. Opening Br. 27-28 (“Holly and the Director also decide[d] that EPA’s AP-42 emission factor for natural gas boilers . . . is the most appropriate emission rate for all the other Refinery boilers.” Petitioners also point to UDAQ forms and guidance as evidence of what UDAQ “has long considered appropriate methods for calculating emissions,” Opening Br. 25, allegedly “directing” permit applicants to use either manufacturer’s specifications or AP-42 factors. *Id.*



These broad assertions fail to answer the only pertinent question on appeal—whether the Executive Director was reasonable in affirming UDAQ’s reliance on the NEI factor. If that determination was reasonable and adequately explained in the record, then it constitutes a “fair and rational basis” for the agency’s decision, Utah Code Ann. § 63G-4-403(4)(h)(iii), regardless of any prior or concurrent agency practice. Although Holly initially proposed use of the AP-42 emission factor, [IR008558], nothing in the record shows that UDAQ ever finally committed to the use of AP-42 for the newer NSPS heaters and boilers in this case by issuing the Holly approval order, which is the only evidence of final action by the agency. Instead, these revisions of the proposed project were part of the normal, evolving evaluation inherent in the administrative process. [ADJ011567-68 (ALJ discussing generally the dynamic nature of the administrative review process).]

In any event, the choice of emission factors lies solely within the discretion of UDAQ. *See* Utah Code Ann. § 19-1-301.5(14)(c)(i); *Union Pac. R.R. v. Utah Dep’t of Transp.*, 2013 UT 39, ¶ 16, 310 P.3d 1204 (quoting *Murray v. Utah Labor Comm’n*, 2013 UT 38, ¶ 30, 308 P.3d 461) (“the agency . . . is free to choose from among [the] range [of acceptable answers] without regard to what an appellate court thinks is the ‘best’ answer”); [ADJ011625-26; ADJ011629-30.] The Executive Director found that “nothing in Utah’s minor source permitting regulations and

nothing in the federal PSD/NSR regulations requires the use of AP-42 emission factors. In fact, those regulations do not mention the AP-42 factors at all.”

[ADJ011627.] Instead, EPA has merely recognized that AP-42 is one of potentially many other authorized methods that UDAQ, as a state agency, has discretion to employ, including emission factors from technical literature. [*Id.* (quoting EPA’s New Source Review Workshop Manual at c.2).]

Holly submitted two expert reports (collectively England Reports, or England I and England II) that explain the technical basis for using the NEI emission factors. [ADJ011622-23; IR007238-58 (England I); IR008024-44 (England II).] UDAQ reviewed the reports and determined that the NEI emission factors would result in more accurate estimation of PTE for PM<sub>2.5</sub>. [IR008558; IR009216-18.] On administrative review, the Executive Director stated that “the NEI emission factors are ‘emissions from technical literature’ that Holly used to calculate potential PM<sub>2.5</sub> emissions from its gas fired heaters and boilers.” [ADJ011627.] EPA has also acknowledged this state agency discretion because of the variability inherent in different facilities, “such as the raw materials used, temperature of combustion, and emission controls.”

[http://www.epa.gov/airquality/aqmportal/management/emissions\\_inventory/emission\\_factor.htm](http://www.epa.gov/airquality/aqmportal/management/emissions_inventory/emission_factor.htm) (last visited October 28, 2015) (emphasis added). These variations

“can significantly effect [sic] the emissions at an individual location.” *Id.*

Accordingly, EPA concluded that “[w]henever possible, the development of local emission factors is highly desirable.” *Id.* Therefore, when appropriate, UDAQ has discretion to develop emission factors to suit the type of project proposed.

Moreover, despite Petitioners’ claim that UDAQ did not provide an adequate justification for its decision to rely on the NEI factor rather than AP-42, Opening Br. 31-34, UDAQ explained the basis for using the NEI factors in the Source Plan Review, [IR008558], and responded to each of the comments Petitioners submitted regarding the proposed use of the NEI factor. [IR009216-18.] Because UDAQ explained its reasoning both prior to and in response to public comments and because Section 19-1-301.5(14)(c)(i) grants UDAQ discretion to interpret the requirements of its own statutes and rules, UDAQ’s determination was reasonable and not arbitrary.<sup>14</sup> The Executive Director further determined that regardless of any previous or concurrent use of AP-42, both the record evidence and UDAQ’s explanation justified the use of the NEI Factor. [ADJ011634-35.] Petitioners do not rebut this determination in the Final Order.

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<sup>14</sup> Petitioners’ Opening Brief also does not claim that UDAQ did not respond adequately (or at all) to the comments Petitioners made during the comment period.

In addition, Petitioners never address the significant analysis conducted by the Executive Director. In the Final Order, the Executive Director reviewed the England Reports and found that the NEI data had been subjected to a rigorous testing program including “extensive quality assurance measures,” whose “results have been subject to peer review and have been corroborated by other independent scientific studies.” [ADJ011635-369; IR008032 (England II).]

The Executive Director also found that EPA itself had recognized the problem with the stack test impinger method, which is that once a gas sample is drawn first through a heated filter and then through a series of iced impingers, the emissions condense and “particulate out as “pseudo-particulate’ matter.”

[ADJ011631-32 (quoting England II at IR008027 and England I at IR007240, IR007242).] Even though “the gas emissions would not condense to form particulate matter under normal operating conditions, the AP-42 factors nevertheless measure this pseudo-particulate matter as primary PM<sub>2.5</sub>.”

[ADJ011631-32.] The Final Order states that “the NEI factors, by contrast, were developed using a newer dilution method, which “does not create artificial pseudo-particulate matter” and “results in much more representative and accurate PM<sub>2.5</sub> measurements.” [ADJ011633 (citing IR008027 (England II), IR008030-8032; IR007241 (England I)).] EPA itself has recognized the dilution-based sampling

method “for measuring direct PM<sub>2.5</sub> eliminates essentially all artifact formation and provides the most accurate emissions quantification.” [ADJ011633 (quoting 72 Fed. Reg. 20,586, 20,653 (Apr. 25, 2007) (emphasis added in original)).]

Petitioners also attack the NEI factor by contrasting it with manufacturer data and Holly’s earlier proposals. Opening Br. 26-33. However, contrasting the forecasted results under AP-42 against the results obtained by employing the NEI emissions factor does not explain how the AP-42’s stack test impinger method is technically preferable<sup>15</sup> to the dilution-based NEI emissions factor, and fails to overcome the discretion afforded UDAQ in the first instance and the Executive Director on review.

**4. The Record Contains Substantial Evidence to Support the Executive Director’s Decision to Uphold UDAQ’s Reliance on the NEI Emissions Factor**

Although the record on appeal in this case includes both the Permitting and Adjudicative Records, Petitioners ignore the Final Order on this issue.

[ADJ011622-38.] This omission is fatal to Petitioners’ claim, because the only

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<sup>15</sup> [ADJ011634 (“In arguing that UDAQ must use the AP-42 emission factors, Petitioners do not defend the accuracy of the AP-42 factors on a technical basis. Nor do they address any of the criticisms, expressed by both EPA and the England Reports, about the inaccuracies of the stack test impinger methods on which the AP-42 factors are based”).]

question for this Court is whether the Executive Director unreasonably approved UDAQ's reliance on the NEI emission factor. With no analysis of the Final Order, Petitioners cannot possibly show that the record does not support UDAQ's use of the NEI factor.

Moreover, on appeal, Rule 24(a)(9) requires Petitioners to marshal the evidence supporting the Final Order on this issue. Petitioners omit much of UDAQ's analysis from the Permitting Record and omit the entire Adjudicative Record, other than a footnoted list of citations that purports to identify "Pertinent Record evidence" but is unaccompanied by any analysis. Opening Br. 31 n.17. This half-measure approach to marshaling violates Section 19-1-301.5(14)(b) and Rule 24(a)(9), and therefore fails to meet Petitioners' burden of persuasion. *See Nielsen*, 2014 UT 10, ¶¶ 40-41.

The evidence that Petitioners identify is merely a selective collection of references to the record that attempts to undermine UDAQ's decision by pointing out the different results between the use of AP-42 and the NEI factor. Opening Br. 29-33. In particular, Petitioners point to UDAQ's permitting forms<sup>16</sup> and guidance,

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<sup>16</sup> Petitioners attach UDAQ NSR Form 19 to their brief as an example of the agency's alleged "command," Opening Br. 25, that permit applicants use AP-42 or manufacturer's data. *Id.* Ex. H, at p. 3. This document is not in the record and

manufacturer data, and possible AP-42 emissions scenarios in Holly's NOI and reviewed by UDAQ early in the permitting process. *Id.* 25-28. Finally, Petitioners point to an approval order that UDAQ previously issued to Holly. *Id.* 27, 29.

However, these examples paint an incomplete picture of the record. The record contains the England Reports, which provide the technical basis for the NEI factor. Petitioners fail to address meaningfully the England Reports as a whole, and deliberately avoid any discussion of England II. Opening Br. 33 n.18.

Not only do Petitioners fail to address the supporting information for the NEI factor, they also fail to acknowledge the record evidence explaining the considerable vulnerabilities of the AP-42 factors and the manufacturer data on which Petitioners rely, some of which is irrelevant because it does not apply to the type of heaters and boilers for which Holly used the NEI factor. [ADJ011636 (ALJ discussing the incomplete and unexplained nature of the boiler sampling and manufacturer data Petitioners submitted and the dissimilarity of some of the heaters

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Petitioners' use of it is improper for two reasons. First, Petitioners never raised this argument below, even though the document was reasonably ascertainable during the time of the public comment period. Second, Form 19 is one guidance document among others that permit applicants may consult, but is not a permitting requirement. For example, UDAQ's NOI Guide states that AP-42 "may be used as a reference when applicable." [ADJ010221.]

and boilers).] The Executive Director concluded that “this data does not undermine use of the NEI emission factors.” [*Id.*]

Finally, the record contains UDAQ’s Source Plan Review, [IR008558], and response to public comments on this issue, [IR009216-18 (responses 89-93)], which address Petitioners’ comments regarding the NEI emission factors. Petitioners failed to confront thoroughly this evidence in the Permitting Record where the agency explains the use of NEI factors instead of AP-42 prior to issuing the permit. *See Sierra Club*, 2012 UT 73, ¶12 (petitioner bears the burden of marshaling all of the evidence and “demonstrating that the agency’s factual determinations are not supported by substantial evidence.”). Therefore, Petitioners cannot show that the Executive Director’s determination regarding the use of the NEI factors is not supported by substantial evidence.

To conclude, the Executive Director provided a thorough review of the evidence in the case (which Petitioners fail to challenge), and determined that the use of NEI emission factor was supported by substantial evidence. [ADJ011635.] On the merits, the record in this case supports and adequately explains UDAQ’s decision. Thus, regardless of any previous or concurrent agency use of AP-42, Petitioners have not been substantially prejudiced by UDAQ’s reliance on the NEI factors.



## **5. Petitioners' Other Challenges to the NEI Factors Are Unavailing**

Having failed to meet their burden on their earlier arguments, Petitioners seek to discredit UDAQ's approval of the NEI factors by advancing three final arguments,<sup>17</sup> claiming that 1) the stack testing requirements in the approval order are not enforceable; 2) EPA lacks confidence in the NEI factors, and 3) UDAQ's reliance on the NEI factor violates 42 U.S.C. § 7430. *See* Opening Br. 31-34. All three arguments are wrong and do not show that the Executive Director erred.

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<sup>17</sup> In just three sentences of argument, Petitioners also claim that the record does not support a claim that the "heaters and boilers" subject to the NEI factor are newer, apparently because FCCU25 had already been used at a refinery in New Mexico. Opening Br. 33. Petitioners fail to acknowledge that although NEI emission factors were used for heaters and boilers, the only example they offer is the alleged previous use of the FCCU25, which is neither a heater nor a boiler. In any event, as UDAQ explained, whether the heaters and boilers are "new" for purposes of applying the NEI emission factor is driven by whether the equipment is subject to the New Source Performance Standards (NSPS), not whether the equipment has previously been in service elsewhere. [IR008558 ("Holly Refinery is proposing to utilize PM10 and PM2.5 emission factors for new (NSPS) combustion sources based on the 2006 EPA published National Emissions Inventory (NEI) Information. Older equipment (non NSPS) emissions will still rely on AP-42 emission factors.".)] Petitioners fail to acknowledge this critical distinction.

**a. Stack Testing is an Enforcement Tool**

Petitioners contend that UDAQ's reliance on stack testing to demonstrate compliance with the emission limits calculated using the NEI emission factors is inappropriate because the stack testing will occur after the Modernization Project is complete. Opening Br. 31-32. However, Petitioners advance an enforcement argument that is not properly before this Court.

Petitioners' argument is premised on the consequences of Holly's possible future failure to comply with its approval order, Opening Br. 32, yet Petitioners also acknowledge that Holly will be held to all limits in its approval order. [ADJ011637 ("[t]he AO imposes an enforceable limit on PM<sub>2.5</sub> emissions from each of the emissions units for which the NEI emission factors were used in an amount equal to the NEI emission factors"; IR009218 (UDAQ response to comments) ("If the stack testing indicates that Holly Refinery cannot comply with these emission factors, it would be out of compliance with its AO . . . .").] Petitioners fail to explain how the limits derived using the NEI factor will not be enforceable when the purpose of those stack test requirements is to provide an additional tool for UDAQ to verify compliance. [IR009218 (UDAQ response to comments) ("UDAQ is

requiring stack testing to verify these emission factors as any regulatory agency would to verify a BACT level that a source is proposing to meet”).]

If Holly fails to meet those limits, it will have to reevaluate its project for Major NSR applicability. [IR009218 (UDAQ response to comments) (“UDAQ acknowledges emission factors have an effect on PSD/Major NSR applicability, and imposes stack testing as a way to ensure the source complies with the terms of the permit”).] As the Executive Director concluded, “UDAQ was reasonable in relying on this limiting factor in its determination that Holly’s project would only be a minor modification for PM.” [ADJ011638.] Petitioners fail to show that these explanations in the record are unreasonable, or that they constitute anything other than a potential enforcement matter between UDAQ and Holly.

**b. Petitioners Erroneously Rely on Statements of EPA Staff**

Petitioners argue that the record “explains why EPA lacks faith in the NEI constants,” offering as support two emails from “EPA experts” whose positions with and authority to speak for EPA are unidentified.<sup>18</sup> Opening Br. 32-33.

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<sup>18</sup> The Executive Director made the following observation about the two EPA emails: “EPA staff members sent emails to an undisclosed Gmail account discussing the accuracy of the NEI emission factors and the ability of EPA to

Notwithstanding the dubious reliability of this evidence, Petitioners misconstrue its contents. The email from EPA staff member Ron Meyers does not state that the NEI factors were unreliable, but rather that if that data were to be used to generate an updated emission factor, EPA would like to have additional supporting information. [IR008911.] The other email that Petitioners cite, Opening Br. 32-33, does not discuss the NEI factors, but instead states generally that EPA would not develop an emission factor without being provided a test report for the underlying data. [IR009043.] The data underlying the NEI factors was accompanied by test reports. [IR008032.] Consequently, the emails from EPA do not undermine the quality of the NEI factors.

In any event, the Executive Director found that “[t]he cautionary statements regarding the NEI emission factors upon which Petitioners rely, Opening Br. 33 (quoting England Reports), ‘do not suggest in any way that those factors are insufficiently supported by data or should not be used,’ [ADJ011635-36; quoting England II at IR008033], and that “[s]uch cautionary language is generally found in all instances where emission factors are used. [*Id.*] Such statements therefore do not

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approve new emission factors generally. [IR008911-8922; IR009043.] Neither the attachments to these emails nor the complete emails were included with the comments. [*Id.*]”

undermine the substantial scientific evidence in the record supporting the accuracy of the factors that relied upon by UDAQ. Moreover, UDAQ provided a reasonable basis and explanation for its reliance on the NEI factors, and this Court should defer to the agency's expert judgment pursuant to Section 19-1-301.5(14)(c).

**c. 42 U.S.C. § 7430 Does Not Apply to This Case**

Finally, Petitioners claim, without analysis, that UDAQ's reliance on the NEI factors violates 42 U.S.C. § 7430. Opening Br. 34. Specifically, in this unpreserved argument<sup>19</sup> Petitioners insist that Section 7430 requires that EPA approve any emissions factor that EPA itself did not establish, and that because EPA did not approve the NEI factor used in this case, Petitioners have been denied the notice-and-comment protections required for rulemaking. *Id.*

The Executive Director rejected this argument because Section 7430 only applies to emission factors used "to estimate the quantity of emissions of carbon monoxide, volatile organic compounds, and oxides of nitrogen from sources of such

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<sup>19</sup> Petitioners fail to acknowledge (or rebut) that the Executive Director found that this legal argument was reasonably ascertainable during the comment period, but not preserved because it was raised for the first time in their briefing on a motion to stay the administrative proceedings. The Executive Director dismissed the claim not only because it was untimely raised, but also because Petitioners did not brief the issue until they filed their Reply before the ALJ. [ADJ011624.]

air pollutants . . . ” 42 U.S.C. § 7430; *see also* [ADJ011628.] The statute says nothing about the use of emission factors to estimate the quantity of PM<sub>2.5</sub> and PM<sub>10</sub>—the only emissions for which Holly used NEI factors to estimate emissions from its heaters and boilers. [ADJ011628.] Petitioners did not then and do not now show that the Executive Director’s legal interpretation of this federal statute is incorrect.

Moreover, EPA has recognized that a state agency may use other methods without obtaining approval under Section 7430, provided the agency supports the method it chooses. [ADJ011629 (citing Public Participation Procedures for EPA Emission Estimation Guidance Materials at 2 (May 1997)).] The complete record contains substantial evidence in support of the NEI factors, and UDAQ reasonably determined that the use of such factors was justified. Petitioners offer no persuasive argument to the contrary.

To conclude, UDAQ’s decision to rely on the NEI factors to estimate PM<sub>2.5</sub> emissions for Holly’s new gas-fired heaters and boilers is reasonable and supported by substantial evidence.

**B. The Executive Director Reasonably Determined That UDAQ Properly Calculated the Emission Decreases From the Closure of the Propane Pit Flare**

Petitioners make a number of arguments that the 2.19 tons per year (tpy) PM<sub>2.5</sub> credit UDAQ allowed Holly for the decommissioning of the propane pit flare (PPF) is unsupported. Opening Br. 34. The Executive Director addressed these arguments and found them unavailing because the emissions credit was based on actual historical inventory data from the flare, as required by applicable law. [ADJ011638-42.] On appeal, Petitioners fail to show that the Executive Director's decision is unreasonable.

As part of its claim, Petitioners allege that "the Record is devoid of any specific emission factors, conversions, equations, calculations, assumptions or monitoring data to substantiate Holly's claimed PPF emissions, *id.*, and that "[a]lthough the Director insists that the PPF PM<sub>2.5</sub> emissions were based on 'actual throughput data,' IR009128, neither he nor Holly provides those data." Opening Br. 36. Petitioners fail to mention that they stipulated to the exclusion of the very calculations and data at issue. [ADJ011642 (citing ADJ011379 (Holly's Surreply); ADJ011331 (Director's Surreply); ADJ011411-412.)]

Petitioners raised this same issue during the adjudication, and the Executive Director found that "Petitioners may not now argue, without having asked to review

the calculations, that the lack of such evidence supports their claim.” [ADJ011642; *see also* ADJ011374.] This same logic applies on appeal. Petitioners do not explain why they should be shielded from the consequence of a stipulation to which they were a party, and therefore contributed to the alleged lack of evidence of which they complain.

In any event, the Executive Director determined that “for purposes of netting emissions in permit applications, the regulations expressly provide that historical inventory information may be used as a baseline for calculating emissions increases and decreases.” [ADJ011641 (citing 40 C.F.R. § 52.21(b)(48)(ii)).] Utah Admin. Code r. 307-150 requires Holly to submit annually to UDAQ an emission inventory that reports actual emissions from its flares and other emission sources. As permitted by the applicable regulations, Holly used the 2008-09 emission inventory reports for the PM<sub>2.5</sub> emissions from the propane pit flare when it netted its overall emissions from the Modernization Project, rather than re-calculating emissions using AP-42 or any other method, as Petitioners claim. [ADJ011639.]

Petitioners have presented nothing to the agency or on appeal that would undermine the deference owed to both UDAQ and the Executive Director on such a highly technical emission calculation, nor have they presented any technical



evidence to undermine the accuracy of the historical inventory information.

Accordingly, this Court should affirm the Final Order on this issue.

**C. The Executive Director Reasonably Upheld UDAQ's FCCU25 PM<sub>2.5</sub> Emissions Estimate**

Though partially unpreserved at the agency level, [ADJ011612-13], Petitioners continue to assert that Holly's and UDAQ's calculation of a maximum coke burn rate of 6200 lbs/hr. resulted in a PTE of 8.15 tpy of PM<sub>2.5</sub>, Opening Br. 39, but that the 8.15 tpy does not reflect the maximum capacity of FCCU25 to emit PM<sub>2.5</sub> because the approval order does not contain a limit on the amount of coke that FCCU25 may burn. *Id.*

Despite the lack of preservation, the Executive Director determined that Petitioners had failed to show that UDAQ's emission calculations were flawed because Holly based its FCCU25 emission estimate on actual test data from a similar-operating FCCU at the Holly Refinery and because the approval order requires Holly to comply with the estimated limit as part of the PM emission caps in the Holly approval order. [ADJ011614-15.]

Utah Admin. Code r. 307-401-2 defines potential to emit or PTE as "the maximum capacity of a stationary source to emit an air contaminant under its physical and operational design." Each installation of new equipment requires an estimate of PTE, and in this case, the installation of FCCU25 triggered the

requirement to estimate that FCCU's PTE. The Executive Director determined that Holly "based its conclusion that the new FCC Unit 25 would burn coke at a rate of 6200 lb/hr on empirical data it obtained from the FCC Unit 4 that was in current operation at the refinery." [ADJ011614; IR008052; *see also* NSR Manual, ADJ01085 ("Methods of estimating potential to emit may include . . . performance test data on similar units").] This approach resulted in a conservative coke burn estimate of 6200 lbs/hr for the maximum capacity of 8500 barrels per day, for a total PM emission level of 8.15 tons per year. [IR008052; IR002811; IR009227.]

UDAQ reviewed Holly's calculation information and found that it justified the coke burn rate. [R009219, Response to Comments Memo ("Based on UDAQ's technical expertise and experience," UDAQ determined that "the 6200 lb/hr value is a fair and reasonable estimate of the quantity of coke burn in FCC Unit 25."); IR008052, November 7, 2013 letter (Holly's emission calculations for PTE of the FCC Unit 25).]

Petitioners claim that Holly's PTE estimate is improper because the FCCU25 will allegedly process different crude than the FCCU4, and because that crude may have a higher coke load, it may mean that a 6200 lbs/hour coke burn rate and corresponding 0.3 lb PM<sub>10</sub>/1000 lbs coke burned estimate is too low. Opening Br. 39-41. However, the Executive Director acknowledged that the highly technical

factual nature of this claim required her to give deference to UDAQ's review and requires Petitioners to show that the record lacks substantial evidence to support UDAQ's PTE calculation. [ADJ011614.] UDAQ reviewed the record evidence that supported Holly's calculations, including the information from the test data of the FCCU4 [IR008052], the maximum crude throughput capacity of the FCCU25 [IR003160], and the fact that the FCCU4 had a larger capacity and emission potential. [IR009227.] This evidence constitutes substantial evidence to support UDAQ's reliance on the calculated PTE for the new FCCU25, as well as the Executive Director's determination.<sup>20</sup>

Petitioners next complain that "there is no federally and practically enforceable limitation that restricts the coke-burn rate or the amount of coke/hr that

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<sup>20</sup> Even though Petitioners now rely on Universal Oil Products data to support their claim that black wax crude will generate higher coke levels and consequently create more PM emissions, Opening Br. 38, they are foreclosed from doing so on appeal. The Executive Director determined below that Petitioners "provide[d] no evidence contradicting Holly's certification that all of the numbers contained in the NOI were accurate," and despite having the opportunity during the comment period to provide technical evidence of alternate coke burn rates that it considered more appropriate, Petitioners failed to do so. [ADJ011613-14; IR009219 (UDAQ noting in response to public comments that Petitioners referred to Universal Oil Products data but did not provide "documents or primary data to support or detail to which estimate, if any, was used to derive the suggested range of coke burn estimates" and did not provide "any specific technical information to UDAQ that would suggest a higher value is more appropriate.").]

Holly may burn” and that “nothing in the AO constrains Holly from exceeding the 6200-lb/hr coke-burn rate.” Opening Br. 39, 40. However, as the Executive Director determined, “[t]he FCC Unit 25 emissions will not exceed the PTE because there is a finite capacity limit on the FCC Unit 25 that acts as a physical limitation on the amount of PM that can be emitted.” [ADJ011615.] Petitioners offer no rebuttal to this practical and physical reality.

Even if FCCU25’s physical capacity allowed greater emissions, “the refinery is limited to an overall PM<sub>10</sub> emission cap of 47.5 tpy and 0.13 tpd for combustion sources. [IR009219, Response to Comments Memo.] “If these limitations are not met, the refinery will be out of compliance until it remedies the problem with additional control equipment or redesign of the system until it meets these limits.” [Id.] Neither before the Executive Director nor on appeal do Petitioners provide any evidence or argument to refute these basic points, and therefore fail to show that the Executive Director’s final determination on this issue is unreasonable.

### **III. THE EXECUTIVE DIRECTOR DID NOT ABUSE HER DISCRETION IN FINDING THAT UDAQ COMPLIED WITH ALL THE APPLICABLE PERMITTING REQUIREMENTS REGARDING THE NAAQS, NSPS, AND THE APPLICABILITY OF BACT**

Petitioners argue that UDAQ failed to comply with the permitting requirements of Rule 307-401-8 of the Utah Administrative Code when it issued an approval order for the Modernization Project. *See* Opening Br. 42-55. Utah

Administrative Code r. 307-401-8 requires that the Director's approval order for a minor modification must ensure that (1) the proposed installation will meet the applicable requirements of the National Ambient Air Quality Standards (NAAQS),<sup>21</sup> *see* Utah Admin. Code r. 307-401-8(1)(b)(vii); (2) the proposed installation will meet the National Standards of Performance for New Stationary Sources (NSPS),<sup>22</sup> *see id.* (1)(b)(vi); and (3) the degree of pollution control for emissions is "at least best available control technology" (BACT),<sup>23</sup> *see id.* (1)(a). Petitioners claim that the Holly approval order does not comply with any of these requirements. Opening Br. 42-55. The Executive Director addresses each argument below: Section A discusses the NAAQS requirements; Section B addresses NSPS; and Section C covers BACT.

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<sup>21</sup> EPA must establish NAAQS for pollutants considered harmful to public health and environment. *See* 42 U.S.C. § 7409.

<sup>22</sup> The NSPS are technology-based standards that apply regardless of the air quality in any particular area. EPA specifies the NSPS by regulation. *See generally* 40 C.F.R. §§ 60.1– 60.5483 (July 16, 2015). Subpart Ja applies to refineries constructed or modified after May 14, 2007. *See* 40 C.F.R. § 60.100a(b).

<sup>23</sup> Rule 307-401-2(1)(d) of the Utah Administrative Code defines BACT as "an emissions limitation . . . based on the maximum degree of reduction for each air contaminant which would be emitted from any proposed stationary source or modification . . . ."

**A. The Executive Director did not Abuse her Discretion in Finding That the Modernization Project Meets all the Applicable Requirements of the NAAQS**

**1. Holly Refinery Flare Emission Limitations Comply With NAAQS**

Petitioners claim that the Director's approval order does not protect the short-term NAAQS because (1) it does not limit emissions from flares,<sup>24</sup> (2) it does not impose short-term emission limits by failing to account for "unregulated" flare emissions during upset conditions, and (3) and it is based on faulty modeling that does not reflect maximum short-term emission rates. *See* Opening Br. 44-51.

The approval order does impose a number of emission limits regulating the routine emissions from the flares. [ADJ011574.] This is accomplished by imposing source-wide caps instead of source-specific emission caps, [ADJ011574], requiring compliance monitoring (i.e. Continuous Emission Monitoring System for SO<sub>2</sub> emission sources), [IR009245; ADJ011583], and mandating tabulating and record keeping for PM<sub>10</sub> emissions for all sources based on the amount of fuel combusted [ADJ011583; ADJ011574-75.] The approval order additionally requires Holly "to

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<sup>24</sup> "Flaring is a high-temperature oxidation process used to burn combustible components . . . of waste gases from industrial operations." [IR002852.] Emissions from flaring include unburdened hydrocarbons, CO, NO<sub>x</sub>, sulfur-containing material, and SO<sub>2</sub>. [*See id.*]

install flow meters and gas combustion monitors on the South Flare gas line to monitor flare combustion efficiency . . . .” [ADJ011583 (internal quotation marks omitted) (internal citation omitted).] Petitioners fail to rebut these findings and conclusions.

Petitioners next argue that the approval order does not protect short-term NAAQS<sup>25</sup> because it excludes unregulated flare emissions and does not impose short-term emission limitations. *See* Opening Br. 44-45. In making these arguments, Petitioners assume that UDAQ must impose short-term emission limits on Holly’s flares and include all upset conditions in calculating potential to emit (PTE) in order to impose emission limitations on the facility. *See id.* Both assumptions are incorrect. UDAQ’s obligation to impose short-term emission limits arises only when the agency finds there is a risk of exceedance of the NAAQS. [ADJ011583.] Although not required,<sup>26</sup> a modeling analysis prepared by Holly and approved by

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<sup>25</sup> Petitioners similarly allege that the Director “has neglected his duty to ensure that the Refinery emissions do not impeded attainment or maintenance of the NAAQS” because he did not impose short-term source-wide emission limits on the Holly Refinery. *See* Opening Br. 51. This argument fails for the same reasons discussed in this Subsection as applicable to the flares.

<sup>26</sup> Holly Refinery performed the modeling analysis even though the governing regulations did not require it for a minor modification. [ADJ011589; ADJ011589 n.14]; *see also* 40 C.F.R. § 52.21(a)(2)(ii) (“The requirements of paragraphs (j) through (r) of this section apply to . . . the major modification of any existing major

UDAQ shows no impact on the NAAQS for CO, PM<sub>10</sub>, NO<sub>2</sub>, and SO<sub>2</sub>.

[ADJ011584; (quoting IR009190-91, Response to Comment Memo); *see also* ADJ011588 (citing IR003017, July 2012 NOI (Table 6-15)) (demonstrating no exceedance of NAAQS).] The Executive Director will address Petitioners' challenges to the modeling analysis and its accuracy below. *See infra*, pp.50-52.

Short-term emission limits are also not required for minor modifications.<sup>27</sup>

[ADJ011586 (holding that EPA's guidance on implementing the 1-hour SO<sub>2</sub> NAAQS in Prevention of Significant Deterioration Permits (major modifications) does not apply to minor modifications).] Whether a modification is major or minor is determined on a pollutant-by-pollutant basis by ascertaining whether there would be a significant net emissions increase over a specific threshold. [ADJ011587.] Once a regulatory agency makes this determination, the major modification requirements apply only to those pollutants for which there would be a significant net emissions increase. [See *id.*] The Modernization Project "fell into the 'major' category for CO and GHG emissions, not for NO<sub>x</sub>, SO<sub>2</sub>, or PM." [*Id.*]

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stationary source"); Utah Admin. Code r. 307-403-3 ("Every . . . major modification must be reviewed by the director to determine if a source will cause or contribute to a violation of the NAAQS.").

<sup>27</sup> *See supra*, n.26.



Turning to the merits of these claims, Holly and UDAQ correctly performed the PTE calculation for the flares by excluding malfunction emissions from the calculation. [ADJ011580.] The Executive Director observed, “[T]he law does not require the inclusion of upset emissions in a PTE calculation for flares because such upset emissions are not considered part of normal operation.” [See *id.*] Potential to emit does not contemplate the “worst conceivable operation,” instead, it refers to “the maximum emissions that can be generated while operating the source as it is intended to be operated and as it is normally operated.” [See *id.* (quoting *United States v. Louisiana-Pacific Corp.*, 682 F. Supp. 1141, 1158 (D. Colo. 1988)).] The courts made similar holdings in *Sierra Club v. Wyoming Dep’t of Env’tl. Quality*, 251 P.3d 310, 314 (Wyo. 2011) and *Alabama Power Co. v. Costle*, 636 F.2d 323 (D.C. Cir. 1979). [ADJ011580.]

Further, because Holly assumed (and UDAQ agreed with) a limit of zero tons per year (tpy) for malfunction emissions when calculating PTE, any exceedances of the emission caps due to upset or malfunction will be violations of Holly’s permit, and subject to enforcement action by UDAQ. [ADJ11581.] As UDAQ explained in its Response to Comments, “All limits of the permit apply at all times, which includes periods of startup, shutdown and malfunction.” [ADJ011581 (quoting

IR009196, Response to Comments Memo).] The Executive Director adopted this statement as part of her findings of fact on the issue. [ADJ011581.]

Petitioners also fail to marshal important findings by the Executive Director regarding estimated annual emissions from upset conditions at the Holly Refinery. For example, the 240 tpy of SO<sub>2</sub> and 8 tpy of NO<sub>x</sub> projected malfunction emissions were “a conservative estimate of what malfunctions could be—not what they actually are.” [ADJ011582 (citing IR003780).] “In fact, the emission calculation documentation in the record demonstrates that actual recorded historic malfunction emissions from the flare averaged only 34 tpy of SO<sub>2</sub><sup>28</sup> from both flares combined.” [ADJ011582 (citing IR003780).] Additionally, even if UDAQ included 34 tpy malfunction emissions into its PTE calculation, such addition would not have changed the netting analysis or made the Modernization Project major for SO<sub>2</sub>, because the netting analysis showed an overall emission reduction in SO<sub>2</sub> of 150.69 tpy. [ADJ011582 (citing IR007574-75).]

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<sup>28</sup> The figure of 34 tpy is an average of historic data from the Holly Refinery over a five-year period from 2005 to 2009. [See ADJ011582, n.12 (citing IR003780).] The lowest malfunction emissions from both flares were 12.7 tpy of SO<sub>2</sub> in 2009 and the highest were 91.0 tpy of SO<sub>2</sub> in 2007. The prediction utilized three standard deviations of the average 34 tpy. [See *id.*]

Thus, the record contains substantial evidence supporting the Final Order, which affirmed UDAQ's decisions to exclude malfunction flare emissions from the PTE calculation and not to impose short-term emission limitations on the flares. This Court should affirm these conclusions.

Petitioners next challenge the modeling analysis, claiming that (1) it "omitted the considerable upset flare emission" (at the same time Petitioners admit that this may not be required by law), *see* Opening Br. 46, and (2) it does not reflect maximum short-term emissions and fails to protect short-term NAAQS, *see id.* 46-48.

As a preliminary matter, the Executive Director found that Petitioners did not satisfy their burden of proof on the modeling issue. [ADJ011585-86.] She concluded that Petitioners failed to marshal a critical portion of the record—the actual modeling evidence—that demonstrated short-term emissions calculations and showed how the NAAQS were being protected, regardless of whether the approval order imposed short-term emission limits. [*See id.*] In this appeal, Petitioners again unsuccessfully attempt to marshal the relevant record evidence through a single footnote, containing a string of citations to the Executive Director's findings and other evidence in the Permitting Record. *See* Opening Br. 45 n.28.

Regardless, the record contains substantial evidence supporting the Executive Director's decision that the "[m]alfunction emissions were not considered in the modeling analysis because federal and state guidance exclude malfunction emissions from the modeling protocols." [ADJ011584-85; *see also* 40 C.F.R. 51, App'x W, § II.B.7.a.1.2(a)n.a (malfunction emissions are not normally included in modeling).] Malfunction operations are not part of the regular operations of a facility; they cannot be controlled in most instances (unless resulting from poor maintenance or careless operations) and cannot be accurately predicted (historical data is usually used to predict these emissions). [IR009214, Response to Comments; *see also* ADJ011591-92.] Additionally, a 2011 EPA guidance document (addressing modeling for compliance with the 1-hour (short-term) NAAQS) supports the exclusion of malfunction emissions from modeling. [ADJ011592, referencing Memorandum from Tyler Fox, *Leader Air Quality Modeling group to Regional Air Division Directors, Additional Clarification Regarding Application of Appendix W Modeling Guidance for the 1-Hour NO<sub>2</sub> National Ambient Air Quality Standard* (Fox Memorandum) (March 1, 2011).] EPA explained that the modeling should only "address emission scenarios that can logically be assumed to be relatively continuous or which occur frequently enough to contribute significantly to the annual distribution of daily maximum 1-hour concentrations based on existing

modeling guidelines . . . .” [ADJ011592 (citing Fox Memorandum at 2).] EPA then specifically advised to exclude “intermittent emissions from . . . startup/shutdown operations from compliance demonstrations for the 1-hour NO<sub>2</sub> standard . . . .” [See *id.*] The Executive Director found that similar logic applied to the 1-hour SO<sub>2</sub> standard and the modeling performed by Holly and UDAQ. [See *id.*, n.15.] Furthermore, the Final Order concluded, “In light of UDAQ’s technical conclusion, it was well within UDAQ’s discretion to determine that the malfunction emissions should not be included in the modeling analysis.” [ADJ011593.]

Petitioners’ second challenge is to the modeling itself, claiming that it does not reflect maximum short-term emissions and, therefore, fails to protect short-term NAAQS. See Opening Br. 46-48. Specifically, Petitioners criticize the Executive Director’s conclusion that because “Holly’s emission modeling analysis contemplated the maximum emissions that Holly could generate on a lb/hr basis,” any “short-term spikes in emissions were accounted for in the modeling and would not cause exceedances.” See *id.* 46; see also ADJ011584. Petitioners contend that “[t]he emission rates Holly modeled do not represent ‘maximum emissions’ or ‘short-term’ spikes at all.” Opening Br. 46. Petitioners base their argument on a comparison of two tables from the July 2012 NOI for the Modernization Project—Table 6-3 “Modeled PTE Emission rates and Stack Parameters for Proposed Holly

Heavy Crude Processing Project Sources – Short Term,” [IR002994], and Table 6-5 “Modeled PTE NO<sub>2</sub> – Annual Emission Rates and Stack Parameters for Proposed Holly Heavy Crude Processing Project Sources,” [IR002997.] Petitioners compare the columns from each table listing NO<sub>x</sub> (g/s) numbers for various sources of NO<sub>x</sub> emissions at the Holly Refinery and conclude that “there is no difference between the NO<sub>x</sub> values used for the short-term and annual models.” Opening Br. 47. Petitioners claim that this is erroneous because the “short-term model merely reflects annual emission rates, which smooth out any variability, and not the sharp increases in emissions that occur on a short-term basis.” *Id.*

Petitioners’ argument ignores that both the January 2012 Dispersion Modeling Protocol (Protocol) and the July 2012 NOI used hourly emission rates in the modeling, representing the maximum potential of each unit to emit.

[ADJ011584.] The Protocol prepared by Holly and approved by UDAQ modeling staff [*id.*], states that “[m]aximum hourly potential to emit (PTE) emissions for existing and proposed sources will be input to the model.” [IR000041.] Similarly, the titles of the July 2012 NOI Tables 6-3 and 6-5 indicate that Holly’s modeling is based on PTE. [IR002994; IR002997.] The July 2012 NOI additionally explains, “The stack parameters and PTE emission rates were used in AERMOD [atmospheric dispersion modeling system] to insure that emissions from Holly’[sic]

proposed crude processing project and existing operations would meet all applicable air quality standards.” [IR002993.]

PTE is defined as “the maximum capacity of a stationary source to emit a pollutant under its physical and operational design.” 40 C.F.R. § 52.21(b)(4). A source cannot emit any more than its maximum hourly PTE. Therefore, any spikes in emissions are included in the hourly rate. “Using the maximum capacity of each unit, MSI [Holly’s technical consultant that performed modeling] determined the total emission the refinery could generate in one hour of operation measured in terms of lbs/hr.” [ADJ011589.] The Court should defer to the agency on this highly technical determination, especially because the record contains substantial evidence demonstrating the accuracy of the modeling analysis.

## **2. Holly Refinery’s Flares are Subject to the Unavoidable Breakdown Rule**

Petitioners claim that the approval order “allows unlimited ‘upset’ emissions from flares” and, therefore, does not set an emission limit for flares. Opening Br. 51. Petitioners then infer that because there is no emission limit for flares, any malfunction events would not trigger the Unavoidable Breakdown Rule (UBR),<sup>29</sup>

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<sup>29</sup> The UBR “sets forth criteria that must be met in the event of excess malfunction emissions to allow UDAQ the enforcement discretion to forgo monetary penalties.”

Utah Admin. Code r. 307-107, and, in essence, such events would be completely unregulated by the agency, and violate the short-term NAAQS. *See* Opening Br. 50-51.

As a threshold matter, Petitioners did not preserve the argument on “misapplication or noncompliance with the UBR” in the adjudicative proceedings. [ADJ011577 (citing IR009056-57); IR008453).] Further, Petitioners did not satisfy the marshaling requirement because they “ignored multiple pieces of evidence that explain how Holly calculated the PTE for the flares in accordance with . . . the UBR.” [ADJ011578.] They do not address these findings in this appeal and, consequently, have not met their burden of proof.

On the merits of this claim, contrary to Petitioners’ assertion that the approval order contains no emission limit on the flares, “The limit in the Holly AO for malfunction emission from the flare is zero tpy, **which is accounted for in the overall SO<sub>2</sub> and PM emission caps**. Any violation of those limits due to an upset or malfunction subjects Holly to the enforcement discretion of UDAQ under the

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[ADJ011579 (citing Utah Admin. Code r. 307-107-1 to -3).] The UBR “assumes that malfunction emissions are violations of the applicable approval order but affords to UDAQ enforcement discretion . . . if a source is otherwise in compliance with the other requirements of the rule, including monitoring and good combustion practice.” [*Id.*]



UBR.” [ADJ011579 (citing IR002857, July 2012 NOI) (internal citations omitted) (emphasis added).] Petitioners overlook the fact that the approval order imposes source-wide SO<sub>2</sub> and PM emission caps on the Holly Refinery (and the flares are subject to these caps), and any exceedance of these caps triggers a violation of the approval order and may subject Holly to the UBR. [ADJ011581 (“If Holly exceeds its emission caps due to an upset or malfunction, Holly will be in violation of its permit and subject to enforcement by UDAQ. The UBR was put in place to deal with these very kinds of emissions.”) (internal citation omitted); *see also* ADH011576 (“The Holly AO does not contain exceptions for emissions due to malfunctions at the refinery; such excess emissions are subject to the UBR.”); IR009196, Response to Comments Memo (“All limits of the permit apply at all times, which include periods of startup, shutdown and malfunction. The ITA contains no exclusion for these events.”).] For these reasons, Petitioners’ argument on this issue must fail.

**B. The Executive Director Did Not Abuse Her Discretion in Finding That UDAQ Properly Applied NSPS Subpart Ja to the Modernization Project**

In Subsection II.C., Petitioners contend that the Holly approval order should be invalidated because it “does not specify that Subpart Ja applies to the flares.” Opening Br. 52. Subpart Ja is a federal regulation that is one of many NSPS EPA

has promulgated for particular types of new or modified sources. *See generally* 42 U.S.C. § 7411. Applicability of NSPS is determined separately from other Clean Air Act regulations, such as the Prevention of Significant Deterioration (PSD) program, which is implemented through individual pre-construction permits like the Holly approval order. *See generally id.* §§ 7475, 7503 (setting forth the pre-construction permitting requirements).

As a threshold matter, no party in this case disputes that NSPS Subpart Ja applies to Holly, regardless of whether the requirements are specified in the approval order. [IR009252; IR002866-87; IR002962; IR009183; ADJ011564.] In fact, Petitioners concede that “[t]here are statements in the Record suggesting the Subpart Ja applies Refinery emission units, including the flares.” Opening Br. 52 n.33. Despite this lack of dispute, Petitioners contend that the approval order is invalid because “[t]he Director . . . refuses to include in the AO the particular Subpart Ja terms and conditions applicable to the refinery.” *Id.* 53. However, Petitioners fail to identify any legal requirement that UDAQ must do so. The only basis offered for such inclusion is that Petitioners are incapable of understanding the approval order in its current form and therefore believe they can neither comment effectively on the approval order, nor monitor Holly’s compliance for purposes of filing a citizen suit. *See id.* 53-54.

The Executive Director determined that “whether Utah law requires the NSPS provisions to be listed in approval orders is a question of law that the agency has been given discretion to interpret and so shall be reviewed under a clearly erroneous standard.” [ADJ011562.] She found that UDAQ’s interpretation of the requirements of Rule 307-401-8 was not clearly erroneous.<sup>30</sup> On appeal, the same standard applies under Section 19-1-301.5(14)(c)(i). Although they refer to Utah Admin. Code r. 307-401-8, Petitioners do not explain why UDAQ’s (and the Executive Director’s) interpretation of the approval order requirements is clearly erroneous.

Because Petitioners have failed to marshal the evidence and cannot show that the Final Order is unreasonable, the Final Order should be affirmed.

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<sup>30</sup> Petitioners never explain what level of specificity would suffice. Rule 307-401-8 does not specify the final format of an approval order. Accordingly, the agency has discretion to determine the best format for including the necessary requirements. If Petitioners desire greater specificity in the rule, they must petition the Utah Air Quality Board for rulemaking.

**C. The Executive Director Properly Determined That the North Flare Was Not Modified and is Subject to Subpart Ja and is Not Subject to BACT**

Petitioners claim that “the record does not support the Director’s determination that the North Flare has not been modified by the expansion or is exempt from BACT.”<sup>31</sup> Opening Br. 54.

As explained, no party disputes that Subpart Ja applies to the North Flare. [ADJ011567; ADJ011568.] On appeal, Petitioners have now narrowed their argument to focus on whether a modification of the North Flare has taken place due to the re-routing of gasses to the North Flare, and if so, whether a BACT analysis is required. However, Petitioners confuse the definition of “modification” for purposes of BACT with the broader definition of “modification” for purposes of NSPS (and Subpart Ja). *See e.g., Env’tl Defense v. Duke Energy Corp.*, 549 U.S. 561, 577 (2007) (“The 1980 PSD regulations on ‘modification’ simply cannot be taken to track the Agency’s regulatory definition under the NSPS.”).

As the Executive Director determined, a modification triggering a BACT analysis occurs when there is “(1) a planned change in an emissions unit that (2) is

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<sup>31</sup> Rule 307-401-2(1)(d) of the Utah Administrative Code defines BACT as “an emissions limitation . . . based on the maximum degree of reduction for each air contaminant which would be emitted from any proposed stationary source or modification . . . .”

reasonably expected to increase the amount or character of the emissions.”

[ADJ011571 (ALJ summarizing requirements of Utah Admin. Code r. 307-401-3(1)(a)’s definition of modification).] Holly’s re-routing of gasses to the North Flare did not constitute a modification, because “[a] shift of emissions from one flare to the other does not result in increased emissions, only *redistributed* emissions.” [ADJ011572 (emphasis in original); *see also* IR009189, Response to Comments Memo (“Because neither the North Flare nor the SRU will undergo any physical change or experience an increase in emissions as a result of Holly Refinery’s proposed project, the ‘emission units’ are not subject to the BACT analysis requirements in the PSD rules.”).] Consequently, the re-routing of gasses will not result in increased emissions, and therefore no BACT analysis is necessary for the North Flare.

Rather than directly confront these findings, Petitioners insist that because the South Flare “will be reconstructed and reconfigured as part of the heavy crude processing project,” [IR002825], the re-routing of gasses to the North Flare must of necessity result in a modification of the North Flare. Opening Br. 54. However, the re-routing of gas to the North Flare had occurred prior to the permitting action for the Modernization Project, so even if the re-routing constituted a change in operation, “such a change occurred well before Holly initiated the current black

wax crude project.” [ADJ011572; *see also* ADJ011570; IR08200 (Holly’s first revised netting analysis) (“currently all gases are routed to the north flare”).]

Even if such re-routing had required a modification for which Holly had not sought authorization, such would constitute an enforcement matter for UDAQ, and is not a proper claim in a challenge to an approval order. Moreover, the Executive Director determined, “The North Flare is already subject to and in compliance with NSPS requirements.” [ADJ011569; *see also* IR009183, Response to Comments Memo (“NSPS Subpart Ja applies to the Woods Cross refinery generally and to both the North and South Flares.”); ADJ011566 (ALJ discussing Holly’s compliance with an EPA consent decree that requires compliance with Subpart Ja); IR004800 (consent decree); IR007946, IR007951 (Holly’s report to EPA of compliance with consent decree).]

Petitioners ignore this critical evidence in the record, and insist that due to the alleged modification, UDAQ must apply BACT to the North Flare. Opening Br. 55. The Executive Director addressed this question as well, finding that “UDAQ determined that BACT for flares was compliance with Subpart Ja.” [ADJ011570; IR008516-17 (Source Plan Review) (“The only technically feasible control options for emissions of all pollutants from flares are: (1) equipment design specifications and good combustion work practices . . . . ; and (2) flare gas recovery systems . . .

DAQ NSR recommends compliance with the requirements of 40 CFR 60 Subpart Ja as BACT.”).] Petitioners fail to acknowledge that regardless of whether a modification to the North Flare had taken place as part of the Modernization Project, Subpart Ja represents BACT for the North Flare, and all parties agree that the North Flare is already subject to Subpart Ja. [IR009252; IR002866-87; IR002962; IR009183; ADJ011564.]; *see also* Opening Br. 52 n.33.

Finally, Petitioners’ argument is moot because regardless of whether it is explicitly stated in the Holly approval order, Utah’s PM<sub>2.5</sub> State Implementation Plan<sup>32</sup> (SIP) requires Holly to install flare gas recovery technology at the Refinery,<sup>33</sup> and Petitioners do not dispute that flare gas recovery is the most stringent pollution control device currently available for flares. [ADJ011573-74; IR008516, Source Plan Review (referring to flare gas recover as “the top control technology”).] Thus, any remand on this issue would be meaningless because it could not change the result. [*Id.*]

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<sup>32</sup> A SIP is a plan that a state creates to reach attainment of EPA-derived NAAQS. 42 U.S.C. §§ 7408, 7409.

<sup>33</sup> “Flare gas recovery is a system that captures gases that would otherwise be combusted in the flare and redirects those gases as fuel sources for other refinery operations.” [ADJ011573 n.10.] The SIP requires “all major source petroleum refineries in or affecting a designated PM<sub>2.5</sub> non-attainment area within the State shall install and operate a flare gas recovery system.” Utah PM<sub>2.5</sub> SIP, Section IX, Part H, p. 43.

In any event, UDAQ and the Executive Director have substantial discretion to interpret the regulations governing modifications and BACT requirements, and any such legal conclusions cannot be invalidated unless clearly erroneous.

Petitioners have not shown that either UDAQ or the Executive Director erred, or that the Executive Director's determination is unreasonable with respect to the application of these regulations to the North Flare.

Consequently, this Court should affirm the Final Order.

### **CONCLUSION**

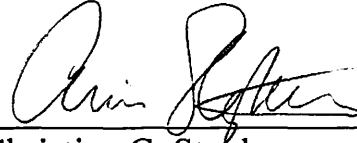
This Court should dismiss Petitioners' appeal in its entirety because they have failed to address the Final Order. By ignoring the Final Order, Petitioners failed to carry their burden on any of their claims. Even if the Court were to disregard this erroneous omission, it should still affirm the Final Order because, based on the applicable standard of review, the Executive Director rationally and correctly analyzed all of the Petitioners' claims raised in this appeal.

For these reasons, the Executive Director respectfully requests this Court to affirm the Executive Director's March 31, 2015 Final Order.



Respectfully submitted this 28th day of October 2015.

SEAN D. REYES  
Utah Attorney General

A handwritten signature in black ink, appearing to read "Christian C. Stephens", is written over a horizontal line.

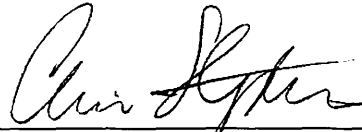
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## CERTIFICATE OF COMPLIANCE

1. This brief complies with the type-volume limitation of Utah R. App. P. 24(f)(1) because this brief contains 13,140 words, excluding the parts of the brief exempted by Utah R. App. P. 24(f)(1)(B).
2. This brief complies with the typeface requirements of Utah R. App. P. 27(b) because this brief has been prepared in a proportionally spaced typeface using Microsoft Word 2010 in 14-point Times New Roman.

Dated this 28th day of October 2015.

SEAN D. REYES  
Utah Attorney General



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Christian C. Stephens  
Craig W. Anderson  
Marina V. Thomas  
Assistant Attorneys General  
Utah Attorney General's Office

## CERTIFICATE OF SERVICE

I certify that on the 28th day of October 2015, I served an electronic copy of the **BRIEF OF RESPONDENTS-APPELLEES EXECUTIVE DIRECTOR OF THE UTAH DEPARTMENT OF ENVIRONMENTAL QUALITY ET AL.** by electronic mail on the Appeals Clerk at [courtofappeals@utcourts.gov](mailto:courtofappeals@utcourts.gov) and on each of the parties listed below. I will follow this electronic filing by submitting one original and seven (7) true and correct copies of this filing to the Appeals Clerk and a true and correct copy to each of the parties within five (5) business days of this electronic filing as allowed for by the April 28, 2015 Letter from the Utah Court of Appeals, Case No. 20150344. I will accompany the hard copies with a DVD disk containing a true and correct copy of this filing in searchable pdf format within fourteen (14) business days of this filing.

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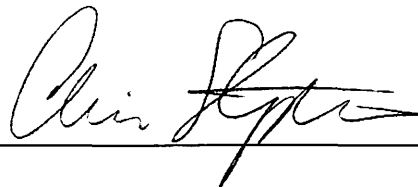
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## **ADDENDA**

Addendum A	Determinative Statutes, Rules, and Provisions
Addendum B	Findings of Fact, Conclusions of Law, and Proposed Order Regarding Petitioners' Motion Requesting Stay of Approval Order
Addendum C	Order Adopting AJL's Proposed Order and Denying Petitioners' Request for Stay
Addendum D	Findings of Fact, Conclusions of Law, and Recommended Order on the Merits
Addendum E	Order Adopting Findings of Fact, Conclusions of Law, and Recommended Order on the Merits

# **ADDENDUM A**

Determinative Statutes, Rules, and Provisions

West's Utah Code Annotated  
Title 19. Environmental Quality Code  
Chapter 1. General Provisions (Refs & Annos)  
Part 3. Administration

U.C.A. 1953 § 19-1-301.5

§ 19-1-301.5. Permit review adjudicative proceedings

Currentness

(1) As used in this section:

(a) "Dispositive action" means a final agency action that:

- (i) the executive director takes as part of a permit review adjudicative proceeding; and
- (ii) is subject to judicial review, in accordance with Subsection (14).

(b) "Dispositive motion" means a motion that is equivalent to:

- (i) a motion to dismiss under Utah Rules of Civil Procedure, Rule 12(b)(6);
- (ii) a motion for judgment on the pleadings under Utah Rules of Civil Procedure, Rule 12(c); or
- (iii) a motion for summary judgment under Utah Rules of Civil Procedure, Rule 56.

(c) "Party" means:

- (i) the director who issued the permit order being challenged in the permit review adjudicative proceeding;
- (ii) the permittee;
- (iii) the person who applied for the permit, if the permit was denied; or
- (iv) a person granted intervention by the administrative law judge.

(d) "Permit" means any of the following issued under this title:

(i) a permit;

(ii) a plan;

(iii) a license;

(iv) an approval order; or

(v) another administrative authorization made by a director.

(e)(i) "Permit order" means an order issued by a director that:

(A) approves a permit;

(B) renews a permit;

(C) denies a permit;

(D) modifies or amends a permit; or

(E) revokes and reissues a permit.

(ii) "Permit order" does not include an order terminating a permit.

(f) "Permit review adjudicative proceeding" means a proceeding to resolve a challenge to a permit order.

(2) This section governs permit review adjudicative proceedings.

(3) Except as expressly provided in this section, the provisions of Title 63G, Chapter 4, Administrative Procedures Act, do not apply to a permit review adjudicative proceeding.

(4) If a public comment period was provided during the permit application process, a person who challenges a permit order, including the permit applicant, may only raise an issue or argument during the permit review adjudicative proceeding that:

(a) the person raised during the public comment period; and

(b) was supported with sufficient information or documentation to enable the director to fully consider the substance and significance of the issue.

(5) The executive director shall appoint an administrative law judge, in accordance with Subsections 19-1-301(5) and (6), to conduct a permit review adjudicative proceeding.

(6)(a) Only the following may file a request for agency action seeking review of a permit order:

(i) a party; or

(ii) a person who is seeking to intervene under Subsection (7).

(b) A person who files a request for agency action seeking review of a permit order shall file the request:

(i) within 30 days after the day on which the permit order is issued; and

(ii) in accordance with Subsections 63G-4-201(3)(a) through (c).

(c) A person may not raise an issue or argument in a request for agency action unless the issue or argument:

(i) was preserved in accordance with Subsection (4); or

(ii) was not reasonably ascertainable before or during the public comment period.

(d) The department may, in accordance with Title 63G, Chapter 3, Utah Administrative Rulemaking Act, make rules allowing the extension of the filing deadline described in Subsection (6)(b)(i).

(7)(a) A person who is not a party may not participate in a permit review adjudicative proceeding unless the person is granted the right to intervene under this Subsection (7).

(b) A person who seeks to intervene in a permit review adjudicative proceeding under this section shall, within 30 days after the day on which the permit order being challenged was issued, file:

(i) a petition to intervene that:

(A) meets the requirements of Subsection 63G-4-207(1); and



(B) demonstrates that the person is entitled to intervention under Subsection (7)(c)(ii); and

(ii) a timely request for agency action.

(c) An administrative law judge shall grant a petition to intervene in a permit review adjudicative proceeding, if:

(i) the petition to intervene is timely filed; and

(ii) the petitioner:

(A) demonstrates that the petitioner's legal interests may be substantially affected by the permit review adjudicative proceeding;

(B) demonstrates that the interests of justice and the orderly and prompt conduct of the permit review adjudicative proceeding will not be materially impaired by allowing the intervention; and

(C) in the petitioner's request for agency action, raises issues or arguments that are preserved in accordance with Subsection (4).

(d) An administrative law judge:

(i) shall issue an order granting or denying a petition to intervene in accordance with Subsection 63G-4-207(3)(a); and

(ii) may impose conditions on intervenors as described in Subsections 63G-4-207(3)(b) and (c).

(e) The department may, in accordance with Title 63G, Chapter 3, Utah Administrative Rulemaking Act, make rules allowing the extension of the filing deadline described in Subsection (7)(b).

(8)(a) An administrative law judge shall conduct a permit review adjudicative proceeding based only on the administrative record and not as a trial de novo.

(b) To the extent relative to the issues and arguments raised in the request for agency action, the administrative record shall consist of the following items, if they exist:

(i) the permit application, draft permit, and final permit;

(ii) each statement of basis, fact sheet, engineering review, or other substantive explanation designated by the director as part of the basis for the decision relating to the permit order;

(iii) the notice and record of each public comment period;

(iv) the notice and record of each public hearing, including oral comments made during the public hearing;

(v) written comments submitted during the public comment period;

(vi) responses to comments that are designated by the director as part of the basis for the decision relating to the permit order;

(vii) any information that is:

(A) requested by and submitted to the director; and

(B) designated by the director as part of the basis for the decision relating to the permit order;

(viii) any additional information specified by rule;

(ix) any additional documents agreed to by the parties; and

(x) information supplementing the record under Subsection (8)(c).

(c)(i) There is a rebuttable presumption against supplementing the record.

(ii) A party may move to supplement the record described in Subsection (8)(b) with technical or factual information.

(iii) The administrative law judge may grant a motion to supplement the record described in Subsection (8)(b) with technical or factual information if the moving party proves that:

(A) good cause exists for supplementing the record;

(B) supplementing the record is in the interest of justice; and

(C) supplementing the record is necessary for resolution of the issues.

(iv) The administrative law judge may supplement the record with technical or factual information on the administrative law judge's own motion if the administrative law judge determines that adequate grounds exist to supplement the record under Subsections (8)(c)(iii)(A) through (C).

(v) In supplementing the record with testimonial evidence, the administrative law judge may administer an oath or take testimony as necessary.

(vi) The department may, in accordance with Title 63G, Chapter 3, Utah Administrative Rulemaking Act, make rules permitting further supplementation of the record.

(9)(a) The administrative law judge shall review and respond to a request for agency action in accordance with Subsections 63G-4-201(3)(d) and (e), following the relevant procedures for formal adjudicative proceedings.

(b) The administrative law judge shall require the parties to file responsive pleadings in accordance with Section 63G-4-204.

(c) If an administrative law judge enters an order of default against a party, the administrative law judge shall enter the order of default in accordance with Section 63G-4-209, following the relevant procedures for formal adjudicative proceedings.

(d) The administrative law judge, in conducting a permit review adjudicative proceeding:

(i) may not participate in an ex parte communication with a party to the permit review adjudicative proceeding regarding the merits of the permit review adjudicative proceeding unless notice and an opportunity to be heard are afforded to all parties; and

(ii) shall, upon receiving an ex parte communication, place the communication in the public record of the proceeding and afford all parties an opportunity to comment on the information.

(e) In conducting a permit review adjudicative proceeding, the administrative law judge may take judicial notice of matters not in the administrative record, in accordance with Utah Rules of Evidence, Rule 201.

(f) An administrative law judge may take any action in a permit review adjudicative proceeding that is not a dispositive action.

(10)(a) A person who files a request for agency action has the burden of demonstrating that an issue or argument raised in the request for agency action has been preserved in accordance with Subsection (4).

(b) The administrative law judge shall dismiss, with prejudice, any issue or argument raised in a request for agency action that has not been preserved in accordance with Subsection (4).

(11) In response to a dispositive motion, the administrative law judge may submit a proposed dispositive action to the executive director recommending full or partial resolution of the permit review adjudicative proceeding, that includes:

- (a) written findings of fact;
- (b) written conclusions of law; and
- (c) a recommended order.

(12) For each issue or argument that is not dismissed or otherwise resolved under Subsection (10)(b) or (11), the administrative law judge shall:

- (a) provide the parties an opportunity for briefing and oral argument;
- (b) conduct a review of the director's determination, based on the record described in Subsections (8)(b), (8)(c), and (9)(e); and
- (c) submit to the executive director a proposed dispositive action, that includes:

- (i) written findings of fact;
- (ii) written conclusions of law; and
- (iii) a recommended order.

(13)(a) When the administrative law judge submits a proposed dispositive action to the executive director, the executive director may:

- (i) adopt, adopt with modifications, or reject the proposed dispositive action; or
- (ii) return the proposed dispositive action to the administrative law judge for further action as directed.

(b) On review of a proposed dispositive action, the executive director shall uphold all factual, technical, and scientific agency determinations that are supported by substantial evidence taken from the record as a whole.

(c)(i) The executive director may not participate in an ex parte communication with a party to the permit review adjudicative proceeding regarding the merits of the permit review adjudicative proceeding unless notice and an opportunity to be heard are afforded to all parties.

(ii) Upon receiving an ex parte communication, the executive director shall place the communication in the public record of the proceeding and afford all parties an opportunity to comment on the information.

(d) In reviewing a proposed dispositive action during a permit review adjudicative proceeding, the executive director may take judicial notice of matters not in the record, in accordance with Utah Rules of Evidence, Rule 201.

(e) The executive director may use the executive director's technical expertise in making a determination.

(14)(a) A party may seek judicial review in the Utah Court of Appeals of a dispositive action in a permit review adjudicative proceeding, in accordance with Sections 63G-4-401, 63G-4-403, and 63G-4-405.

(b) An appellate court shall limit its review of a dispositive action of a permit review adjudicative proceeding to:

(i) the record described in Subsections (8)(b), (8)(c), (9)(e), and (13)(d); and

(ii) the record made by the administrative law judge and the executive director during the permit review adjudicative proceeding.

(c) During judicial review of a dispositive action, the appellate court shall:

(i) review all agency determinations in accordance with Subsection 63G-4-403(4), recognizing that the agency has been granted substantial discretion to interpret its governing statutes and rules; and

(ii) uphold all factual, technical, and scientific agency determinations that are supported by substantial evidence viewed in light of the record as a whole.

(15)(a) The filing of a request for agency action does not stay a permit or delay the effective date of a permit.

(b) A permit may not be stayed or delayed unless a stay is granted under this Subsection (15).

(c) The administrative law judge shall:

(i) consider a party's motion to stay a permit during a permit review adjudicative proceeding; and

(ii) submit a proposed determination on the stay to the executive director.

(d) The administrative law judge may not recommend to the executive director a stay of a permit, or a portion of a permit, unless:

(i) all parties agree to the stay; or

(ii) the party seeking the stay demonstrates that:

(A) the party seeking the stay will suffer irreparable harm unless the stay is issued;

(B) the threatened injury to the party seeking the stay outweighs whatever damage the proposed stay is likely to cause the party restrained or enjoined;

(C) the stay, if issued, would not be adverse to the public interest; and

(D) there is a substantial likelihood that the party seeking the stay will prevail on the merits of the underlying claim, or the case presents serious issues on the merits, which should be the subject of further adjudication.

(e) A party may appeal the executive director's decision regarding a stay of a permit to the Utah Court of Appeals, in accordance with Section 78A-4-103.

#### **Credits**

Laws 2012, c. 333, § 2, eff. May 8, 2012.

#### **HISTORICAL AND STATUTORY NOTES**

Laws 2012, c. 360, § 115(3), provides:

“Section 115. Coordinating S.B. 21[c. 360] with S.B. 11[c. 333]--Substantive and technical amendments.

“If this S.B. 21 and S.B. 11, Department of Environmental Quality Boards Adjudicative Proceedings, both pass and become law, the Legislature intends that the Office of Legislative Research and General Counsel shall prepare the Utah Code database for publication as follows:”

“(3) amend Section 19-1-301.5 to read as follows:

“ ‘19-1-301.5. Permit review adjudicative proceedings.

“(1) As used in this section:

“(a) “Dispositive action” means a final agency action that:

“(i) the executive director takes as part of a permit review adjudicative proceeding; and

“(ii) is subject to judicial review, in accordance with Subsection (14).

§ 19-1-301.5. Permit review adjudicative proceedings, U.C.A. 1953 § 19-1-301.5

“(b) “Dispositive motion” means a motion that is equivalent to:

“(i) a motion to dismiss under Utah Rules of Civil Procedure, Rule 12(b)(6);

“(ii) a motion for judgment on the pleadings under Utah Rules of Civil Procedure, Rule 12(c); or

“(iii) a motion for summary judgment under Utah Rules of Civil Procedure, Rule 56.

“(c) ‘Party’ means:

“(i) the director who issued the permit order being challenged in the permit review adjudicative proceeding;

“(ii) the permittee;

“(iii) the person who applied for the permit, if the permit was denied; or

“(iv) a person granted intervention by the administrative law judge.

“(d) “Permit” means any of the following issued under this title:

“(i) a permit;

“(ii) a plan;

“(iii) a license;

“(iv) an approval order; or

“(v) another administrative authorization made by a director.

“(e)(i) ‘Permit order’ means an order issued by a director that:

“(A) approves a permit;

“(B) renews a permit;

“(C) denies a permit;

“(D) modifies or amends a permit; or

“(E) revokes and reissues a permit.

“(ii) ‘Permit order’ does not include an order terminating a permit.

“(f) ‘Permit review adjudicative proceeding’ means a proceeding to resolve a challenge to a permit order.

“(2) This section governs permit review adjudicative proceedings.

§ 19-1-301.5. Permit review adjudicative proceedings, U.C.A. 1953 § 19-1-301.5

“(3) Except as expressly provided in this section, the provisions of Title 63G, Chapter 4, Administrative Procedures Act, do not apply to a permit review adjudicative proceeding.

“(4) If a public comment period was provided during the permit application process, a person who challenges a permit order, including the permit applicant, may only raise an issue or argument during the permit review adjudicative proceeding that:

“(a) the person raised during the public comment period; and

“(b) was supported with sufficient information or documentation to enable the director to fully consider the substance and significance of the issue.

“(5) The executive director shall appoint an administrative law judge, in accordance with Subsections 19-1-301(5) and (6), to conduct a permit review adjudicative proceeding.

“(6)(a) Only the following may file a request for agency action seeking review of a permit order:

“(i) a party; or

“(ii) a person who is seeking to intervene under Subsection (7).

“(b) A person who files a request for agency action seeking review of a permit order shall file the request:

“(i) within 30 days after the day on which the permit order is issued; and

“(ii) in accordance with Subsections 63G-4-201(3)(a) through (c).

“(c) A person may not raise an issue or argument in a request for agency action unless the issue or argument:

“(i) was preserved in accordance with Subsection (4); or

(ii) was not reasonably ascertainable before or during the public comment period.

“(d) The department may, in accordance with Title 63G, Chapter 3, Utah Administrative Rulemaking Act, make rules allowing the extension of the filing deadline described in Subsection (6)(b)(i).

“(7)(a) A person who is not a party may not participate in a permit review adjudicative proceeding unless the person is granted the right to intervene under this Subsection (7).

“(b) A person who seeks to intervene in a permit review adjudicative proceeding under this section shall, within 30 days after the day on which the permit order being challenged was issued, file:

“(i) a petition to intervene that:

“(A) meets the requirements of Subsection 63G-4-207(1); and

“(B) demonstrates that the person is entitled to intervention under Subsection (7)(c)(ii); and

“(ii) a timely request for agency action.



“(c) An administrative law judge shall grant a petition to intervene in a permit review adjudicative proceeding, if:

“(i) the petition to intervene is timely filed; and

“(ii) the petitioner:

“(A) demonstrates that the petitioner's legal interests may be substantially affected by the permit review adjudicative proceeding;

“(B) demonstrates that the interests of justice and the orderly and prompt conduct of the permit review adjudicative proceeding will not be materially impaired by allowing the intervention; and

“(C) in the petitioner's request for agency action, raises issues or arguments that are preserved in accordance with Subsection (4).

“(d) An administrative law judge:

“(i) shall issue an order granting or denying a petition to intervene in accordance with Subsection 63G-4-207(3)(a); and

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“(e) The department may, in accordance with Title 63G, Chapter 3, Utah Administrative Rulemaking Act, make rules allowing the extension of the filing deadline described in Subsection (7)(b).

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“(b) To the extent relative to the issues and arguments raised in the request for agency action, the administrative record shall consist of the following items, if they exist:

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“(ii) each statement of basis, fact sheet, engineering review, or other substantive explanation designated by the director as part of the basis for the decision relating to the permit order;

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“(iv) the notice and record of each public hearing, including oral comments made during the public hearing;

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“(vi) responses to comments that are designated by the director as part of the basis for the decision relating to the permit order;

“(vii) any information that is:

“(A) requested by and submitted to the director; and

“(B) designated by the director as part of the basis for the decision relating to the permit order;

“(viii) any additional information specified by rule;

“(ix) any additional documents agreed to by the parties; and

“(x) information supplementing the record under Subsection (8)(c).

“(c)(i) There is a rebuttable presumption against supplementing the record.

“(ii) A party may move to supplement the record described in Subsection (8)(b) with technical or factual information.

“(iii) The administrative law judge may grant a motion to supplement the record described in Subsection (8)(b) with technical or factual information if the moving party proves that:

“(A) good cause exists for supplementing the record;

“(B) supplementing the record is in the interest of justice; and

“(C) supplementing the record is necessary for resolution of the issues.

“(iv) The administrative law judge may supplement the record with technical or factual information on the administrative law judge's own motion if the administrative law judge determines that adequate grounds exist to supplement the record under Subsections (8)(c)(iii)(A) through (C).

“(v) In supplementing the record with testimonial evidence, the administrative law judge may administer an oath or take testimony as necessary.

“(vi) The department may, in accordance with Title 63G, Chapter 3, Utah Administrative Rulemaking Act, make rules permitting further supplementation of the record.

“(9)(a) The administrative law judge shall review and respond to a request for agency action in accordance with Subsections 63G-4-201(3)(d) and (e), following the relevant procedures for formal adjudicative proceedings.

“(b) The administrative law judge shall require the parties to file responsive pleadings in accordance with Section 63G-4-204.

“(c) If an administrative law judge enters an order of default against a party, the administrative law judge shall enter the order of default in accordance with Section 63G-4-209, following the relevant procedures for formal adjudicative proceedings.

“(d) The administrative law judge, in conducting a permit review adjudicative proceeding:

“(i) may not participate in an ex parte communication with a party to the permit review adjudicative proceeding regarding the merits of the permit review adjudicative proceeding unless notice and an opportunity to be heard are afforded to all parties; and

“(ii) shall, upon receiving an ex parte communication, place the communication in the public record of the proceeding and afford all parties an opportunity to comment on the information.

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“(10)(a) A person who files a request for agency action has the burden of demonstrating that an issue or argument raised in the request for agency action has been preserved in accordance with Subsection (4).

“(b) The administrative law judge shall dismiss, with prejudice, any issue or argument raised in a request for agency action that has not been preserved in accordance with Subsection (4).

“(11) In response to a dispositive motion, the administrative law judge may submit a proposed dispositive action to the executive director recommending full or partial resolution of the permit review adjudicative proceeding, that includes:

“(a) written findings of fact;

“(b) written conclusions of law; and

“(c) a recommended order.

“(12) For each issue or argument that is not dismissed or otherwise resolved under Subsection (10)(b) or (11), the administrative law judge shall:

“(a) provide the parties an opportunity for briefing and oral argument;

“(b) conduct a review of the director's determination, based on the record described in Subsections (8)(b), (8)(c), and (9)(e); and

“(c) submit to the executive director a proposed dispositive action, that includes:

“(i) written findings of fact;

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“(13)(a) When the administrative law judge submits a proposed dispositive action to the executive director, the executive director may:

“(i) adopt, adopt with modifications, or reject the proposed dispositive action; or

“(ii) return the proposed dispositive action to the administrative law judge for further action as directed.

“(b) On review of a proposed dispositive action, the executive director shall uphold all factual, technical, and scientific agency determinations that are supported by substantial evidence taken from the record as a whole.

“(c)(i) The executive director may not participate in an ex parte communication with a party to the permit review adjudicative proceeding regarding the merits of the permit review adjudicative proceeding unless notice and an opportunity to be heard are afforded to all parties.

“(ii) Upon receiving an ex parte communication, the executive director shall place the communication in the public record of the proceeding and afford all parties an opportunity to comment on the information.

“(d) In reviewing a proposed dispositive action during a permit review adjudicative proceeding, the executive director may take judicial notice of matters not in the record, in accordance with Utah Rules of Evidence, Rule 201.

“(e) The executive director may use the executive director's technical expertise in making a determination.

“(14)(a) A party may seek judicial review in the Utah Court of Appeals of a dispositive action in a permit review adjudicative proceeding, in accordance with Sections 63G-4-401, 63G-4-403, and 63G-4-405.

“(b) An appellate court shall limit its review of a dispositive action of a permit review adjudicative proceeding to:

“(i) the record described in Subsections (8)(b), (8)(c), (9)(e), and (13)(d); and

“(ii) the record made by the administrative law judge and the executive director during the permit review adjudicative proceeding.

“(c) During judicial review of a dispositive action, the appellate court shall:

“(i) review all agency determinations in accordance with Subsection 63G-4-403(4), recognizing that the agency has been granted substantial discretion to interpret its governing statutes and rules; and

“(ii) uphold all factual, technical, and scientific agency determinations that are supported by substantial evidence viewed in light of the record as a whole.

“(15)(a) The filing of a request for agency action does not stay a permit or delay the effective date of a permit.

“(b) A permit may not be stayed or delayed unless a stay is granted under this Subsection (15).

“(c) The administrative law judge shall:

“(i) consider a party's motion to stay a permit during a permit review adjudicative proceeding; and

“(ii) submit a proposed determination on the stay to the executive director.

“(d) The administrative law judge may not recommend to the executive director a stay of a permit, or a portion of a permit, unless:

“(i) all parties agree to the stay; or

“(ii) the party seeking the stay demonstrates that:

“(A) the party seeking the stay will suffer irreparable harm unless the stay is issued;

“(B) the threatened injury to the party seeking the stay outweighs whatever damage the proposed stay is likely to cause the party restrained or enjoined;

“(C) the stay, if issued, would not be adverse to the public interest; and

“(D) there is a substantial likelihood that the party seeking the stay will prevail on the merits of the underlying claim, or the case presents serious issues on the merits, which should be the subject of further adjudication.

“(e) A party may appeal the executive director’s decision regarding a stay of a permit to the Utah Court of Appeals, in accordance with Section 78A-4-103.”

U.C.A. 1953 § 19-1-301.5, UT ST § 19-1-301.5

Current through 2014 General Session.

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West's Utah Code Annotated  
Title 63g. General Government  
Chapter 4. Administrative Procedures Act (Refs & Annos)  
Part 4. Judicial Review (Refs & Annos)

U.C.A. 1953 § 63G-4-403  
Formerly cited as UT ST § 63-46b-16

§ 63G-4-403. Judicial review--Formal adjudicative proceedings

Currentness

(1) As provided by statute, the Supreme Court or the Court of Appeals has jurisdiction to review all final agency action resulting from formal adjudicative proceedings.

(2)(a) To seek judicial review of final agency action resulting from formal adjudicative proceedings, the petitioner shall file a petition for review of agency action with the appropriate appellate court in the form required by the appellate rules of the appropriate appellate court.

(b) The appellate rules of the appropriate appellate court shall govern all additional filings and proceedings in the appellate court.

(3) The contents, transmittal, and filing of the agency's record for judicial review of formal adjudicative proceedings are governed by the Utah Rules of Appellate Procedure, except that:

(a) all parties to the review proceedings may stipulate to shorten, summarize, or organize the record;

(b) the appellate court may tax the cost of preparing transcripts and copies for the record:

(i) against a party who unreasonably refuses to stipulate to shorten, summarize, or organize the record; or

(ii) according to any other provision of law.

(4) The appellate court shall grant relief only if, on the basis of the agency's record, it determines that a person seeking judicial review has been substantially prejudiced by any of the following:

(a) the agency action, or the statute or rule on which the agency action is based, is unconstitutional on its face or as applied;

(b) the agency has acted beyond the jurisdiction conferred by any statute;

- (c) the agency has not decided all of the issues requiring resolution;
- (d) the agency has erroneously interpreted or applied the law;
- (e) the agency has engaged in an unlawful procedure or decision-making process, or has failed to follow prescribed procedure;
- (f) the persons taking the agency action were illegally constituted as a decision-making body or were subject to disqualification;
- (g) the agency action is based upon a determination of fact, made or implied by the agency, that is not supported by substantial evidence when viewed in light of the whole record before the court;
- (h) the agency action is:
  - (i) an abuse of the discretion delegated to the agency by statute;
  - (ii) contrary to a rule of the agency;
  - (iii) contrary to the agency's prior practice, unless the agency justifies the inconsistency by giving facts and reasons that demonstrate a fair and rational basis for the inconsistency; or
  - (iv) otherwise arbitrary or capricious.

**Credits**

Laws 2008, c. 382, § 1393, eff. May 5, 2008.

Notes of Decisions (457)

U.C.A. 1953 § 63G-4-403, UT ST § 63G-4-403

Current through 2015 First Special Session

Utah Administrative Code Currentness Environmental Quality R307. Air Quality.
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U.A.C. R307-401

R307-401. Permit: New and Modified Sources.

R307-401-1. Purpose.

This rule establishes the application and permitting requirements for new installations and modifications to existing installations throughout the State of Utah. Additional permitting requirements apply to larger installations or installations located in nonattainment or maintenance areas. These additional requirements can be found in R307-403, R307-405, R307-406, R307-420, and R307-421. Modeling requirements in R307-410 may also apply. Each of the permitting rules establishes independent requirements, and the owner or operator must comply with all of the requirements that apply to the installation. Exemptions under R307-401 do not affect applicability of the other permitting rules.

R307-401-2. Definitions.

(1) The following additional definitions apply to R307-401.

“Actual emissions” (a) means the actual rate of emissions of an air contaminant from an emissions unit, as determined in accordance with paragraphs (b) through (d) below.

(b) In general, actual emissions as of a particular date shall equal the average rate, in tons per year, at which the unit actually emitted the air contaminant during a consecutive 24-month period which precedes the particular date and which is representative of normal source operation. The director shall allow the use of a different time period upon a determination that it is more representative of normal source operation. Actual emissions shall be calculated using the unit's actual operating hours, production rates, and types of materials processed, stored, or combusted during the selected time period.

(c) The director may presume that source-specific allowable emissions for the unit are equivalent to the actual emissions of the unit.

(d) For any emissions unit that has not begun normal operations on the particular date, actual emissions shall equal the potential to emit of the unit on that date.

“Best available control technology” means an emissions limitation (including a visible emissions standard) based on the maximum degree of reduction for each air contaminant which would be emitted from any proposed stationary source or modification which the director, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such source or modification through application of production processes or available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of such pollutant. In no event shall application of best available control technology result in emissions of any pollutant which would exceed the emissions allowed by any applicable standard under 40 CFR parts 60 and 61. If the director determines that technological or economic limitations on the application of measurement methodology to a particular emissions unit would make



the imposition of an emissions standard infeasible, a design, equipment, work practice, operational standard or combination thereof, may be prescribed instead to satisfy the requirement for the application of best available control technology. Such standard shall, to the degree possible, set forth the emissions reduction achievable by implementation of such design, equipment, work practice or operation, and shall provide for compliance by means which achieve equivalent results.

"Building, structure, facility, or installation" means all of the pollutant-emitting activities which belong to the same industrial grouping, are located on one or more contiguous or adjacent properties, and are under the control of the same person (or persons under common control) except the activities of any vessel. Pollutant-emitting activities shall be considered as part of the same industrial grouping if they belong to the same Major Group (i.e., which have the same two-digit code) as described in the Standard Industrial Classification Manual, 1972, as amended by the 1977 Supplement (U.S. Government Printing Office stock numbers 4101-0066 and 003-005-00176-0, respectively).

"Construction" means any physical change or change in the method of operation (including fabrication, erection, installation, demolition, or modification of an emissions unit) that would result in a change in emissions.

"Emissions unit" means any part of a stationary source that emits or would have the potential to emit any air contaminant.

"Fugitive emissions" means those emissions which could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening.

"Indirect source" means a building, structure, facility or installation which attracts or may attract mobile source activity that results in emission of a pollutant for which there is a national standard.

"Potential to emit" means the maximum capacity of a stationary source to emit an air contaminant under its physical and operational design. Any physical or operational limitation on the capacity of the source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is enforceable. Secondary emissions do not count in determining the potential to emit of a stationary source.

"Secondary emissions" means emissions which occur as a result of the construction or operation of a major stationary source or major modification, but do not come from the major stationary source or major modification itself. Secondary emissions include emissions from any offsite support facility which would not be constructed or increase its emissions except as a result of the construction or operation of the major stationary source or major modification. Secondary emissions do not include any emissions which come directly from a mobile source, such as emissions from the tailpipe of a motor vehicle, from a train, or from a vessel.

"Stationary source" means any building, structure, facility, or installation which emits or may emit an air contaminant.

#### R307-401-3. Applicability.

(1) R307-401 applies to any person intending to:

- (a) construct a new installation which will or might reasonably be expected to become a source or an indirect source of air pollution, or

(b) make modifications or relocate an existing installation which will or might reasonably be expected to increase the amount or change the effect of, or the character of, air contaminants discharged, so that such installation may be expected to become a source or indirect source of air pollution, or

(c) install a control apparatus or other equipment intended to control emissions of air contaminants.

(2) R307-403, R307-405 and R307-406 may establish additional permitting requirements for new or modified sources.

(a) Exemptions contained in R307-401 do not affect applicability or other requirements under R307-403, R307-405 or R307-406.

(b) Exemptions contained in R307-403, R307-405 or R307-406 do not affect applicability or other requirements under R307-401, unless specifically authorized in this rule.

#### R307-401-4. General Requirements.

The general requirements in (1) through (3) below apply to all new and modified installations, including installations that are exempt from the requirement to obtain an approval order.

(1) Any control apparatus installed on an installation shall be adequately and properly maintained.

(2) If the director determines that an exempted installation is not meeting an approval order or State Implementation Plan limitation, is creating an adverse impact to the environment, or would be injurious to human health or welfare, then the director may require the owner or operator to submit a notice of intent and obtain an approval order in accordance with R307-401-5 through R307-401-8. The director will complete an appropriate analysis and evaluation in consultation with the owner or operator before determining that an approval order is required.

(3) Low Oxides of Nitrogen Burner Technology.

(a) Except as provided in (b) below, whenever existing fuel combustion burners are replaced, the owner or operator shall install low oxides of nitrogen burners or equivalent oxides of nitrogen controls, as determined by the director, unless such equipment is not physically practical or cost effective. The owner or operator shall submit a demonstration that the equipment is not physically practical or cost effective to the director for review and approval prior to beginning construction.

(b) The provisions of (a) above do not apply to non-commercial, residential buildings.

#### R307-401-5. Notice of Intent.

(1) Except as provided in R307-401-9 through R307-401-17, any person subject to R307-401 shall submit a notice of intent to the director and receive an approval order prior to initiation of construction, modification or relocation. The notice of intent shall be in a format specified by the director.

(2) The notice of intent shall include the following information:

(a) A description of the nature of the processes involved; the nature, procedures for handling and quantities of raw materials; the type and quantity of fuels employed; and the nature and quantity of finished product.

(b) Expected composition and physical characteristics of effluent stream both before and after treatment by any control apparatus, including emission rates, volume, temperature, air contaminant types, and concentration of air contaminants.

(c) Size, type and performance characteristics of any control apparatus.

(d) An analysis of best available control technology for the proposed source or modification. When determining best available control technology for a new or modified source in an ozone nonattainment or maintenance area that will emit volatile organic compounds or nitrogen oxides, the owner or operator of the source shall consider EPA Control Technique Guidance (CTG) documents and Alternative Control Technique documents that are applicable to the source. Best available control technology shall be at least as stringent as any published CTG that is applicable to the source.

(e) Location and elevation of the emission point and other factors relating to dispersion and diffusion of the air contaminant in relation to nearby structures and window openings, and other information necessary to appraise the possible effects of the effluent.

(f) The location of planned sampling points and the tests of the completed installation to be made by the owner or operator when necessary to ascertain compliance.

(g) The typical operating schedule.

(h) A schedule for construction.

(i) Any plans, specifications and related information that are in final form at the time of submission of notice of intent.

(j) Any additional information required by:

(i) R307-403, Permits: New and Modified Sources in Nonattainment Areas and Maintenance Areas;

(ii) R307-405, Permits: Major Sources in Attainment or Unclassified Areas (PSD);

(iii) R307-406, Visibility;

(iv) R307-410, Emissions Impact Analysis;

(v) R307-420, Permits: Ozone Offset Requirements in Davis and Salt Lake Counties; or

(vi) R307-421, Permits: PM10 Offset Requirements in Salt Lake County and Utah County.

(k) Any other information necessary to determine if the proposed source or modification will be in compliance with Title R307.

(3) Notwithstanding the exemption in R307-401-9 through 16, any person that is subject to R307-403, R307-405, or R307-406 shall submit a notice of intent to the director and receive an approval order prior to initiation of construction, modification, or relocation.

#### R307-401-6. Review Period.

(1) Completeness Determination. Within 30 days after receipt of a notice of intent, or any additional information necessary to the review, the director will advise the applicant of any deficiency in the notice of intent or the information submitted.

(2) Within 90 days of receipt of a complete application including all the information described in R307-401-5, the director will

(a) issue an approval order for the proposed construction, installation, modification, relocation, or establishment pursuant to the requirements of R307-401-8, or

(b) issue an order prohibiting the proposed construction, installation, modification, relocation or establishment if it is deemed that any part of the proposal is inadequate to meet the applicable requirements of R307.

(3) The review period under (2) above may be extended by up to three 30-day extensions if more time is needed to review the proposal.

#### R307-401-7. Public Notice.

(1) Issuing the Notice. Prior to issuing an approval or disapproval order, the director will advertise intent to approve or disapprove in a newspaper of general circulation in the locality of the proposed construction, installation, modification, relocation or establishment.

(2) Opportunity for Review and Comment.

(a) At least one location will be provided where the information submitted by the owner or operator, the director's analysis of the notice of intent proposal, and the proposed approval order conditions will be available for public inspection.

(b) Public Comment.

(i) A 30-day public comment period will be established.

(ii) A request to extend the length of the comment period, up to 30 days, may be submitted to the director within 15 days of the date the notice in R307-401-7(1) is published.

(iii) Public Hearing. A request for a hearing on the proposed approval or disapproval order may be submitted to the director within 15 days of the date the notice in R307-401-7(1) is published.

(iv) The hearing will be held in the area of the proposed construction, installation, modification, relocation or establishment.

(v) The public comment and hearing procedure shall not be required when an order is issued for the purpose of extending the time required by the director to review plans and specifications.

(3) The director will consider all comments received during the public comment period and at the public hearing and, if appropriate, will make changes to the proposal in response to comments before issuing an approval order or disapproval order.

R307-401-8. Approval Order.

(1) The director will issue an approval order if the following conditions have been met:

(a) The degree of pollution control for emissions, to include fugitive emissions and fugitive dust, is at least best available control technology. When determining best available control technology for a new or modified source in an ozone nonattainment or maintenance area that will emit volatile organic compounds or nitrogen oxides, best available control technology shall be at least as stringent as any Control Technique Guidance document that has been published by EPA that is applicable to the source.

(b) The proposed installation will meet the applicable requirements of:

(i) R307-403, Permits: New and Modified Sources in Nonattainment Areas and Maintenance Areas;

(ii) R307-405, Permits: Major Sources in Attainment or Unclassified Areas (PSD);

(iii) R307-406, Visibility;

(iv) R307-410, Emissions Impact Analysis;

(v) R307-420, Permits: Ozone Offset Requirements in Davis and Salt Lake Counties;

(vi) R307-210, National Standards of Performance for New Stationary Sources;

(vii) National Primary and Secondary Ambient Air Quality Standards;

(viii) R307-214, National Emission Standards for Hazardous Air Pollutants;

(ix) R307-110, Utah State Implementation Plan; and

(x) all other provisions of R307.

(2) The approval order will require that all pollution control equipment be adequately and properly maintained.

(3) Receipt of an approval order does not relieve any owner or operator of the responsibility to comply with the provisions of R307 or the State Implementation Plan.

(4) To accommodate staged construction of a large source, the director may issue an order authorizing construction of an initial stage prior to receipt of detailed plans for the entire proposal provided that, through a review of general plans, engineering reports and other information the proposal is determined feasible by the director under the intent of R307. Subsequent detailed plans will then be processed as prescribed in this paragraph. For staged construction projects the previous determination under R307-401-8(1) and (2) will be reviewed and modified as appropriate at the earliest reasonable time prior to commencement of construction of each independent phase of the proposed source or modification.

(5) If the director determines that a proposed stationary source, modification or relocation does not meet the conditions established in (1) above, the director will not issue an approval order.

#### R307-401-9. Small Source Exemption.

(1) A small stationary source is exempted from the requirement to obtain an approval order in R307-401-5 through 8 if the following conditions are met.

(a) its actual emissions are less than 5 tons per year per air contaminant of any of the following air contaminants: sulfur dioxide, carbon monoxide, nitrogen oxides, PM<sub>10</sub>, ozone, or volatile organic compounds;

(b) its actual emissions are less than 500 pounds per year of any hazardous air pollutant and less than 2000 pounds per year of any combination of hazardous air pollutants;

(c) its actual emissions are less than 500 pounds per year of any air contaminant not listed in (a) or (b) above and less than 2000 pounds per year of any combination of air contaminants not listed in (a) or (b) above.

(d) Air contaminants that are drawn from the environment through equipment in intake air and then are released back to the environment without chemical change, as well as carbon dioxide, nitrogen, oxygen, argon, neon, helium, krypton, xenon should not be included in emission calculations when determining applicability under (a) through (c) above.

(2) The owner or operator of a source that is exempted from the requirement to obtain an approval order under (1) above shall no longer be exempt if actual emissions in any subsequent year exceed the emission thresholds in (1) above. The owner or operator shall submit a notice of intent under R307-401-5 no later than 180 days after the end of the calendar year in which the source exceeded the emission threshold.

(3) Small Source Exemption—Registration. The director will maintain a registry of sources that are claiming an exemption under R307-401-9. The owner or operator of a stationary source that is claiming an exemption under R307-401-9 may submit a written registration notice to the director. The notice shall include the following minimum information:

(a) identifying information, including company name and address, location of source, telephone number, and name of plant site manager or point of contact;

(b) a description of the nature of the processes involved, equipment, anticipated quantities of materials used, the type and quantity of fuel employed and nature and quantity of the finished product;

(c) identification of expected emissions;

(d) estimated annual emission rates;

(e) any control apparatus used; and

(f) typical operating schedule.

(4) An exemption under R307-401-9 does not affect the requirements of R307-401-17, Temporary Relocation.

(5) A stationary source that is not required to obtain a permit under R307-405 for greenhouse gases, as defined in R307-405-3(9) (a), is not required to obtain an approval order for greenhouse gases under R307-401. This exemption does not affect the requirement to obtain an approval order for any other air contaminant emitted by the stationary source.

R307-401-10. Source Category Exemptions.

The following source categories described in (1) through (5) below are exempted from the requirement to obtain an approval order. The general provisions in R307-401-4 shall apply to these sources.

(1) Fuel-burning equipment in which combustion takes place at no greater pressure than one inch of mercury above ambient pressure with a rated capacity of less than five million BTU per hour using no other fuel than natural gas or LPG or other mixed gas that meets the standards of gas distributed by a utility in accordance with the rules of the Public Service Commission of the State of Utah, unless there are emissions other than combustion products.

(2) Comfort heating equipment such as boilers, water heaters, air heaters and steam generators with a rated capacity of less than one million BTU per hour if fueled only by fuel oil numbers 1—6,

(3) Emergency heating equipment, using coal or wood for fuel, with a rated capacity less than 50,000 BTU per hour.

(4) Exhaust systems for controlling steam and heat that do not contain combustion products.

R307-401-11. Replacement-in-Kind Equipment.

(1) Applicability. Existing process equipment or pollution control equipment that is covered by an existing approval order or State Implementation Plan requirement may be replaced using the procedures in (2) below if:

(a) the potential to emit of the process equipment is the same or lower;

(b) the number of emission points or emitting units is the same or lower;

(c) no additional types of air contaminants are emitted as a result of the replacement;

(d) the process equipment or pollution control equipment is identical to or functionally equivalent to the replaced equipment;

(e) the replacement does not change the basic design parameters of the process unit or pollution control equipment;

(f) the replaced process equipment or pollution control equipment is permanently removed from the stationary source, otherwise permanently disabled, or permanently barred from operation;

(g) the replacement process equipment or pollution control equipment does not trigger New Source Performance Standards or National Emissions Standards for Hazardous Air Pollutants under 42 U.S.C. 7411 or 7412; and

(h) the replacement of the control apparatus or process equipment does not violate any other provision of Title R307.



(2) Replacement-in-Kind Procedures.

(a) In lieu of filing a notice of intent under R307-401-5, the owner or operator of a stationary source shall submit a written notification to the director before replacing the equipment. The notification shall contain a description of the replacement-in-kind equipment, including the control capability of any control apparatus and a demonstration that the conditions of (1) above are met.

(b) If the replacement-in-kind meets the conditions of (1) above, the director will update the source's approval order and notify the owner or operator. Public review under R307-401-7 is not required for the update to the approval order.

(3) If the replaced process equipment or pollution control equipment is brought back into operation, it shall constitute a new emissions unit.

R307-401-12. Reduction in Air Contaminants.

(1) Applicability. The owner or operator of a stationary source of air contaminants that reduces or eliminates air contaminants is exempt from the requirement to submit a notice of intent and obtain an approval order prior to construction if:

(a) the project does not increase the potential to emit of any air contaminant or cause emissions of any new air contaminant, and

(b) the director is notified of the change and the reduction of air contaminants is made enforceable through an approval order in accordance with (2) below.

(2) Notification. The owner or operator shall submit a written description of the project to the director no later than 60 days after the changes are made. The director will update the source's approval order or issue a new approval order to include the project and to make the emission reductions enforceable. Public review under R307-401-7 is not required for the update to the approval order.

R307-401-13. Plantwide Applicability Limits.

A plantwide applicability limit under R307-405-21 does not exempt a stationary source from the requirements of R307-401.

R307-401-14. Used Oil Fuel Burned for Energy Recovery.

(1) Definitions.

"Boiler" means boiler as defined in R315-1-1(b).

"Used Oil" is defined as any oil that has been refined from crude oil, used, and, as a result of such use contaminated by physical or chemical impurities.

(2) Boilers burning used oil for energy recovery are exempted from the requirement to obtain an approval order in R307-401-5 through 8 if the following requirements are met:

- (a) the heat input design is less than one million BTU/hr;
- (b) contamination levels of all used oil to be burned do not exceed any of the following values:
  - (i) arsenic—5 ppm by weight,
  - (ii) cadmium—2 ppm by weight,
  - (iii) chromium—10 ppm by weight,
  - (iv) lead—100 ppm by weight,
  - (v) total halogens—1,000 ppm by weight,
  - (vi) Sulfur—0.50% by weight; and
- (c) the flash point of all used oil to be burned is at least 100 degrees Fahrenheit.

(3) Testing. The owner or operator shall test each load of used oil received or generated as directed by the director to ensure it meets these requirements. Testing may be performed by the owner/operator or documented by test reports from the used fuel oil vendor. The flash point shall be measured using the appropriate ASTM method as required by the director. Records for used oil consumption and test reports are to be kept for all periods when fuel-burning equipment is in operation. The records shall be kept on site and made available to the director or the director's representative upon request. Records must be kept for a three-year period.

R307-401-15. Air Strippers and Soil Venting Projects.

(1) The owner or operator of an air stripper or soil venting system that is used to remediate contaminated groundwater or soil is exempt from the notice of intent and approval order requirements of R307-401-5 through 8 if the following conditions are met:

- (a) the estimated total air emissions of volatile organic compounds from a given project are less than the de minimis emissions listed in R307-401-9(1)(a), and
- (b) the level of any one hazardous air pollutant or any combination of hazardous air pollutants is below the levels listed in R307-410-5(1)(c)(i)(C).

(2) The owner or operator shall submit documentation that the project meets the exemption requirements in R307-401-15(1) to the director prior to beginning the remediation project.

(3) After beginning the soil remediation project, the owner or operator shall submit emissions information to the director to verify that the emission rates of the volatile organic compounds and hazardous air pollutants in R307-401-15(1) are not exceeded.

(a) Emissions estimates of volatile organic compounds shall be based on test data obtained in accordance with the test method in the EPA document SW-846, Test #8260c or 8261a, or the most recent EPA revision of either test method if approved by the director.

(b) Emissions estimates of hazardous air pollutants shall be based on test data obtained in accordance with the test method in EPA document SW-846, Test #8021B or the most recent EPA revision of the test method if approved by the director.

(c) Results of the test and calculated annual quantity of emissions of volatile organic compounds and hazardous air pollutants shall be submitted to the director within one month of sampling.

(d) The test samples shall be drawn on intervals of no less than twenty-eight days and no more than thirty-one days (i.e., monthly) for the first quarter, quarterly for the first year, and semi-annually thereafter or as determined necessary by the director.

(4) The following control devices do not require a notice of intent or approval order when used in relation to an air stripper or soil venting project exempted under R307-401-15:

(a) thermodestruction unit with a rated input capacity of less than five million BTU per hour using no other auxiliary fuel than natural gas or LPG, or

(b) carbon adsorption unit.

R307-401-16. De minimis Emissions From Soil Aeration Projects.

An owner or operator of a soil remediation project is not subject to the notice of intent and approval order requirements of R307-401-5 through 8 when soil aeration or land farming is used to conduct a soil remediation, if the owner or operator submits the following information to the director prior to beginning the remediation project:

(1) documentation that the estimated total air emissions of volatile organic compounds, using an appropriate sampling method, from the project are less than the de minimis emissions listed in R307-401-9(1)(a);

(2) documentation that the levels of any one hazardous air pollutant or any combination of hazardous air pollutants are less than the levels in R307-410-5(1)(d); and

(3) the location of the remediation and where the remediated material originated.

R307-401-17. Temporary Relocation.

The owner or operator of a stationary source previously approved under R307-401 may temporarily relocate and operate the stationary source at any site for up to 180 working days in any calendar year not to exceed 365 consecutive days, starting from the initial relocation date. The director will evaluate the expected emissions impact at the site and compliance with applicable Title R307 rules as the bases for determining if approval for temporary relocation may be granted. Records of the working days at each site, consecutive days at each site, and actual production rate shall be submitted to the director at the end of each 180 calendar days. These records shall also be kept on site by the owner or operator for the entire project, and be made available for review to the director as requested. R307-401-7, Public Notice, does not apply to temporary relocations under R307-401-17.

R307-401-18. Eighteen Month Review.

Approval orders issued by the director in accordance with the provisions of R307-401 will be reviewed eighteen months after the date of issuance to determine the status of construction, installation, modification, relocation or establishment. If a continuous program of construction, installation, modification, relocation or establishment is not proceeding, the director may revoke the approval order.

R307-401-19. General Approval Order.

(1) The director may issue a general approval order that would establish conditions for similar new or modified sources of the same type or for specific types of equipment. The general approval order may apply throughout the state or in a specific area.

(a) A major source or major modification as defined in R307-403, R307-405, or R307-420 for each respective area is not eligible for coverage under a general approval order.

(b) A source that is subject to the requirements of R307-403-5 is not eligible for coverage under a general approval order.

(c) A source that is subject to the requirements of R307-410-4 is not eligible for coverage under a general approval order unless a demonstration that meets the requirements of R307-410-4 was conducted.

(d) A source that is subject to the requirements of R307-410-5(1)(c)(ii) or (iii) is not eligible for coverage under a general approval order.

(2) A general approval order shall meet all applicable requirements of R307-401-8.

(3) The public notice requirements in R307-401-7 shall apply to a general approval order except that the director will advertise the notice of intent in a newspaper of statewide circulation.

(4) Application.

(a) After a general approval order has been issued, the owner or operator of a proposed new or modified source may apply to be covered under the conditions of the general approval order.

(b) The owner or operator shall submit the application on forms provided by the director in lieu of the notice of intent requirements in R307-401-5 for all equipment covered by the general approval order.

(c) The owner or operator may request that an existing, individual approval order for the source be revoked, and that it be covered by the general approval order.

(d) The owner or operator that has applied to be covered by a general approval order shall not initiate construction, modification, or relocation until the application has been approved by the director.

(5) Approval.

(a) The director will review the application and approve or deny the request based on criteria specified in the general approval order for that type of source. If approved, the director will issue an authorization to the applicant to operate under the general approval order.

(b) The public notice requirements in R307-401-7 do not apply to the approval of an application to be covered under the general approval order.

(c) The director will maintain a record of all stationary sources that are covered by a specific general approval order and this record will be available for public review.

(6) Exclusions and Revocation.

(a) The director may require any source that has applied for or is authorized by a general approval order to submit a notice of intent and obtain an individual approval order under R307-401-8. Cases where an individual approval order will be required include, but are not limited to, the following:

(i) the director determines that the source does not meet the criteria specified in the general approval order;

(ii) the director determines that the application for the general approval order did not contain all necessary information to evaluate applicability under the general approval order;

(iii) modifications were made to the source that were not authorized by the general approval order or an individual approval order;

(iv) the director determines the source may cause a violation of a national ambient air quality standard; or

(v) the director determines that one is required based on the compliance history and current compliance status of the source or applicant.

(b)(i) Any source authorized by a general approval order may request to be excluded from the coverage of the general approval order by submitting a notice of intent under R307-401-5 and receiving an individual approval order under R307-401-8.

(ii) When the director issues an individual approval order to a source subject to a general approval order, the applicability of the general approval order to the individual source is revoked on the effective date of the individual approval order.

(7) Modification of General Approval Order. The director may modify, replace, or discontinue the general approval order.

(a) Administrative corrections may be made to the existing version of the general approval order. These corrections are to correct typographical errors or similar minor administrative changes.

(b) All other modifications or the discontinuation of a general approval order shall not apply to any source authorized under previous versions of the general approval order unless the owner or operator submits an application to be covered under the new version of the general approval order. Modifications under R307-401-19(7)(b) shall meet the public notice requirements in R307-401-19(3).

(c) A general approval order shall be reviewed at least every three year. The review of the general approval order shall follow the public notice requirements of R307-401-19(3).

(8) Modifications at a source covered by a general approval order. A source may make modifications only as authorized by the approved general approval order. Modifications outside the scope authorized by the approved general approval order shall require a new application for either an individual approval order under R307-401-8 or a general approval order under R307-401-19.

#### **Credits**

KEY: air pollution, permits, approval orders, greenhouse gases

August 7, 2014

Notice of Continuation June 6, 2012

19-2-104(3)(q)

19-2-108

Current through January 1, 2015.

U.A.C. R307-401, UT ADC R307-401

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## **ADDENDUM B**

Findings of Fact, Conclusions of Law, and Proposed Order Regarding Petitioners'  
Motion Requesting Stay of Approval Order



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**BEFORE THE EXECUTIVE DIRECTOR OF THE  
UTAH DEPARTMENT OF ENVIRONMENTAL QUALITY**

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In the Matter of:

Approval Order No. DAQE-AN101230041-13

Holly Refining & Marketing Company –  
Woods Cross, LLC  
Heavy Crude Processing Project  
Project No. N10123-0041

**FINDINGS OF FACT, CONCLUSIONS  
OF LAW, AND PROPOSED ORDER  
REGARDING PETITIONERS'  
MOTION REQUESTING STAY OF  
APPROVAL ORDER**

Administrative Law Judge Bret F. Randall

March 25, 2014

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This matter is before me pursuant to appointment by the Executive Director of the Utah Department of Environmental Quality dated January 9, 2014. The appointment charges me to conduct a permit review adjudicative proceeding in this matter in accordance with Utah Code Ann., § 19-1-301.5 and Utah Admin. Code R305-7.

**Procedural Background**

On November 18, 2013, the Director of the Utah Division of Air Quality (“Director”) issued approval order DAQE-AN101230041-13 (Project Number N10123-0041) (the “AO” or “Permit”) to Holly Refining and Marketing Company, Woods Cross LLC (“Holly”), authorizing the construction of the Heavy Black Waxy Crude Processing Project (“Expansion Project”).

On December 18, 2013, Utah Physicians for a Healthy Environment and FRIENDS of Great Salt Lake (collectively “Utah Physicians”) filed a Request for Agency Action seeking administrative review of the AO, pursuant to Utah Code §§ 19-1-301.5 and 63G-4-201(1)(b), (3) and Utah Admin. Code R305-7-203.

On December 24, 2013, Utah Physicians filed a motion and supporting memorandum requesting a stay of the AO, pursuant to Utah Admin. Code R305-7-217 and Utah Code Ann. § 19-1-301.5. However, because Utah Physicians had not been granted party status and no ALJ

had yet been appointed to this matter, the time for responding to the motion to stay did not begin to run at that time.

On January 16, 2014, I entered an Order on Petition to Intervene, provisionally granting intervention to Utah Physicians for a Healthy Environment and Friends of Great Salt Lake (collectively, "Petitioners"). On the same date, I entered a Notice of Further Proceedings.

Petitioners filed a Corrected Motion and Memorandum Requesting Stay on January 21, 2014 ("Stay Motion"). I deemed that the date of the filing of the corrected motion for stay triggered a new response period for Respondents. The Stay Motion is the subject of the present Proposed Order.

Pursuant to the Utah Code, whenever a motion to stay is filed in a permit review adjudicative proceeding, "the administrative law judge shall: (i) consider a party's motion to stay a permit during a permit review adjudicative proceeding; and (ii) submit a proposed determination on the stay to the executive director." Section 19-1-301.5(15)(c), Utah Code Ann.

Following briefing on the Stay Motion, I granted Respondents' motion for oral argument, with oral argument being held on March 6, 2014. All parties appeared and participated in oral argument, which was of record through a court reporter.

Having heard argument on the Stay Motion, and being fully advised in the premises, and pursuant to Section 19-1-301.5(15)(c), Utah Code Ann., this tribunal enters the following proposed Findings of Fact and Conclusions of Law, and proposed determination that the Executive Director of the Utah Department of Environmental Quality ("DEQ") deny Petitioners' Stay Motion for the reasons set forth herein.

## **FINDINGS OF FACT**

### **Regulatory Background**

1. Air pollution is harmful to human health and to the environment. [IR at 009140-48; IR at 009139-45; IR at 009144-45; IR at 009145-47.]

2. In enacting the Utah Air Conservation Act, the Utah Legislature declared: "It is the policy of this state and the purpose of [the Utah Air Conservation Act] to achieve and maintain levels of air quality which will protect human health and safety, and to the greatest degree practicable, prevent injury to plant and animal life and property, foster the comfort and convenience of the people, promote the economic and social development of this state, and facilitate the enjoyment of the natural attractions of this state." Section 19-2-101(2), Utah Code Ann.

3. The Utah Legislature further declared that the "purpose" of the Utah Air Conservation Act is to "(a) provide for a coordinated statewide program of air pollution prevention, abatement, and control; (b) provide for an appropriate distribution of responsibilities among the state and local units of government; (c) facilitate cooperation across jurisdictional lines in dealing with problems of air pollution not confined within single jurisdictions; and (d) provide a framework within which air quality may be protected and consideration given to the public interest at all levels of planning and development within the state." Section 19-2-101(4), Utah Code Ann.

4. Similarly, in enacting the Clean Air Act, the Congress found, among other things:  
**(2)** that the growth in the amount and complexity of air pollution brought about by urbanization, industrial development, and the increasing use of motor vehicles, has resulted in mounting dangers to the public health and welfare, including

injury to agricultural crops and livestock, damage to and the deterioration of property, and hazards to air and ground transportation; [and]

(3) that air pollution prevention (that is, the reduction or elimination, through any measures, of the amount of pollutants produced or created at the source) and air pollution control at its source is the primary responsibility of States and local governments . . . .

42 U.S.C. § 7401(a).

5. Congress also stated that the “primary goal” of the Clean Air Act is to “encourage or otherwise promote reasonable Federal, State, and local governmental actions . . . for pollution prevention.” 42 U.S.C. § 7401(c).

#### **Permit Chronology**

6. In May of 2012, Holly Refining & Marketing Company – Woods Cross, LLC (“Holly”) submitted a notice of intent (“NOI”) to DAQ requesting an approval order to expand its Woods Cross refinery and modernize certain equipment in a way that allowed Holly to process an additional 20,000 barrels per day of black wax crude from the Uintah Basin in eastern Utah (“May NOI”). [May NOI at IR000049-001108.]

7. In response to DAQ’s request to provide additional information, Holly re-submitted its NOI in July of 2012 (“July NOI”). [July NOI at IR002798-003590.]

8. Following its technical and legal evaluation of the July NOI and related evidence, DAQ released for public comment an Intent to Approve (“First ITA”), dated November 28, 2012. The First ITA included a draft Approval Order. [First ITA at IR001967-001996.]

9. During the initial 60-day public comment period, DAQ received comments from Western Resource Advocates on behalf of Utah Physicians for a Healthy Environment (“UPHE”) and Friends of Great Salt Lake (“Friends”) [IR004007-004035], Blaine Rawson on behalf of Mark J. Hall [IR004202-004217], Alexander Sagady on behalf of UPHE [IR009046-009135],

the Environmental Protection Agency (“EPA”) [IR004001-004005], and Holly [IR003757-003910].

10. In April 2013, Holly submitted a new netting analysis in a revised NOI. [Revised NOI at IR007335-007395.]

11. In addition to certain other changes, the Revised NOI estimated PM<sub>2.5</sub> emissions from Holly’s gas-fired heaters and boilers based on the EPA’s National Emission Inventory (“NEI”) data. [*Id.*]

12. Following its technical and legal evaluation of the Revised NOI and related evidence, DAQ released, on June 5, 2013, for a second public comment period an Intent to Approve document (“Second ITA”) and a Source Plan Review (“SPR”). [Second ITA at IR007498-007499, SPR at IR008480-008575.]

13. On July 25, 2013, DAQ received comments on the draft approval order from Western Resource Advocates on behalf UPHE [IR007842-007997], Blaine Rawson on behalf of Mark J. Hall [IR008579-008602], Alexander Sagady on behalf of Petitioners [IR009046-009135], the EPA [IR007840-007841], and Holly [IR007613-007836].

14. Following its review and evaluation of the foregoing information and comments, on November 6, 2013, DAQ requested additional information from Holly that DAQ believed was necessary in order to fully consider the pending comments and evidence. Holly responded to DAQ’s request for additional information on November 7, 2013. [IR008021, IR008022-0052.]

15. After considering the supplemental information provided by Holly, on November 18, 2013, DAQ issued Holly a new approval order authorizing the construction of the Modernization Project (“Holly AO”). [Holly AO at IR009223-009254.]

16. Concurrently therewith, DAQ issued a Response to Comments Memorandum (“Response Memorandum”) that addressed the comments made during the public comment periods, explained DAQ’s response to those comments, and, where appropriate, described how the comments had been incorporated into the Holly AO. [Response Memorandum at IR009174-009222.]

17. On December 18, 2013, Petitioners filed their Request for Agency Action. On January 22, 2014, Petitioners filed their Amended Motion and Memorandum Requesting a Stay of the Approval Order. Oral argument was held on the Stay Motion on March 6, 2014.

#### **DAQ’s Permit Review**

18. In their Stay Motion, Petitioners challenge three portions of the Holly AO: (1) the use of the NEI emission factors to estimate PM<sub>2.5</sub> emissions from Holly’s new gas-fired heaters and boilers; (2) the calculated coke burn rate for Holly’s proposed Fluid Catalytic Cracking Unit (“FCC Unit 25”), and (3) the calculated reduction of PM<sub>2.5</sub> emissions from the removal of Holly’s existing propane pit flare. [Stay Motion, p. 15-37.]

19. DAQ determined that use of the NEI emission factors to calculate PM<sub>2.5</sub> emissions from the new heaters and boilers was appropriate because (1) there was substantial evidence in the record supporting the accuracy of these emission factors to estimate PM emissions from gas-fired heaters and boilers, as explained in the two reports from Glenn England [See Glen England Reports at IR007238-007258, IR008024-008044; *see also* Response Memorandum at IR009215-009216]; (2) DAQ had imposed a stack testing requirement in the Holly AO to verify that the emission factors were an accurate representation of actual emissions [Response Memorandum at IR008129-008131]; and (3) DAQ imposed a limit derived from the NEI factors into the final Holly AO that is binding on Holly during all operations of the Woods

Cross refinery [Holly AO, Section II.B.7.a.2 at IR009248; *see also* Response Memorandum at IR009217].

20. DAQ determined that regardless of whether there were other alternative emission factor calculations for heaters and boilers that yielded higher estimates, Holly would be subject to an enforceable PM<sub>10</sub> emission limit of 0.00051 lb/MMBtu, derived from the NEI emission factors. [See Response Memorandum IR008130.] DAQ reasoned that any failure by Holly to comply with that emission limit would result in compliance violations, which would ensure that Holly would not contribute a significant increase of PM as a result of the expansion. [*Id.*]

21. DAQ determined that 40 C.F.R. § 60.14 did not require the use of the older AP-42 emission factors, as Petitioners argued, to calculate Holly's PM<sub>2.5</sub> emissions from the heaters and boilers because that regulation only applies to determining applicability of the New Source Performance Standards, "which [is] separate from the New Source Review regulations that are relevant to this permitting process." [Response Memorandum at IR008130.] Moreover "EPA guidance states that sources other than the AP-42 emission factors may be used in determining emissions for PSD/NSR emissions...including '[e]mission factors from technical literature.'" [*Id.* (second alteration in original) (quoting EPA New Source Review Workshop Manual, Prevention of Significant Deterioration and Nonattainment Area Permitting, draft dated October 1990 at A.22).]

22. With respect to the PM<sub>2.5</sub> emission reduction of 2.19 tons per year ("tpy") from the decommissioning of Holly's propane pit flare, which Petitioners claimed was inaccurately high, the Revised NOI reflects that Holly and DAQ calculated this emission reduction using the actual emission inventory data on file at DAQ for the years 2008 and 2009. [Revised NOI at IR007339; Response Memorandum at IR009218 ("flare emissions came from the UDAQ

inventory record for reported actual emissions from 2008-2009 based on 259 MMBtu/hr and actual throughput data”).]

23. As to the coke burn rate for Holly’s proposed FCC Unit 25, which Petitioners claimed was inaccurately low, the emission calculations Holly provided to DAQ indicate that the rate was calculated based on actual emission data from the current FCC Unit 4, a larger unit than the proposed FCC Unit 25, and thus was a conservatively high estimate of expected emissions from the FCC Unit 25. [IR008052; *see also* Holly AO at IR009227-009229 (The FCC Unit 4 processes 8,880 barrels per day (“bpd”) while the proposed FCC Unit 25 can only process 8,500 bpd.)]

24. Regardless of the coke burn rate, DAQ concluded that the FCC Unit 25 is subject to a specific PM<sub>10</sub> limit of 0.30lb/1000 lb. of coke burned, which is limited by the 8,500 bpd operating capacity, and is also subject to the overall PM<sub>10</sub> emission cap of 47.5 tpy and 0.13 tons per day (“tpd”) for combustion sources. [Response Memorandum at IR009219.] “If these limitations are not met, the refinery will be out of compliance until it remedies the problem with additional control equipment or redesign of the system until it meets these limits.” [*Id.*]

25. DAQ rejected Petitioners’ calculation of coke burn based on the Universal Oil Products yield estimates because they “provided no documents or primary data to support or detail [] which estimate, if any, was used to derive the suggested range of coke burn estimates.” [Response Memorandum at IR009219.] “Based on UDAQ’s technical experience and expertise,” DAQ determined that “the 6200 lb/hr value is a fair and reasonable estimate of the quantity of coke burn in FCC Unit 25.” [*Id.*]



### **Impacts of Modernization Project Construction**

26. The Conrad Jenson Declaration submitted with Holly's opposition to the Stay Motion ("Jenson Declaration") is the most recent evidence of Holly's present construction schedule. In light of the procedural history recited above, the earlier construction timetable estimates are deemed to be updated by the facts as set forth in the Jenson Declaration, which are credited and treated as true for the purposes of this proposed order.

27. According to the Jenson Declaration, Holly's first phase of construction will not be fully installed and operational until the fall of 2015. [Exhibit A to Holly's Opposition to Petitioners Motion Requesting Stay of Approval Order ¶ 9.]

28. "[D]uring the construction of Phase I, there will not be any increase in emissions until completion of Phase I in the fall of 2015." [*Id.* ¶ 10.]

29. As confirmed by the parties during oral argument, this permit review adjudicative proceeding is expected to be fully briefed by July 9, 2014. [See Corrected Stipulated Order Regarding Response to Request for Agency Action and Subsequent Deadlines, dated February 19, 2014.] Oral argument likely will be scheduled before the end of July 2014 and a recommended order will likely be prepared for the Executive Director as soon as possible after oral argument, certainly by the end of September 2014. [See Stay Motion Hearing Transcript at p. 14-16.] During this time, it is undisputed that there will be no increase in emissions from the Holly refinery due to the Modernization Project, and no emissions for at least a year beyond the proposed adjudicative proceeding timeline. [Jenson Declaration ¶ 10.]

30. Holly has already incurred approximately \$48,000,000 in costs for preliminary activities in preparation for construction. [*Id.* ¶ 6.]

31. Holly commenced construction on the Expansion Project after receiving the Holly AO. [*Id.* ¶ 7.]

32. The overall costs of the Modernization Project are anticipated to be approximately \$700 to \$800 million, with approximately \$300 million allocated to Phase I and the remaining approximate \$400 to \$500 million allocated to Phase II. These estimated costs represent design/engineering, materials, and construction costs. [*Id.* ¶ 11.]

33. If the Holly AO is stayed and construction stopped, it is undisputed that Holly would experience significant demobilization and remobilization costs. According to the Jenson Declaration, the demobilization costs include hourly pay rates for the remaining contract workers who will need to secure construction equipment and the construction site safely during the stay period. It also includes costs of equipment storage. Remobilization costs would include similar expenses for restarting work that had been stopped. If construction is stayed, Holly's main contractor would charge a minimum of \$625,000 per month for such delays. These figures do not account for lost profits or additional harm of further delay on the overall project schedule. [*Id.* ¶ 13.]

34. Delays in the Project are directly correlated with lost revenue that Holly would have generated if it were able to process the increased number of barrels of crude on schedule. For every month Holly is unable to process additional crude, it anticipates a loss of approximately \$10,000,000. [*Id.* ¶ 15.]

35. During Phase I and Phase II of construction, Holly anticipates up to 500 people at any given time on site fulfilling construction jobs related to the project. [*Id.* ¶ 17.]

36. After Phase I of the Modernization Project is completed, Holly anticipates a 25% increase in permanent jobs at the Woods Cross refinery. After completion of Phase II, Holly

anticipates another 25% increase in permanent jobs. This is a 50% overall increase in permanent jobs at the refinery. [*Id.* ¶ 18.]

37. Overall, the Modernization Project will create a public benefit through job creation, increased state and local taxes, and capital infusion and investment in Davis County, as well as benefits from increased crude production within the state of Utah. These benefits will be delayed or may be lost if Holly is forced to stop construction on the Project. [*Id.* ¶ 19.]

38. The Modernization Project may also result in a number of calculated emission reductions at the Holly refinery, including a reduction in NO<sub>x</sub> by 21.53 tpy, a reduction in SO<sub>2</sub> by 150.69 tpy, and a reduction in VOC by 17.02 tpy. [IR007575.] DAQ has determined that these pollutants are precursors to PM<sub>2.5</sub> and major contributors to wintertime inversions in the Salt Lake Valley. [Utah State Implementation Plan, § IX.A, dated December 4, 2013, § 1.6.] According to the recent Utah State Implementation Plan for PM<sub>2.5</sub>, reductions in these pollutants would have the secondary effect of reducing wintertime PM<sub>2.5</sub> levels. [*Id.*]

39. Based on the evidence, these emission reductions are the result of voluntary pollution control strategies that Holly has proposed for the Modernization Project and that are incorporated in the Holly AO. [See SPR at IR008564, IR008568-008569; *see also* IR007335.] These reductions fall into five different categories:

- a. Holly will install a new wet gas scrubber as part of the new FCC Unit 25 and will route its existing gas streams that presently are emitted after treatment in an existing sulfur recovery unit (“SRU”) through that wet gas scrubber, reducing overall SO<sub>2</sub> emissions [See July NOI IR002812, 002821, 002823-002824.];

- b. Holly will remove both its propane pit flare and the frozen earth propane pit storage facility, which will reduce NO<sub>x</sub> and VOC emissions, respectively [See July NOI at IR002828, 003035];
- c. Holly will replace four gas-driven compressor engines with electric engines, which will reduce NO<sub>x</sub> emissions [See Revised NOI at IR007335];
- d. Holly will add selective catalytic reduction technology to three current heaters and boilers, further reducing NO<sub>x</sub> emissions [See Source Plan Review at IR008551; Holly AO at IR009248]; and
- e. Holly will be subject to overall, refinery-wide emissions limitation reductions for PM<sub>10</sub>, NO<sub>x</sub>, and SO<sub>2</sub>. [See Holly AO at IR009225.]

40. Based on the evidence of record, if the Holly AO is stayed or remanded, these emission control strategies will either be delayed or will not be implemented because they are approved and authorized by the Holly AO. [See SPR at IR008564, IR008568-008569; *see also* IR007335.]

### **CONCLUSIONS OF LAW**

1. This is a permit review adjudicative proceeding pursuant to Utah Code § 19-1-301.5 and Utah Admin. Code R305-7.

2. The Stay Motion is governed by Section 19-1-301.5(15), Utah Code Ann., providing:

(a) The filing of a request for agency action does not stay a permit or delay the effective date of a permit.

(b) A permit may not be stayed or delayed unless a stay is granted under this Subsection (15).

(c) The administrative law judge shall:

(i) consider a party's motion to stay a permit during a permit review adjudicative proceeding; and

(ii) submit a proposed determination on the stay to the executive director.

(d) The administrative law judge may not recommend to the executive director a stay of a permit, or a portion of a permit, unless:

(i) all parties agree to the stay; or

(ii) the party seeking the stay demonstrates that:

(A) the party seeking the stay will suffer irreparable harm unless the stay is issued;

(B) the threatened injury to the party seeking the stay outweighs whatever damage the proposed stay is likely to cause the party restrained or enjoined;

(C) the stay, if issued, would not be adverse to the public interest; and

(D) there is a substantial likelihood that the party seeking the stay will prevail on the merits of the underlying claim, or the case presents serious issues on the merits, which should be the subject of further adjudication.

3. In order to prevail on the Stay Motion, Petitioners must satisfy all four of the statutory elements listed above. Failure to satisfy even one element is fatal to the Stay Motion. *See Utah Med. Prods. Inc. v. Searcy*, 958 P.2d 228, 231 (Utah 1998).

4. Petitioners' burden to satisfy the four factors listed above is more stringent under Utah Code Section 19-1-301.5 than under the analogous state (or federal) procedural stay standards. Utah Code Section 19-1-301.5 represents statutory language enacted by the Utah Legislature. By contrast, the law governing interlocutory relief in state and federal courts is primarily judge-made common law, guided by procedural rules. In Utah, the rules of civil procedure do not rise to the level of statutory law but are promulgated and regulated by the Utah Supreme Court. Section 78A-3-103, Utah Code Ann. The express statutory language provides

governing stays in permit review adjudicative proceedings states that the ALJ “may not” recommend a stay of a permit “unless” the moving party establishes all four statutory elements. By contrast, Rule 65A of the *Utah Rule of Civil Procedure* begins with a neutral presumption and simply provides that a court “may issue” an injunction upon a showing of four elements. *See* Utah R. Civ. P. 65A(e) (“A restraining order or preliminary injunction may issue only upon a showing that . . .”). This permissive language is consistent with the touchstone of interlocutory relief in state and federal courts: the broad discretion afforded state and federal judges. *See Southwest Stainless, LP v. Sappington*, 582 F.3d 1176, 1191 (10th Cir. 2009) (“The district court’s discretion in [granting an injunction] is necessarily broad . . .”); *Purkey v. Roberts*, 2012 UT App 241, ¶ 21, 285 P.3d 1242 (“Ultimately, the decision of whether to issue an injunction remains within the discretion of the trial court.”). It is also worth noting that the federal courts of appeals have articulated differing versions of the discretionary, balancing tests applicable to interlocutory orders. However, these legal tests relate to a trial judge’s discretion and are therefore not directly applicable here in light of the clear and unambiguous requirement in the Utah Code that the moving party prove the application of all four statutory standards.

5. Based on the foregoing and without limiting the potential discretion of the Executive Director in granting preliminary injunctive relief in permit review adjudicative proceedings, it is clear that the Utah Legislature employed mandatory language that is not found in the analogous federal and state procedural rules and case law. As a result, the state and federal cases governing stays and injunctive relief, while important to consider, also apply less stringent legal standards than the Utah Legislature has directed be applied to the Stay Motion. Analysis of the following factors is therefore undertaken in light of the more stringent statutory standard established by the Utah Legislature.

### **Irreparable Harm**

6. Irreparable harm being the *sine qua non* of interlocutory relief, the moving party has a particularly heavy burden to prove it. *Dominion Video Satellite, Inc. v. Echostar Satellite Corp.*, 356 F.3d 1256, 1260 (10th Cir. 2004) (noting that the irreparable harm factor is the “single most important prerequisite for the issuance of a preliminary injunction”) (internal quotations and citation omitted); *accord, Sys. Concepts, Inc. v. Dixon*, 669 P.2d 421, 427 (Utah 1983); *see also New York v. NRC*, 550 F.2d 745, 753 (2d Cir. 1977). Irreparable harm must be non-speculative and imminent: there must be evidence supporting a conclusion that irreparable harm will, in fact, occur if the relief is not granted. *See Direx Israel, Ltd. v. Breakthrough Medical Corp.*, 952 F.2d 802 (4<sup>th</sup> Cir. 1991).

7. In the context of a permit review adjudicative proceeding, the irreparable harm must necessarily relate to the period of time between the date of the motion for stay and the final determination on the merits. This conclusion is particularly important in the instant proceeding, where no evidentiary hearing or trial is provided. In an analogous situation, Judge Posner wrote: “When persons harmed by administrative action bring a suit for injunction in a federal district court, it is not because they want, or are entitled to, a trial.” *Cronin v. United States Dep’t of Agriculture*, 919 F.2d 439, 443 (7th Cir. 1990). Rather, he continued, such persons are entitled to judicial review of the agency action, applying the standard touchstones of administrative law. *Id.* After considering the legal standards that might be applied to that case, involving a Forest Service decision to allow for the cutting of timber on federal land, Judge Posner concluded: “But all this assumes that the decision whether to grant or deny the preliminary injunction is preliminary to a full hearing on the plaintiff’s claim. If it is not[, then] the two stages are

collapsed into one because there will never be a fuller hearing . . . .” Id. at 445. *See also Rodriguez ex rel. Rodriguez v. DeBuono*, 175 F.3d 227, 235 (2d Cir. 1998) (noting that a petitioner must show that “the harm . . . [is] so imminent as to be irreparable if a court waits until the end of trial to resolve the harm.”). Stated differently, “if a trial on the merits can be conducted before the injury would occur there is no need for interlocutory relief.” 11A Charles Alan Wright, Arthur R. Miller & Mary Kay Kane, *Federal Practice & Procedure* § 2948.1, at 129 (3d ed. 2013). Such is certainly the case in these proceedings: the decision on the merits will be rendered prior to the time that the Expansion Project begins operation.

8. Petitioners have failed to carry their burden of proof that they will suffer irreparable harm if the Permit is not stayed prior to the time that the review on the merits is completed in this matter. The record supports the finding that hearing and determination on the merits in this case will be completed by the end of the summer of 2014, long before the Expansion Project is operational, being the fall of 2015 at the earliest. [Jenson Declaration ¶ 10.] If Petitioners are successful on their claims on the merits, then the proper remedy would be to remand to the Director to reconsider the Permit. In that event, the Petitioner would not have the Permit necessary to operate the Expansion Project as required by the Utah Air Conservation Act and the Clean Air Act (“CAA”). The requested injunctive relief would therefore be self-enforcing and no claimed irreparable harm could result.<sup>1</sup> If Petitioners’ claims fail on the merits, then injunctive relief would not be warranted in any event.

---

<sup>1</sup> This conclusion is an important consideration here because the case law cited by Petitioners supporting the Stay Motion is distinguishable from the case at bar. Here, success on the merits would itself result in a self-enforcing injunction, inasmuch as the Permit is required in order for Holly to operate the Expansion Project in the first instance. Thus, this matter is distinguishable from *Davis v. Mineta*, 302 F3d 1104 (10<sup>th</sup> Cir. 2002), where construction of the highway project in question without proper wetland fill permits under the Clean Water Act may have caused irreparable harm.



9. Petitioners have failed to carry their burden of proof that “bureaucratic momentum” will result in irreparable harm prior to the time that hearing on the merits is completed. There is no evidence to support any such conclusion. Moreover, the instant permit review adjudicative proceeding is easily distinguishable from the cases cited by Petitioners, supporting their “bureaucratic momentum” argument for irreparable harm. Here, the provisions of the CAA impose substantive requirements on Holly within the permitting process or upon a remand. *See Sierra Club v. Marsh*, 872 F.2d 497, 503 (1st Cir. 1989) (holding that where a statute substantively “require[s] the agency to change direction,” such as the Clean Water Act at issue in *Weinberger v. Romero-Barcelo*, 456 U.S. 305 (1982), or the Alaska National Interest Lands Conservation Act in *Amoco Prod. Co. v. Village of Gambell*, 480 U.S. 531 (1987), “bureaucratic commitment to a project” does not constitute irreparable harm). Indeed, the one case to address the “bureaucratic commitment” theory in the context of the CAA permitting process expressly rejected the argument. *Sierra Club v. Larsen*, 769 F. Supp. 420 (D. Mass. 1991), *aff’d* 2 F.3d 462 (1st Cir. 1993). The National Environmental Protection Act (“NEPA”) case law upon which Petitioners rely for their “bureaucratic momentum” argument is simply inapplicable in this case. *See Marsh*, 872 F.2d at 503; 15 U.S.C. § 793(c)(1) (“No action taken under the CAA shall be deemed a major federal action significantly affecting the quality of the human environment within the meaning of the National Environmental Policy Act.”). Stated differently, under the CAA, Holly is required to have, maintain, and follow a legal and valid permit in order to operate the Expansion Project. This scenario is easily distinguishable from a NEPA situation, where the law requires, and only requires, that full consideration of the environmental impacts of all applicable options be undertaken and completed *before the “federal action” can be initiated*. More specifically, the principle in *Sierra Club* that a violation of NEPA

constitutes an irreparable injury rests on NEPA's purpose to foster informed decision-making. *Sierra Club*, 872 F.2d at 500. In the context of NEPA, irreparable harm to the environment, almost by definition, occurs because uninformed decisionmakers commit themselves to a course of action that rarely can be undone given "a chain of bureaucratic commitment that will become progressively harder to undo the longer it continues." *Id.* Such considerations are not applicable here, where the substantive requirements of the CAA will continue to have prospective application.

10. Petitioners' failure to carry their burden of proof as to irreparable harm is dispositive to the Stay Motion. However, analysis of the remaining factors is warranted.

#### **Likelihood of Success on the Merits**

11. Petitioners raise three issues in their Stay Motion regarding the merits: (1) the assertion that DAQ erred in allowing the use of the NEI emission factors to calculate PM<sub>2.5</sub> emissions from Holly's gas-fired heaters and boilers; (2) the assertion that Holly overestimated the PM<sub>2.5</sub> emission reductions that will be realized through the decommissioning of the propane pit flare; and (3) the assertion that DAQ underestimated the coke burn rate from the FCC Unit 25, which Petitioners argue will result in higher PM<sub>2.5</sub> emissions. [Stay Motion pp. 15-37.]

12. The merits have not yet been fully briefed and argued by the parties.

13. DAQ is granted substantial discretion to interpret its governing statutes and rules. *See* Utah Code § 19-1-301.5(14)(c) (expressly "recognizing that [DAQ] has been granted substantial discretion to interpret its governing statutes and rules"). Moreover, Section 19-1-301.5 instructs that DAQ's factual, technical and scientific determinations should be upheld if they are supported by substantial evidence in the record. Utah Code § 19-1-301.5(14)(c).

14. Solely for purposes of this Recommended Order, I conclude that Petitioners have failed to carry their burden of showing that they are likely to succeed on the merits, or that the case presents serious issues on the merits, which should be the subject of further adjudication. Carrying this burden here requires a showing that DAQ abused its discretion or lacked substantial evidence to support its factual, technical and scientific determinations in connection with the Permit.

15. In reaching Conclusion No. 14, I rely in large part on the independent determination of EPA that the Permit is acceptable, notwithstanding Petitioners' objections. *See* EPA Comment Letters [IR004001-004005; IR007840-007841]. In *Alaska Dep't of Env'tl. Conservation v. EPA*, 540 U.S. 461, 124 S. Ct. 983 (2004), the U.S. Supreme Court held that EPA is entitled to review the reasonableness of state permitting authorities' BACT determinations under the PSD program and has authority to issue stop construction orders if it reasonably believes that a BACT designation is erroneous or unreasonable. The CAA also provides EPA with concurrent enforcement authority that is directly applicable to the present proceeding. 42 U.S.C. §§ 7477, 7413(a)(5)(A) (describing the enforcement options available to the EPA when it finds that a state is not complying with any requirement of the CAA with respect to construction of a new source or modification of an existing source). *See* Jennifer A. Davis Foster, Note, EPA Oversight in Determining Best Available Control Technology: The Supreme Court Determines the Proper Scope of Enforcement, 69 Missouri L. Rev., Issue 4, at 1 (Fall 2004). Based on the foregoing, it is clear that if in EPA's independent judgment, any of the objections and issues Petitioners have raised on the merits were deserving of further evaluation, comment, or reconsideration, EPA had an independent duty and authority to pursue such issues. EPA declined to do so even after being given the opportunity in connection with the Permit.

16. In this permit review adjudicative proceeding, we have a somewhat unusual situation in administrative law where not one but two regulatory agencies with significant technical expertise and concurrent (and somewhat overlapping) legal jurisdiction have been involved in the procedural and substantive process that led to the issuance of the Permit. This situation provides a second layer of regulatory oversight to ensure that the applicable procedural and substantive requirements of the CAA, as adopted and enforced through the Utah Air Conservation Act in the spirit of “cooperative federalism,” have been met. Solely for purposes of the Stay Motion, therefore, I conclude that EPA’s independent review and acceptance of the Permit demonstrates that Petitioners do not have a substantial likelihood of success on the merits or that the case presents serious issues on the merits, which should be the subject of further adjudication

17. Petitioners’ failure to carry their burden of proof as to success on the merits should, standing alone, be dispositive of the Stay Motion.

#### **Public Interest**

18. Air pollution is harmful to humans and ecological receptors. Thus, it is self-evident that the public interest is served by reduction and elimination of air pollution. Under our system, however, a source’s compliance with the requirements set forth in the CAA, as implemented through the Utah Air Conservation Act and related rules and regulations, satisfies, as a matter of law, the public policy of protection of human health and the environment from exposures to air pollution.

19. Petitioners have failed to make a showing of cognizable harm that will occur during the pendency of these proceedings unless the Holly AO is stayed. As a result, they have failed to show that the public interest favors a stay.

20. To the extent that a violation of the CAA and other applicable law may have occurred in connection with the Permit, the instant proceedings will be concluded prior to the time that the Expansion Project begins operation. And in the event that Petitioners are successful on the merits, injunctive relief, in a sense, would be self-executing since a valid permit is required to operate the Expansion Project in the first instance. Hence, I find that the public interest is adequately protected by compliance with the existing permitting requirements set forth in the Utah Air Conservation Act and the CAA.

21. The record also shows that the Holly AO will result in substantial emission reductions in SO<sub>2</sub>, NO<sub>x</sub>, and VOCs, which are precursors to PM pollution along the Wasatch Front. The Holly AO will also lower refinery-wide emissions limits for PM<sub>10</sub>, NO<sub>x</sub>, and SO<sub>2</sub>. Staying the Holly AO will delay implementation of pollution control technologies that will result in these emission reductions, harming the public interest.

22. Finally, the public interest also extends to the economic activity, including jobs the Modernization Project design and construction will generate. This undisputed factor weighs against the Stay Motion.

23. Petitioners' failure to establish that the Stay Motion is in the public interest should be dispositive of the Stay Motion.

#### **Balance of Harms**

24. Petitioners have failed to carry their burden to show that the balance of harms tips in their favor.

25. The increased emissions about which Petitioners complain will not occur until after construction is completed in 2015, long after determination on the merits is completed. By

contrast, a stay would result in the immediate cessation of design and construction activities for the Expansion Project, resulting in the undisputed harms that are of record.

26. Finally, if Petitioners are successful on the merits, injunctive relief would be self-executing as discussed above. The balance of the harms, therefore, does not tip in Petitioners' favor.

27. Petitioners' failure to carry their burden to demonstrate that the balance of harms tips in their favor should be dispositive of the Stay Motion.

**PROPOSED ORDER**

Based on the forgoing, I recommend that the Executive Director deny the Stay Motion.

DATED this 25<sup>th</sup> day of March, 2014.



BRET F. RANDALL  
Administrative Law Judge

**CERTIFICATE OF SERVICE**

I HEREBY CERTIFY that on the 25<sup>th</sup> day of March 2014, I served the foregoing  
**FINDINGS OF FACT, CONCLUSIONS OF LAW AND RECOMMENDED ORDER  
REGARDING PETITIONERS' MOTION REQUESTING STAY OF APPROVAL  
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/s/ Bret F. Randall, ALJ



## **ADDENDUM C**

Order Adopting AJL's Proposed Order and Denying Petitioners' Request for Stay



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**BEFORE THE EXECUTIVE DIRECTOR  
OF THE UTAH DEPARTMENT OF ENVIRONMENTAL QUALITY**

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**In the Matter of:**

**Approval Order No.  
DAQE-AN101230041-13**

**Holly Refining & Marketing Company—  
Woods Cross, LLC  
Heavy Crude Processing Project  
Project Number: N10123-0041**

**ORDER ADOPTING ALJ'S PROPOSED  
ORDER  
and  
DENYING PETITIONERS' REQUEST  
FOR STAY**

**Amanda Smith  
Executive Director  
Department of Environmental Quality**

May 8, 2014

---

This matter is before me based on the Administrative Law Judge's proposed determination on a motion for stay in this matter. For the reasons set forth herein, I hereby adopt the March 25, 2014 Proposed Order regarding Petitioners' Motion Requesting Stay of Approval Order.

**Findings of Fact**

1. On November 18, 2013, the Director of the Utah Division of Air Quality issued Approval Order DAQE-AN101230041-13 (Project Number N10123-0041) (hereafter "AO") to Holly Refining and Marketing Company, for the construction of the Heavy Black Waxy Crude Processing Project.

2. On December 18, 2013, Petitioners Utah Physicians for a Health Environment and Friends of the Great Salt Lake (hereinafter "Utah Physicians") filed a Request for Agency Action (RFAA) seeking a review of the AO pursuant to Utah Code §§19-1-301.5 and 63G-4-201(1)(b) and Utah Admin. Code R305-7-203.

3. On January 9, 2014, I appointed Bret F. Randall as the Administrative Law Judge (ALJ) in this matter pursuant to Utah Code Ann., §19-1-301.5(5). I charged the ALJ to conduct a permit review adjudicative proceeding in accordance with Utah Code Ann., §19-1-301.5 and Utah Admin. Code R305-7.

4. On December 21, 2013, Utah Physicians filed a motion and supporting memorandum requesting a stay of the AO pending a full hearing on the merits pursuant to Utah Code Ann., §19-1-301.5(15) and Utah Admin. Code R305-7-217. Petitioners filed a Corrected Motion and Memorandum Requesting Stay on January 21, 2014.

5. Following extensive briefing on the motion to stay by the Parties, the ALJ heard oral argument on March 6, 2014. The hearing was transcribed by a court reporter.

6. On March 25, 2014, pursuant to Utah Code Ann., §19-1-301.5(15)(c), the ALJ issued proposed findings of fact (including references to the initial administrative record) conclusions of law and a proposed order recommending that the Executive Director deny the petitioners' motion to stay.

7. The ALJ's findings of fact (including references to the initial administrative record) address the: regulatory background; permit chronology; DAQ's permit review; and impacts of modernization project construction. The ALJ's conclusions of law address each of the four statutory elements required for a stay. The required statutory elements were briefed and argued by the parties at the March 6, 2014 hearing.

8. On April 8, 2014, Utah Physicians submitted comments on the ALJ's proposed order. The following memoranda were subsequently filed on April 15, 2014 in response to Utah Physicians' comments: Holly's Response to Utah Physicians' Comments on ALJ's Recommended Order Re: Petitioners' Request for a Stay of Approval Order; and the Utah

**Division of Air Quality's Response to Utah Physicians' Comments on ALJ's Recommended Order Regarding Stay of Approval Order.**

9. The points raised by Holly and DAQ in response to Utah Physicians' comments confirm that the comments repeat points previously briefed and argued at the time of the hearing on the stay. The ALJ has addressed each of those points in his proposed order.

**Conclusions of Law**

10. Whenever a motion to stay is filed in a permit review adjudicative proceeding, the ALJ shall: (i) consider a party's motion to stay a permit review adjudicative proceeding; and (ii) submit a proposed determination on the stay to the Executive Director. Utah Code Ann., §19-1-301.5(15)(c).

11. Utah Code Ann., §191-301.5(15)(d) provides that the ALJ may not recommend to the executive director a stay of a permit, or a portion of a permit, unless: (i) all parties agree to the stay; or (ii) the party seeking the stay demonstrates that:

- (A) the party seeking the stay will suffer irreparable harm unless the stay is issued;
- (B) the threatened injury to the party seeking the stay outweighs whatever damage the proposed stay is likely to cause the party restrained or enjoined;
- (C) the stay, if issued would not be adverse to the public interest; and
- (D) there is a substantial likelihood that the party seeking the stay will prevail on the merits of the underlying claim, or the case presents serious issues on the merits, which should be the subject of further adjudication.

The Parties did not stipulate to a stay and the Petitioners must, therefore, demonstrate compliance with all of the four statutory elements.

12. The ALJ's findings of fact and conclusions of law address each of the elements necessary for a stay and establish that based on the record then before the ALJ, the Petitioners have failed to carry their burden of proof on the statutory elements required for a stay.

### **Order**

I have reviewed the proposed findings of fact, conclusions of law and proposed determination. I have also reviewed the comments and responses to comments submitted by the parties regarding the ALJ's proposed determination. Based on the ALJ's review and evaluation, I am persuaded that the petitioners have failed to meet the statutory elements required for a stay. I therefore adopt the ALJ's findings of fact, conclusions of law and proposed order, and I deny the Petitioners' motion for stay.

Dated this 8th day of May, 2014

A handwritten signature in cursive script, appearing to read "Amanda Smith", written over a horizontal line.

Amanda Smith, Executive Director  
Department of Environmental Quality  
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**CERTIFICATE OF SERVICE**

I hereby certify that on this 8<sup>th</sup> day of May, 2014, the foregoing **ORDER ADOPTING ALJ'S PROPOSED ORDER and DENYING PETITIONERS' REQUEST FOR STAY** was served via e-mail upon the following:

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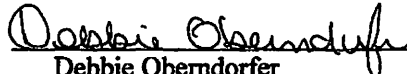
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## **ADDENDUM D**

Findings of Fact, Conclusions of Law, and Recommended Order on the Merits

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**BEFORE THE EXECUTIVE DIRECTOR OF THE  
UTAH DEPARTMENT OF ENVIRONMENTAL QUALITY**

---

In the Matter of:

Approval Order No. DAQE-AN101230041-13

Holly Refining & Marketing Company –  
Woods Cross, LLC  
Heavy Crude Processing Project  
Project No. N10123-0041

**FINDINGS OF FACT, CONCLUSIONS  
OF LAW, AND RECOMMENDED  
ORDER ON THE MERITS**

Administrative Law Judge Bret F. Randall

March 11, 2015

This matter is before me pursuant to appointment by the Executive Director of the Utah Department of Environmental Quality dated January 9, 2014. The appointment charges me to conduct a permit review adjudicative proceeding in this matter in accordance with Utah Code Ann., § 19-1-301.5 and Utah Admin. Code R305-7. Following are my Findings of Fact,<sup>1</sup> Conclusions of Law, and Recommended Order on the Merits.

---

<sup>1</sup> While the Utah Code directs me to provide “findings of fact,” I note that my review of this matter is in an appellate capacity. There was no trial, no witnesses were called, no testimony was heard, and no evidence was presented to me as a trier of fact. Thus, the legislature’s requirement that the ALJ provide “findings of fact” and a proposed dispositive action should not be read to suggest that I have weighed evidence, except in an appellate-like role, applying the standards of review as discussed below.



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## **INTRODUCTION**

This matter came before me for oral argument on September 17, 2014 at 9:30 am. Present at the argument was Joro Walker and Rob Dubuc on behalf of Petitioners; Christian Stephens for Respondent Division of Air Quality; and Steve Christiansen, David Reymann, Cheylynn Hayman, and Megan Houdeshel for Respondent Holly. Having reviewed the briefing in this matter and heard oral argument, I propose that Petitioners' Request for Agency Action and all claims asserted therein be rejected.

## **PROCEDURAL BACKGROUND**

1. In May of 2012, Holly Refining & Marketing Company – Woods Cross, LLC (“Holly”) submitted a notice of intent (“May NOI”) to the Utah Division of Environmental Quality (“UDAQ”) requesting an approval order to expand its Woods Cross refinery (“Holly Refinery”) and modernize certain equipment in a way that would allow Holly to process an additional 20,000 barrels per day of black wax crude from the Uintah Basin in eastern Utah (“Modernization Project”). [May NOI, IR000049-001108].

2. In July of 2012, Holly re-submitted its May NOI with revisions in response to UDAQ's request for additional information (“July NOI”). [July NOI, IR002798-003590].

3. On November 28, 2012, UDAQ released for public comment an Intent to Approve document (“First ITA”) containing a draft approval order. [First ITA, IR001967-001996].

4. During the initial 60-day public comment period, UDAQ received comments from the U.S. Environmental Protection Agency (“EPA”) [IR004001-004005]; Western Resource Advocates on behalf of Utah Physicians for a Healthy Environment and Friends of Great Salt Lake (collectively “Petitioners”) [IR004007-004035]; Blaine Rawson on behalf of

Mark J. Hall [IR004202-004217]; Alexander Sagady on behalf of Petitioners [IR009046-009135]; and Holly [IR003757-003910].

5. In February and March of 2013, Holly provided a detailed response to EPA relating to the EPA's comments referenced above, which objected (among other things) to Holly's original netting analysis. [IR008245-008259].

6. In March 2013, Holly submitted a new netting analysis partly in response to a specific request made by UDAQ in February of 2013 and partly in response to EPA's comments referenced above [IR008198-008259].

7. In April 2013, Holly formally submitted a revised NOI ("Revised NOI") to UDAQ that also included the new netting analysis. [Revised NOI at IR007335-007395].

8. In addition to certain other changes, the Revised NOI estimated PM<sub>2.5</sub> emissions from Holly's gas-fired heaters and boilers based on the EPA's National Emission Inventory ("NEI") data. [*Id.*]

9. On June 5, 2013, UDAQ released for a second public comment period an Intent to Approve document ("Second ITA") and a Source Plan Review. [Second ITA, IR00008449-008479; SPR, IR008480-008575].

10. On July 25, 2013, UDAQ received comments on the draft approval order in the Second ITA from EPA ("EPA's Second Comment Letter") [IR007840-007841]; Western Resource Advocates on behalf Petitioners ("Petitioners' Second Comment Letter") [IR007842-007997]; Blaine Rawson on behalf of Mark J. Hall ("Rawson's Second Comment Letter") [IR008579-008602]; Alexander Sagady on behalf of Petitioners ("Sagady's Second Comment Letter") [IR009046-009135]; and Holly ("Holly's Second Comment Letter") [IR007613-007836].

11. On November 6, 2013, UDAQ requested additional information from Holly pertaining to certain comments raising questions about the Second ITA and Holly responded to this request for supplemental information on November 7, 2013. [IR008021, IR008022-0052].

12. On November 18, 2013, UDAQ issued a Response to Comments Memorandum (“Response to Comments Memo”) addressing all of the comments made during the second public comment period, explained UDAQ’s response to those comments, and, where appropriate, described how the comments had been incorporated into the Holly AO. [Response to Comments Memo, IR009174-009222].

13. UDAQ, having considered and answered all of the comments received during the public comment period, issued Holly a new approval order authorizing the construction of the Modernization Project (“Holly AO”), on November 18, 2013. [Holly AO, IR009223-009254].

14. On December 18, 2013, Petitioners filed their Request for Agency Action contesting UDAQ’s issuance of the Holly AO (“RAA”).

15. In January 9, 2014, the Executive Director of UDAQ appointed me as the administrative law judge (“ALJ”) to conduct a permit review adjudicative proceeding in this matter in accordance with Utah Code Section 19-1-301.5 and Utah Admin. Code R305-7.

16. On January 16, 2014, I issued a Notice of Further Proceedings, in which, among other things, ordered that the party with the burden of proof on any issue would be held to a stringent marshaling requirement (“Marshaling Requirement”).

17. On January 22, 2014, Petitioners filed an Amended Motion and Memorandum Requesting a Stay of the Approval Order (“Motion for Stay”). Oral argument was held on the Motion for Stay on March 6, 2014.

18. On March 25, 2014, I recommended to the Executive Director of the Department of Environmental Quality (“Executive Director”) deny the Motion for Stay finding that Petitioners had not satisfied the four factors required for issuance of a stay of an environmental permit.

19. On May 8, 2014, the Executive Director of the Department of Environmental Quality adopted my proposed order and denied the Motion for Stay.

20. Prior to briefing the merits, Holly and UDAQ submitted Motions to Dismiss certain issues in Petitioners’ RAA.

21. On April 2, 2014, I denied without prejudice the Motions to Dismiss, finding at that time that “preservation issues would be most efficiently addressed in connection with briefing on the merits,” which would afford a reviewing court “a more complete record for appellate review.” [Order on Motions to Dismiss at 6-7].

22. On April 16, 2014, the Petitioners filed a Motion for Clarification Regarding Notice of Further Proceedings, in which they asked me to clarify the Marshaling Requirement imposed by the Notice of Further Proceedings.

23. On April 17, 2014, I issued an Order Clarifying the Marshaling Requirement (“Clarification Order”) reiterating that the Petitioners bear the burden to marshal all of the evidence in the administrative record, both supportive of and contrary to their claims.

24. On September 12, 2014, I issued a subsequent Order regarding the Marshaling Requirement, clarifying further the Petitioners’ burden of proof in light of the Utah Supreme Court decision in State v. Nielsen, 2014 UT 10, 326 P.3d 645. In that Order, I explained that Petitioners were required to marshal all of the evidence in the administrative record to carry their burden of proof on any particular issue.

25. On September 17, 2014, after receiving briefs on the merits from all the parties, I heard oral argument to hear the merits of Petitioners' RAA, as required by the Utah Code. After reviewing and considering all of the facts and arguments presented in the briefing and at oral argument and pursuant to Utah Code Section 19-1-301.5(12)(c), I hereby submit to the Executive Director the following Proposed Findings of Fact, Conclusions of Law, and Proposed Order Regarding the Merits.

### **LAW APPLICABLE TO THIS ADJUDICATION**

#### **I. Standard of Review**

1. This permit review adjudicative proceeding is governed by Utah Code Section 19-1-301.5, which requires the presiding ALJ to "conduct a permit review adjudicative proceeding based only on the administrative record and not as a trial de novo." Utah Code § 19-1-301.5(8)(a). Unlike many other administrative proceedings involving an ALJ, in a permit review adjudicative proceeding it is clear that the Utah Legislature intended to limit the ALJ's authority to a review of UDAQ's decision, thereby placing the ALJ in an appellate-like review role. There is to be no trial. There will be no witnesses, no examination or cross examination, and no findings of fact where disputed testimony is weighed and where witness credibility is at issue, as often occurs in other administrative adjudicative proceedings. Rather, all of the weighing of the evidence has already occurred at the UDAQ level.

2. UDAQ prepared a written response to public comments in connection with the issuance of the Holly AO. [IR009174-9222]. The ALJ must "review...the director's determination, based on the record," culminating in a proposed dispositive action that includes findings of fact, conclusions of law, and a recommended order. Utah Code § 19-1-301.5(12)(b)-(c). Because these proceedings are, by definition, limited to the issues raised during the public

comment period, UDAQ's written response to public comments plays a central role in evaluating whether UDAQ's conclusions satisfy applicable legal requirements.

3. Petitioners have the burden of proof to demonstrate that the Director's determination to issue the Holly AO was in error. [Clarification Order at 4 ("Petitioners acknowledge that they have the burden of proof in this proceeding."); *see also Taylor v. Pub. Serv. Comm'n*, 2005 UT App 121, \*1 (unpublished) ("In the typical challenge to agency action, the party challenging the action carries the burden of demonstrating its impropriety." (internal quotations omitted))].

4. The Director's determination can include factual findings, interpretations of law, and mixed determinations of law and facts.

5. To carry their burden of proof with respect to their challenge of factual findings, the Petitioners must demonstrate that UDAQ's findings of fact are not supported by substantial evidence; otherwise, the ALJ must "uphold all factual technical, and scientific agency determinations that are supported by substantial evidence taken from the record as a whole." Utah Code § 19-1-301.5(13)(b).<sup>2</sup> Under Utah case law relevant to this proceeding, the ALJ's review on questions of fact is limited to determining if UDAQ's factual findings "were reasonable and rational," while giving "great deference" to UDAQ's factual findings and not "reweighing" the evidence. Utah Chapter of the Sierra Club v. Bd. of Oil, Gas & Mining, 2012

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<sup>2</sup> While subsection (13)(b) expressly applies directly to the Executive Director's review, the standard of review that the ALJ is to apply to the record is not expressly stated in the Utah Code. Under a fair reading of the statute, it is clear that the ALJ is to apply the same standard as the Executive Director is required to apply. This conclusion is based on a reading of the permit review adjudicative proceeding statute as a whole. In the first instance, the ALJ's express duty and authority is to undertake a permit review adjudicatory proceeding and not a trial *de novo* on the merits, resulting in a recommended ruling for the Executive Director. In other words, the role of the ALJ is to "stand in the shoes" of the Executive Director and provide her with a recommended ruling on the merits. Thus, the ALJ is to apply the same standard of review to the administrative record as the Executive Director is required to apply. Utah Code Ann. § 19-1- 301.5.



UT 73, ¶ 11, 38 P.3d 291 (hereinafter Sierra Club v. BOGM) (internal quotation marks omitted).<sup>3</sup>

While reviewing an agency's determination for substantial evidence, the ALJ should "state the facts and all legitimate inferences drawn therefrom in the light most favorable to the agency's findings." *Id.* ¶ 12.

6. With respect to legal interpretations, the ALJ should grant "substantial discretion" to UDAQ in its interpretation of its governing statutes and rules. *See* Utah Code § 19-1-301.5(14)(c)(i). In this case, the governing statutes and rules include the Clean Air Act, the Utah Air Conservation Act, and the applicable regulations under these statutes. UDAQ's legal interpretation of these statutes and rules may be overturned only if Petitioners show that such interpretation is a "clearly erroneous interpretation or application of the law." *See, e.g., Sierra Club v. BOGM*, 2012 UT 73, ¶ 10; *see also Assoc. Gen. Contractors v. Bd. of Oil, Gas & Mining*, 2001 UT 112, ¶ 18, 38 P.3d 291 (an agency's "interpretation of the operative provisions of the statutory law it is empowered to administer" must be given deference).

7. By contrast, UDAQ's general interpretations of the law, including constitutional questions, jurisdiction, and statutes unrelated to the agency, are granted little or no deference and are simply reviewed for correctness. *Sierra Club*, 2012 UT 73, ¶ 9; *see also Sevier Citizens v. Dept. of Env't. Quality*, 2014 UT App 257, ¶ 6 (where the statute under review was procedural, and where issue was interpretation of the statute itself that granted agency interpretive discretion, the court applied a traditional approach to standard of review and imposed a correctness standard

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<sup>3</sup> Section 19-1-301.5, however, also vests the ALJ with the authority to supplement the administrative record. Utah Code Ann. § 19-1-301.5(8)(c)(iv) (providing that the ALJ "may supplement the record with technical or factual information."). Based on these statutory provisions, if the ALJ determines that UDAQ has not addressed an issue or UDAQ's response to an issue is inadequate, the ALJ may request additional technical or factual information from the parties as opposed to recommending a remand of the AOs.

to the question of whether the failure to file a petition to intervene strips the agency of jurisdiction under Utah Code Section 19-1-301.5(7)).

8. Finally, when the agency has been granted discretion to interpret the statute or regulation at issue, mixed questions of law and fact are reviewed under an abuse of discretion standard. See Murray v. Utah Labor Comm'n, 2013 UT 38, ¶ 39, 308 P.3d 461. Here, Section 19-1-301.5(14)(c)(i) expressly grants UDAQ “substantial discretion to interpret its governing statutes and rules.” Agency decisions on mixed questions of law and fact must be upheld under this discretion standard if they are “rationally based” and set aside only “if they are imposed arbitrarily and capriciously or are beyond the tolerable limits of reason.” Assoc. Gen. Contractors, 2001 UT 112, ¶ 18 (internal quotation marks omitted).

## **II. Petitioners’ Burden of Proof**

1. Petitioners, as the parties challenging UDAQ’s decision to issue the Holly AO, carry the burden of demonstrating UDAQ’s determinations were not supported by substantial evidence, were erroneous, or were an abuse of discretion. See Sierra Club v. BOGM, 2012 UT 73, ¶ 31; Associated Gen. Contractors, 2001 UT 112, ¶ 34; Taylor, 2005 UT App 121, \*1 (Utah Ct. App 1993) (unpublished).

2. A party with the burden of proof must “fully identify, analyze, and cite its legal arguments” and “provide meaningful legal analysis” but may not “dump the burden of argument and research” on the reviewing authority. W. Jordan City v. Goodman, 2006 UT 27, ¶ 29, 135 P.3d 874 (internal quotation marks omitted); see also Kenyon v. Air Quality Bd., 2009 UT 77, ¶ 29, 270 P.3d 417 (declining to review a petitioner’s challenge to an AO where the petitioners failed to adequately brief a claim). Moreover, a party’s briefing is inadequate where the briefing “merely contains bald citations to authority without development of that

authority and reasoned analysis based on that authority.” Allen v. Friel, 2008 UT 56, ¶ 9, 194 P.3d 903 (internal quotation marks omitted); State v. Lamb, 2013 UT App 5, ¶ 11, 294 P.3d 639.

### **III. Petitioners’ Duty to Marshal All Relevant Evidence**

1. This tribunal’s statutory jurisdiction under Utah Code Section 19-1-301.5 requires this tribunal to conduct this proceeding based only on the administrative record and to uphold “all factual, technical, and scientific agency determinations that are supported by substantial evidence viewed in light of the record as a whole.” Utah Code § 19-1-301.5(14)(c) (emphasis added). Accordingly, there will never be a “trial” on the merits. Rather, UDAQ undertook the adjudication of Holly’s NOIs after receiving and considering, among other things, public comments.

2. All of the evidentiary information upon which the Director could have relied is contained in the formal administrative record as defined by Utah Code Section 19-1-301.5(8)(b). For every issue raised in public comments, the Director provided a detailed written response, which also forms part of the administrative record. Utah Code Ann. § 19-1-301.5(8)(b).

3. The Director’s detailed response to comments provides a specific record as to how the Director considered and resolved each public comment and also, in some instances, refers to and provides citation to other evidence in the administrative record upon which the Director has relied in reaching any given conclusion. Thus, while there is no trial on the merits, the Director’s response to public comments provides a rather detailed “roadmap” as to the factual and legal basis for the Director’s decision to issue the Holly AO.

4. Because Petitioners have the burden of persuasion in this proceeding, the only way they can possibly carry that burden of proof is to convince the ALJ (or, by extension, the Executive Director, the Utah Court of Appeals, or the Utah Supreme Court) that any disputed factual, technical, or scientific agency determination is not supported by substantial evidence taken from the administrative record as a whole. By extension, therefore, they must marshal all of the evidence relevant to each claim they assert. *See, e.g., Nielsen*, 2014 UT 10, ¶ 42. In short, the Marshaling Requirement forms an inherent part of Petitioners' burden of proof in this proceeding. Indeed, the Utah Supreme Court recently clarified that "a party who fails to identify and deal with supportive evidence will never persuade an appellate court to reverse under the deferential standard of review that applies to such issues." *Nielsen*, 2014 UT 10, ¶ 40 (emphasis added).

5. In their briefing on the merits and at oral argument, Petitioners raised a number of objections to the Marshaling Requirement. These objections lack merit.<sup>4</sup> The Marshaling Requirement was properly imposed, either as an inherent part of Petitioners' burden of proof or, in the alternative, pursuant to the ALJ's statutory grant of authority to manage all non-dispositive aspects of these proceedings.

6. The Utah Legislature has granted the ALJ the jurisdiction to "take any action in a permit review adjudicative proceeding that is not a dispositive action." Utah Code § 19-1-301.5(9)(f). Although the Marshaling Requirement is not specifically adopted in the Utah Code or Utah Administrative Code as applied to these proceedings and Rule 24(a)(9) does not expressly apply here, an ALJ has the authorization to manage this proceeding in the most efficient

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<sup>4</sup> The fact that Holly was able to marshal record evidence, point by point, in the manner that I had requested of Petitioners, provides further support for the conclusion that Petitioners' arguments against the Marshaling Requirement lack merit and should be rejected.

and effective way appropriate under the circumstances of this case.<sup>5</sup> All of the policy reasons underlying Rule 24(a)(9) of the Rules of Appellate Procedure apply with full force to a permit review adjudicative proceeding.

7. In an analogous situation, the Utah Court of Appeals declined to undertake an independent review of a large record. Wright v. Westside Nursery, 787 P.2d 508, 512 n.2 (Utah App. 1990). There, the court noted that Rule 24(a)(9) was intended precisely “to spare appellate courts such an onerous burden.” *Id.* Hence, the court continued, “[a]bsent exceptional circumstances, our review of the record is limited to those specific portions of the record which have been drawn to our attention by the parties and which are relevant to the legal questions before us.” *Id.* The court noted that Rule 24(a)(9) was intended precisely “to spare appellate courts such an onerous burden.” Hence, the court continued, “[a]bsent exceptional circumstances, our review of the record is limited to those specific portions of the record which have been drawn to our attention by the parties and which are relevant to the legal questions properly before us.” *Id.* I have applied this same standard to my review of the administrative record in this proceeding, for the same reasons as stated by the Utah Court of Appeals. If this rule were not applied to the administrative record in a permit review adjudicative proceeding, an appellant on future appeal could potentially argue that the administrative law judge overlooked or failed to consider, under his or her independent review of the record, certain evidence of record even though that evidence was not specifically drawn

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<sup>5</sup> It is undisputed that should Petitioners appeal any issue arising from this proceeding to the Utah Court of Appeals, Rule 24(a)(9) would apply to their briefs on appeal. Because the administrative law judge and the Executive Director are called upon to apply the same standard of review to the agency determinations as the Utah Court of Appeals, it stands to reason that the marshaling requirement should also apply at the ALJ and Executive Director levels of review. Moreover, Petitioners have been on notice of this procedural requirement from the outset of this proceeding and did not appeal the ALJ’s Order Clarifying the Marshaling Requirement to the Executive Director. They cannot therefore show undue burden or prejudice.

to the attention of the administrative law judge. I find and conclude that the types of “exceptional circumstances” that may warrant deviation from this rule, as stated in *Wright*, do not apply to the present proceedings.<sup>6</sup>

8. This conclusion finds further support in Utah case law in the cases cited below, subject to the clarification that in these cases, the potential for a procedural default upon failure to marshal the record is not an appropriate result, as held in *State v. Nielsen*, *supra*. However, to the extent that Utah case law regarding the burden of proof and marshaling does not deal with the procedural default issue rejected in *State v. Nelson*, it is still good law and should be considered as being relevant here. *See, e.g., Simmons Media Group, LLC v. Waykar, LLC*, 2014 UT App 145, ¶¶ 46, 763 Utah Adv. Rep. 32 (dismissing a claim where the appellant “does not identify and deal with the supportive evidence” (internal quotation marks omitted)); *Nebeker v. Summit County*, 2014 UT App 137, ¶ 46, 762 Utah Adv. Rep. 25 (“To prevail on such a challenge, the County must acknowledge the evidence that supports the findings and demonstrate ‘a basis for overcoming the healthy dose of deference owed to factual findings’” (quoting *Nielsen*, 2014 UT 10 ¶¶ 41-42); *Wachocki v. Luna*, 2014 UT 139, ¶ 11, n. 6, 330 P.3d 717 (holding that because appellants failed to marshal the evidence, appellants did not carry their burden on appeal); *W. Jordan City*, 2006 UT 27, ¶ 29; *Heinecke v. Dep’t of Commerce*, 810 P.2d 459, 464 (Utah Ct. App. 1991) (holding that parties fail to meet their burden to marshal the evidence when they leave “it to the court to sort out what evidence

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<sup>6</sup> There is simply nothing in the Utah Code to suggest that the administrative law judge in a permit review adjudicative proceeding has an independent duty to comb through the entire Administrative Record to identify all relevant facts in support of a disputed factual, technical, and scientific agency determination, particularly where, as here, Petitioners are represented by experienced and competent legal counsel. To be sure, a more generous standard of briefing may apply to a permit review adjudicative proceeding where parties appear *pro se*. Because no *pro se* parties are involved in the instant proceeding, I will not speculate as to the potential applicability of the Marshaling Requirement in cases where parties are not represented by legal counsel.

actually supported the finding” and instead argued their “own position without regard for the evidence supporting the...findings”).

9. The duty to carry the burden of proof through marshaling must fall to Petitioners in this permit review adjudicative proceeding, because as a matter of longstanding administrative law, the party challenging any factual finding underlying an agency’s determination is required to marshal “all” evidence supporting the agency’s determination. Sierra Club v. BOGM, 2012 UT 73, ¶ 12; *see also* Kennon, 2009 UT 77, ¶ 27 (“When challenging factual findings, a party is obligated to marshal ‘all record evidence that supports the challenged finding.’” (quoting Utah R. App. P. 24(a)(9))); First Nat’l Bank of Boston v. County Bd. of Equalization of Salt Lake County, 799 P.2d 1163, 1165 (Utah 1990) (In an appeal of an agency action, “the party challenging the finding...must marshal all of the evidence supporting the finding.”).

10. The duty to marshal the evidence in administrative appeals also applies to parties challenging an agency’s determination on mixed questions of fact and law. Peterson Hunting v. Labor Comm’n, 2012 UT App 14, ¶ 15, 269 P.3d 998; *see also* United Park City Mines Co. v. Stichting Mayflower Mountain Fonds, 2006 UT 35, ¶ 25, 140 P.3d 1200 (“Even where the defendants purport to challenge only the legal ruling, as here, if a determination of the correctness of a court’s application of a legal standard is extremely fact-sensitive, the [appellants] also have a duty to marshal the evidence.” (internal quotation marks omitted)).

A party obligated to marshal the evidence must do so for each claim that the marshaling mandate applies. *Sierra Club 2012*, 2012 UT 73, ¶ 30 & n.3 (holding that Petitioners failed to marshal one claim while determining that the same Petitioners marshaled another claim). At its core, the marshaling requirement demands that a party “marshal all of the evidence supporting the findings and show that despite the supporting facts, the...findings are not support by substantial evidence.” *Id.* ¶ 30. To do so, the party may not “‘simply attack [the agency’s] credibility.’”

Associated Gen. Contractors, 2001 UT 112, ¶ 34 (quoting Brewer v. Denver & Rio Grande W. R.R., 2001 UT 77, ¶ 36, 31 P.3d 557).

11. In light of the Marshaling Requirement, the ALJ has ordered that Petitioners were not subject to a page limitation in their briefing on the merits. Rather, the only requirement has been that the briefing be of reasonable length. Thus, Petitioners have been afforded every opportunity to carry their burden of proof in this proceeding to convince the ALJ that any disputed factual, technical, or scientific agency determination is not supported by substantial evidence taken from the administrative record as a whole. In order to meet that burden of proof, it will be necessary for Petitioners to bring to the tribunal's attention all evidence from the administrative record that relates to any such disputed issue.

#### **IV. Preservation Standard**

1. Pursuant to Utah Code Section 19-1-301.5(10), "[a] person who files a request for agency action has the burden of demonstrating that an issue or argument raised in the request for agency action has been preserved." Lacking such demonstration, the ALJ "shall dismiss, with prejudice, any issue or argument in a request for agency action that has not been preserved." *Id.*

2. An issue or argument has been preserved for appeal if (a) the person raised it during the public comment period and it was supported with sufficient information or documentation to enable the director to fully consider the substance and significance of the issue, Utah Code § 19-1-301.5(4)(a)-(b); or (b) the issue was not reasonably ascertainable during the public comment period, *id.* § 19-1-301.5(6)(c).

3. The failure to raise reasonably ascertainable issues or arguments relating to the proposed permit during the public comment period deprives UDAQ from considering all



possible issues prior to any issuance of an approval order and results in less effective agency process.

4. The demonstration that each issue has been properly preserved must be found in the Petitioners' RAA at the outset of the case. *See id.*; *see also* Utah Admin. Code R305-7-203(3)(h) (mandating that an RAA provide a showing on preservation).

5. The failure to raise issues in the RAA frustrates the goals of the permit review adjudicative process by failing to place the respondents on notice of the specific claims. Such failure prevents UDAQ and Holly from assessing whether it should have supplemented the record in response to newly presented claims in the RAA. Moreover, by not raising issues in the RAA and waiting to reveal claims until the briefing, Petitioners prevented Holly from assessing the full risks of proceeding with construction under an AO subject to a permit challenge.

6. Any claims not preserved in accordance with the statutory standard set forth above will be dismissed.

7. Petitioners raised concerns in their RAA and then again in their Reply Brief about whether due process had been satisfied where Holly submitted additional information to UDAQ after the close of the public comment period and Petitioners were not given a second opportunity to submit comments on this additional material.

8. First, Petitioners have waived this claim by not briefing it in their opening brief. Petitioners may not raise claims in their RAA and then wait to address such claims until their Reply brief. *See e.g., Coleman ex rel. Schefski v. Stevens*, 2000 UT 98, ¶ 9, 17 P.3d 1122 (refusing to consider matters raised for the first time in the reply brief).

9. Even if Petitioners' claims regarding procedural due process were not waived and had merit, which is unclear in light of the fact that Petitioners do not adequately brief this issue,

fail to cite any case law, or quote from the due process clause of the Utah or United States Constitution, it is clear that Petitioners were afforded an opportunity to supplement the record and raise issues in the RAA relating to any new information submitted after the close of the public comment period.

10. Petitioners were on notice that additional information had been submitted, as it was referenced multiple times in the response to comments document UDAQ issued in conjunction with the final Holly AO. Petitioners also had access to UDAQ's permitting file after the Holly AO was issued before the deadline for filing their RAA.

11. Moreover, this tribunal has allowed arguments that were not reasonably ascertainable to be raised in the RAA, for the first time, in accordance with Utah Code Section 19-1-301.5(6)(c)(ii), and allowed the parties to supplement the record via motion in accordance with Section 19-1-301.5(8)(c). This tribunal has also waived any page limits to allow the parties the opportunity to fully develop any claims that arose either during the public comment period, or after.

12. Petitioners are incorrect that their due process rights have been implicated in this case.<sup>7</sup> Any claims or issues that were reasonably ascertainable during the public comment period must have been raised in Petitioners' comments. Any claims that were not reasonably ascertainable during the public comment period could be included for the first time in the Petitioners' RAA but may not appear for the first time in Petitioners' briefing on the merits. Petitioners have failed to demonstrate how, in light of this tribunal's treatment of the claims in accordance with 19-1-301.5, any procedural due process rights have been violated.

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<sup>7</sup> To the extent Petitioners claim that permit review adjudication statute and rules violate the due process protections of the Utah and United States Constitutions, such claims are beyond the jurisdiction of the ALJ to decide in this permit review proceeding. *See e.g., Nebeker v. Utah State Tax Comm'n*, 2001 UT 74, ¶ 23, 34 P.3d 180.

**V. Scope of Proceedings; Regulatory Background; and EPA Role**

1. The evidence Petitioners presented in this matter stands for the self-evident, general proposition that air pollution is harmful to human health and to the environment. [IR at 009140-48; IR at 009139-45; IR at 009144-45; IR at 009145-47.] On that point, there is no disagreement.

2. In enacting the Utah Air Conservation Act, the Utah Legislature declared: “It is the policy of this state and the purpose of [the Utah Air Conservation Act] to achieve and maintain levels of air quality which will protect human health and safety, and to the greatest degree practicable, prevent injury to plant and animal life and property, foster the comfort and convenience of the people, promote the economic and social development of this state, and facilitate the enjoyment of the natural attractions of this state.” Section 19-2-101(2), Utah Code Ann.

3. The Utah Legislature further declared that the “purpose” of the Utah Air Conservation Act is to “(a) provide for a coordinated statewide program of air pollution prevention, abatement, and control; (b) provide for an appropriate distribution of responsibilities among the state and local units of government; (c) facilitate cooperation across jurisdictional lines in dealing with problems of air pollution not confined within single jurisdictions; and (d) provide a framework within which air quality may be protected and consideration given to the public interest at all levels of planning and development within the state.” Section 19-2-101(4), Utah Code Ann.

4. Similarly, in enacting the Clean Air Act, the Congress found, among other things:

(2) that the growth in the amount and complexity of air pollution brought about by urbanization, industrial development, and the increasing use of motor vehicles, has resulted in mounting dangers to the public health and welfare, including

injury to agricultural crops and livestock, damage to and the deterioration of property, and hazards to air and ground transportation; [and]

(3) that air pollution prevention (that is, the reduction or elimination, through any measures, of the amount of pollutants produced or created at the source) and air pollution control at its source is the primary responsibility of States and local governments . . . .

42 U.S.C. § 7401(a).

5. Congress also stated that the “primary goal” of the Clean Air Act is to “encourage or otherwise promote reasonable Federal, State, and local governmental actions . . . for pollution prevention.” 42 U.S.C. § 7401(c).

6. In these proceedings, I am charged to conduct a permit review adjudicative proceeding in this matter in accordance with Utah Code Ann., § 19-1-301.5 and Utah Admin. Code R305-7.

7. As a matter of law, any source’s compliance with the permitting requirements set forth in the Clean Air Act and the Utah Air Conservation Act satisfies the public policy of protecting the public and the environment from the harms of air pollution.

8. The question before me in these proceedings is not whether air pollution is harmful but rather whether the Holly AO is in compliance with applicable laws, rules, and regulations. Based on the evidence in this record, the unavoidable conclusion is that the Holly AO is in compliance with the law, all as explained in more detail below.

9. The conclusions reached in these proposed Findings and Fact and Conclusions of Law, to the effect that the Holly AO is in compliance with all applicable laws, rules, and regulations, notwithstanding Petitioners’ objections, find additional support in the EPA’s independent review of the Holly AO and that agency’s conclusion that the Holly AO may be issued. *See* EPA Comment Letters [IR004001-004005; IR007840-007841]. In *Alaska Dep’t of*

*Env'tl. Conservation v. EPA*, 540 U.S. 461, 124 S. Ct. 983 (2004), the U.S. Supreme Court held that EPA is entitled to review the reasonableness of state permitting authorities' BACT determinations under the PSD program and has authority to issue stop construction orders if it reasonably believes that a BACT designation is erroneous or unreasonable. The CAA also provides EPA with concurrent enforcement authority that is directly applicable to the present proceeding. 42 U.S.C. §§ 7477, 7413(a)(5)(A) (describing the enforcement options available to the EPA when it finds that a state is not complying with any requirement of the CAA with respect to construction of a new source or modification of an existing source). *See* Jennifer A. Davis Foster, Note, EPA Oversight in Determining Best Available Control Technology: The Supreme Court Determines the Proper Scope of Enforcement, 69 Missouri L. Rev., Issue 4, at 1 (Fall 2004). Based on the foregoing, it is clear that if in EPA's independent judgment, any of the objections and issues Petitioners have briefed on the merits were meritorious, EPA had an independent duty and authority to pursue such issues. EPA declined to do so even after being given the opportunity in connection with the Holly AO.

10. In this permit review adjudicative proceeding, we have a somewhat unusual situation in administrative law where not one but two regulatory agencies with significant technical expertise and concurrent (and somewhat overlapping) legal jurisdiction have been involved in the procedural and substantive process that led to the issuance of the Permit. This situation provides a second layer of regulatory oversight to ensure that the applicable procedural and substantive requirements of the Clean Air Act, as adopted and enforced through the Utah Air Conservation Act in the spirit of "cooperative federalism," have been met.

**FINDINGS OF FACT AND CONCLUSIONS OF LAW FOR CLAIMS PETITIONERS  
FAILED TO BRIEF ON THE MERITS**

1. Petitioners' RAA contains a number of claims that Petitioners did not raise in their briefing on the merits. Those claims are listed in a Table of Waived Claims attached hereto as **Appendix A**, incorporated herein by this reference.

2. Both Holly and UDAQ pointed out in their briefing and at oral argument that Petitioners failed to brief these claims and therefore waived such claims. Petitioners did not rebut this argument and at oral argument conceded that this tribunal need not address claims they did not brief.

3. Because Petitioners failed to brief these claims, they should be dismissed with prejudice on two separate and independent grounds: (a) waiver; and (b) failure to carry Petitioners' burden of proof. *See, e.g., See Sierra Club v. BOGM*, 2012 UT 73, ¶ 31; *Kenyon*, 2009 UT 77, ¶ 29; *W. Jordan City*, 2006 UT 27, ¶ 29; *Anderson v. Kriser*, 2009 UT App 319, \*2 n.3 ("[A]rguments not raised in an appellant's initial brief are waived."); *Brown v. Glover*, 2000 UT 89, ¶ 23, 16 P.3d 540 ("Generally, issues raised by an appellant in the reply brief that were not presented in the opening brief are considered waived and will not be considered by the appellate court.").

**FINDINGS OF FACT AND CONCLUSIONS OF LAW FOR CLAIMS PETITIONERS  
BRIEFED ON THE MERITS**

Petitioners' remaining claims can be grouped into eleven independent claims, each of which will be addressed below. Before addressing the specific claims, I would like to make the following general findings of fact relating to the regulatory context, inasmuch as the general aim of many of Petitioners' comments go to the issue of the harms caused by air pollution.

**I. UDAQ Is Properly Regulating the Holly Refining Flares as Required by Subpart Ja.**

Petitioners' first specific argument on the merits goes to the interplay between the regulation of the Holly flares, as required by law, and the Holly AO at issue in this matter. Petitioners argue that the Holly AO is invalid because UDAQ did not "properly regulate" the refining flares by explicitly listing and explaining every applicable provision of the regulation governing the flares (New Source Performance Standards ("NSPS"), 40 C.F.R. Part 60, Subpart Ja ("Subpart Ja"). [Petitioners' Opening Brief at 4-12.] More specifically, Petitioners argue that "the Director has failed to specify in the AO – or elsewhere – the exact conditions of Subpart Ja that apply to the Holly Refining Flares and has failed to impose these conditions on the facility. Without particular AO terms and conditions that reflect the relevant Subpart Ja standards on the flares, the Heavy Crude Project will not meet the requirements of Utah Admin Code R307-401-8(1)(b)(vi), Rule 307-401-8(1)(a) and Rule R307-401-8(5)." [Petitioners' Opening Brief at 4-5.] For the reasons set forth below, this argument should be rejected.

**A. Findings of Fact**

1. Holly's NOI acknowledges that Subpart Ja applies to the refinery generally and to the flares specifically. [See IR002866-87, Holly's July 2012 NOI ("The following Subparts are applicable to the proposed project...Subpart Ja – Standards of Performance for Petroleum Refineries"); IR002868-69 ("The provisions of [40 C.F.R. Part 60 Subpart Ja] apply to the new FCCU and fuel gas combustion devices, including flares and process heaters.");<sup>8</sup> IR002962

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<sup>8</sup> When Holly submitted its NOI, Subpart Ja included all flares in its definition of "fuel gas combustion device." See 40 C.F.R. § 60.101a (2012). However, during Holly's permit review process, the regulation was revised to separate fuel gas combustion devices from flares. 40 C.F.R. § 60.101a (2013). Despite this change in the regulations, in Holly's NOI and the Source Plan Review, flares were grouped together with other fuel gas combustion devices and subject to the same emission requirements. See IR005871-72.

("Because the flare is located at a petroleum refinery, the flare must comply with the requirements and limitations presented in 40 C.F.R. Part 60 Subpart Ja.").

2. Holly's NOI also incorporated emission limits derived from Subpart Ja for combustion devices. [IR002868-69, Holly's July 2012 NOI ("Holly will comply with the following emission limitations...Holly shall not burn in any new fuel gas combustion device any fuel gas that contains H<sub>2</sub>S in excess of 162 ppmv determined hourly on a three-hour rolling average basis and H<sub>2</sub>S in excess of 60 ppmv determined daily on a 365 successive calendar day rolling average basis.").

3. UDAQ independently recognized in the Source Plan Review that Subpart Ja applies to the Holly Refinery and that Holly is subject to the emission limitations contained in Subpart Ja. [IR008571-8572, Source Plan Review ("40 CFR 60 Subpart Ja: The provisions of this subpart apply to the new FCCU and fuel gas combustion devices, including flares and process heaters. Holly Refinery will comply with the following emission limitations...Holly Refinery shall not burn in any new fuel gas combustion device any fuel gas that contains H<sub>2</sub>S in excess of 162 ppmv determined hourly on a three-hour rolling average basis and H<sub>2</sub>S in excess of 60 ppmv determined daily on a 365 successive calendar day rolling average basis.").

UDAQ also made clear that Subpart Ja applies to the flares in its Response to Comments Memo. [IR009183, Response to Comments Memo ("NSPS Subpart Ja applies to the Woods Cross refinery generally and to both the North and South Flares.").

4. UDAQ determined that Holly is required to comply with Subpart Ja whether or not such emission limits were contained in the Holly AO. [See IR009183, Response to Comments Memo ("Regardless of whether the requirements [of NSPS] are in the AO, Holly Refinery must comply with all applicable subparts...Holly Refinery is not in violation of any



federal limits.”); IR009252, Holly AO (listing Subpart Ja in Section III, “Applicable Federal Requirements”).]

5. The EPA made no comments regarding issues with the applicability or enforcement of Subpart Ja as to the Holly Refinery generally or as to the AO specifically. [See IR004001, EPA First Comment Letter; IR007840-7841, EPA Second Comment Letter.]

**B. Findings and Conclusions on Preservation**

6. Petitioners preserved this argument in accordance with 19-1-301.5(4) by raising the issue during the public comment period. [See IR007858-7860, Petitioners’ Second Comment Letter.]

**C. Findings and Conclusions on Burden of Proof**

7. Petitioners assert that this issue is purely a question of law—whether UDAQ is required to explicitly outline and explain every applicable provision of Subpart Ja in the Holly AO. Petitioners concede that Subpart Ja applies to Holly’s flares and other combustion sources, but argue that the AO is deficient because each applicable provision is not explained in detail in the Holly AO.

8. The question of whether Utah law requires applicable NSPS provisions to be listed in approval orders is a question of law that the agency has been given discretion to interpret and so shall be reviewed under a clearly erroneous standard. Whether UDAQ correctly applied a particular NSPS provision and whether Holly is in compliance with NSPS are mixed questions of law and fact that are reviewed for reasonableness and whether there is substantial evidence in the record to support the determinations. Whether Holly is in compliance with subpart Ja is a question that is specifically handled by DAQ’s enforcement section and therefore beyond the scope of these proceedings.

9. In their briefing, Petitioners failed to reference any of the specific evidence in Holly's NOI in which Holly recognized it was subject to Subpart Ja.

10. Additionally, Petitioners' reference to other evidence in the record is relegated to footnotes and lacks any description of the document being referenced.

11. Because Petitioners have omitted multiple pieces of evidence from their analysis that show Subpart Ja does apply to the Holly Refinery, they have failed to meet their burden of proof on this issue for the reasons described in more detail above.

**D. Conclusions of Law on the Merits**

12. Even if Petitioners had carried their burden of proof, or to the extent marshaling is not properly applied to this claim (being a question of law), Petitioners' arguments should fail on the merits for the independent reasons discussed below.

13. Subpart Ja is one of many NSPS the EPA has promulgated for particular types of new or modified sources that EPA has determined are major emitters of criteria air pollutants, such as petroleum refineries. *See generally* 42 U.S.C. § 7411, Standards of Performance for New Stationary Sources (granting the administrator of EPA the authority to regulate certain sources). The applicability of a particular NSPS to a particular source is often specifically outlined in the text of the regulation applicable to that source category. *See e.g.*, 40 C.F.R. § 60.100a (defining modification for purposes of Subpart Ja applicability). The applicability of NSPS is evaluated separately from other Clean Air Act regulations such as the Prevention of Significant Deterioration Program ("PSD"), which is implemented through individual pre-construction permits like the Holly AO. *See generally* 42 U.S.C. §§ 7475, 7503 (setting forth the pre-construction permitting requirements).

14. Unlike the PSD program, the NSPS regulations apply to a source whether or not that source is undergoing a modification requiring pre-construction approval. *See, e.g.*, 40 C.F.R. § 60.1(a) (defining NSPS applicability); *id.* § 60.2 (defining when “construction” or “modification” takes places for purposes of NSPS applicability); Env’tl Defense v. Duke Energy Corp., 549 U.S. 561, 577-78 (2007) (recognizing the distinction between the NSPS and PSD regulations). Therefore, NSPS compliance and/or applicability determinations are not dependent upon inclusion of the NSPS regulation’s language in the pre-construction permit. Compliance or non-compliance with NSPS is entirely separate from the PSD permitting process.

15. The oversight of Holly’s compliance with Subpart Ja is a matter for UDAQ’s enforcement section. This is true regardless of whether the provisions of Subpart Ja are in the permit or not. [IR009183, Response to Comments Memo (“Regardless of whether the requirements [of NSPS] are in the AO, Holly Refinery must comply with all applicable subparts...Holly Refinery is not in violation of any federal limits.”).]

16. If Holly were in violation of Subpart Ja, contrary to UDAQ’s determination, the Clean Air Act provides Petitioners with a separate remedy in the form of a citizen suit under Section 304 of the Clean Air Act. *See* 42 U.S.C. § 7604(a) (Clean Air Act citizen suit provision). Challenging compliance with Subpart Ja in this permit review proceeding is therefore misplaced.

17. Petitioners also are incorrect in their assertion that R307-415 of the Utah Administrative Code requires all federally-applicable NSPS requirements to be included in the Holly AO. The regulations Petitioners cite apply only to Title V operating permits—not approval orders. The Title V operating permit regulations are independent of the approval order

pre-construction permit regulations. *Compare* Utah Admin. Code R307-415 (Title V operating permit regulations), *with id.* R307-401 (pre-construction approval order permit regulations).

18. The purpose of Title V is to consolidate all applicable federal and state regulatory requirements into one permit. *See* 40 C.F.R. § 71.1(b) (“All sources subject to the operating permit requirements of title V and this part shall have a permit to operate that assures compliance by the source with all applicable requirements.”). Thus, there is no legal requirement to include all applicable NSPS regulations in an approval order.

19. Accordingly, Petitioners’ arguments that the applicable provisions of Subpart Ja must be included in the Holly AO fail on the merits and should be dismissed.

## **II. The North Flare is Subject to Subpart Ja.**

1. The Petitioners next contend that the Director erred in reversing his position regarding the applicability of Subpart Ja to the North Flare. [Petitioners’ Opening Brief at 12-15.] For the reasons stated below, this argument should be rejected.

### **A. Findings of Fact**

2. The Director determined that Holly must comply with all applicable subparts of the NSPS regulations and that Holly was not in violation of any federal limits. [IR009183, Response to Comments Memo (“Regardless of whether the requirements [of NSPS] are in the AO, Holly Refinery must comply with all applicable subparts...Holly Refinery is not in violation of any federal limits.”).]

3. The Director determined that the North Flare was not being modified as part of this project and therefore was outside the scope of the permitting action. [IR009183, Response to Comments Memo (“The North Flare is not being modified as part of the project proposed by

Holly Refinery in its NOI, so it is outside the scope of this permit action. NSPS Subpart Ja applies to the Woods Cross refinery generally and to both the North and South Flares.”.)]

4. According to undisputed evidence in the record, Holly’s North Flare was subject to and in compliance with Subpart J and A of the NSPS regulations. [IR007999, Email Correspondence between Eric Benson and Camron Harry (“Holly’s North Flare was applicable and compliant with 40 CFR 60 Subpart A & J upon startup.”).]

5. A consent decree entered in 2008 between Holly and EPA required that Holly bring the North Flare into compliance with applicable NSPS standards. [See IR004800-4801, Consent Decree (requiring flaring devices to become NSPS compliant).]

6. As of December 2008, Holly reported to the EPA that its North Flare was in compliance with NSPS. [See IR007946, IR007951, Semi-Annual Progress Report to EPA and UDAQ re Consent Decree (reporting that “Performance tests for both North and South Flares [were] conducted December 10, 2008” and “[the] North Flare [was] subject to NSPS as of date of [Consent Decree] entry, eliminate all routinely-generated gas” and compliance status was “Complete....[N]o routinely-generated gas sent to the flare.”).]

7. In connection with its independent review of the entire Holly AO, the EPA made no comments about the North Flare or Subpart Ja, compliance with the Consent Decree, or any of the other related issues raised by Petitioners here. [See IR004001, EPA First Comment Letter; IR007840-7841, EPA Second Comment Letter.]

#### **B. Findings and Conclusions on Preservation**

8. Petitioners preserved this argument in accordance with 19-1-301.5(4) by raising the issue during the public comment period. [See IR007858, IR007864, Petitioners’ Second Comment Letter.]

**C. Findings and Conclusions on Burden of Proof**

9. Petitioners' argument that the Director reversed his position relative to the North Flare is a question of fact and the Petitioners bear the burden to demonstrate that the Director's decision is not supported by substantial evidence in the record and was an abuse of discretion.

10. Petitioners, in their briefing, failed to marshal all of the evidence that supported the Director's ultimate conclusion that Subpart Ja applied to the North Flare and that Holly was in compliance with this Subpart. By contrast, Holly did marshal all of the evidence in its briefing.

11. Nothing in the record supports the assertion that the Director changed his mind about the applicability of Subpart Ja. From the beginning of the project, all parties agreed that this NSPS provision applied to the Holly Refinery.

12. Accordingly, Petitioners failed to satisfy their burden of proof for this claim.

**D. Conclusions of Law on the Merits**

13. Even if Petitioners had carried their burden of proof, or to the extent marshaling is not properly applied to this claim (being a question of law), Petitioners' claims fail on the merits for the independent reasons discussed below.

14. The legislative intent of a permit review adjudicative process is to allow for an evolving understanding of a project before any final decisions are made. The Director may, at the beginning of a project, take a position in light of the information in the record at the time but later reverse that position based on additional information presented during the public comment period or otherwise, such as information provided by the source upon request. The question that must be answered in this permit review adjudication proceeding is whether the Director's final decision to issue the Holly AO is supported by substantial evidence in the record. This question

remains the same whether or not the Director may have changed his mind during the permitting process. In fact, the entire point of the permitting process as defined by the Utah Legislature is to allow for well-informed administrative decisionmaking. To the extent that the Director may have reached a different view on any given point suggests that the process is working as intended.

15. In this case, the Petitioners do not present any evidence that there was a reversal of position with respect to the applicability of Subpart Ja to the North Flare. To the contrary, all of the evidence in the record supports the position that the Director ultimately took, which was that Subpart Ja applied to the North Flare.

16. Petitioners argue that the North Flare was modified when all gases from the South Flare were routed to the North Flare and this modification triggered NSPS Subpart Ja applicability. [Petitioners' Opening Brief at 13.]

17. Regardless of whether the North Flare was modified, the record evidence demonstrates that Holly and the Director agreed that Subpart Ja applied for this project. [IR009183; IR009183; IR004800-4801; IR007946, IR007951.] Therefore, any evidence that a modification may have occurred on the North Flare would only be superfluous, not contradictory.

18. The EPA raised no procedural or substantive comments regarding with UDAQ's handling of Subpart Ja. [See IR004001, EPA First Comment Letter; IR007840-7841, EPA Second Comment Letter.]

19. The substantial weight of the evidence supports the Director's ultimate determination that Subpart Ja applies to Holly's North Flare and Petitioners' arguments that the Director contradicted himself should be dismissed with prejudice.

### **III. A BACT Analysis Was Not Required for the North Flare.**

1. Petitioners argue that UDAQ erred in failing to perform or require a BACT analysis for the North Flare. [Petitioners' Opening Brief at 15-16]. For the reasons set forth below, this argument should be rejected.

#### **A. Findings of Fact**

2. Holly did not propose any physical modification of the North Flare as part of the project approved in the Holly AO. [IR009183, Response to Comments Memo ("The North Flare is not being modified as part of the project proposed by Holly Refinery in its NOI, so it is outside the scope of this permit action. NSPS Subpart Ja applies to the Woods Cross refinery generally and to both the North and South Flares."); IR009189, Response to Comments Memo ("Because neither the North Flare nor the SRU will undergo any physical change or experience an increase in emissions as a result of Holly Refinery's proposed project, the 'emission units' are not subject to the BACT analysis requirements in the PSD rules.").]

3. UDAQ did not anticipate any increase in overall flare emissions as a result of the project. [IR008561, Source Plan Review ("there is no reason to assume that upset condition emissions will be any greater after the project is complete than before the project.").]

4. The North Flare is already subject to and in compliance with NSPS requirements. [IR009183, Response to Comments Memo ("NSPS Subpart Ja applies to the Woods Cross refinery generally and to both the North and South Flares.").]

5. UDAQ determined that BACT for flares was compliance with Subpart Ja. [IR008516-17, Source Plan Review ("The only technically feasible control options for emissions of all pollutants from flares are: (1) equipment design specifications and good combustion work



practices...; and (2) flare gas recovery systems...DAQ NSR recommends compliance with the requirements of 40 CFR 60 Subpart Ja as BACT.”.)]

6. According to the record, prior to the authorization of this project, all of the flare gases were being routed to the North Flare. [IR08200, Holly’s first revised netting analysis (“currently all gases are routed to the north flare”).]

7. The EPA raised no procedural or substantive comments regarding UDAQ’s analysis regarding BACT for the North Flare. [See IR004001, EPA First Comment Letter; IR007840-7841, EPA Second Comment Letter.]

**B. Findings and Conclusions on Preservation**

8. Petitioners preserved this argument in accordance with 19-1-301.5(4) by raising the issue during the public comment period. [See IR007858, IR007864, Petitioners’ Second Comment Letter.]

**C. Findings and Conclusions on Burden of Proof**

9. Petitioners’ claim that UDAQ erred in failing to perform a BACT analysis on the North Flare is a mixed question of law and fact. There is also a dispute regarding the correct interpretation of the regulations that trigger BACT, which is a question of law reviewed under a clearly erroneous standard. The application of that law to the facts in this case triggers the mixed question standard of review in which the ALJ reviews the Director’s determination for reasonableness.

10. Petitioners failed to marshal all of the evidence related to their claim.

11. Specifically, Petitioners failed to cite UDAQ’s finding that BACT for flares is compliance with Subpart Ja and that the North Flare is already subject to NSPS requirements.

12. Accordingly, Petitioners failed to satisfy their burden of proof on this claim and it can be dismissed on this basis.

**D. Conclusions of Law on the Merits**

13. Even if Petitioners had carried their burden of proof, or to the extent marshaling is not properly applied to this claim (being a question of law), Petitioners' claims fail on the merits for the independent reasons discussed below.

14. In the briefing on this issue, Petitioners erroneously conflate the same definition of modification they cite in their NSPS arguments. However, a "modification" that triggers a BACT analysis is different than what is required to trigger NSPS applicability. *See, e.g., Env't'l Defense v. Duke Energy Corp.*, 549 U.S. 561, 577 (2007) ("The 1980 PSD regulations on 'modification' simply cannot be taken to track the Agency's regulatory definition under the NSPS.").

15. A modification for purposes of BACT applicability occurs when a person "intend[s] to make modifications or relocate an existing installation which will or might reasonably be expected to increase the amount or change the effect of, or the character of, air contaminants discharged." Utah Admin. Code R307-401-3(1)(a) (emphasis added). An "installation" is defined as "a discrete process with identifiable emissions which may be part of a larger industrial plant" and a "modification" is defined as "any planned change in a source which results in a potential increase of emission." *Id.* R307-100-2.

16. Accordingly, for there to be a "modification" triggering BACT applicability, there must be (1) a planned change in an emissions unit that (2) is reasonably expected to increase the amount or character of the emissions. The federal regulations contain similar requirements. *See* 40 C.F.R. § 52.21(j)(3) (BACT is required on units that experience a net emissions increase "as a

result of a physical change or change in the method of operation in the unit.”); 71 Fed. Reg. 54,235, 54,240 (Sept. 14, 2006) (“We further note that our current rules do not require BACT or LAER at unchanged units ....”); Letter from Robert B. Miller, Chief of the Permits and Grants Section of the EPA to Lloyd Eagan, Director of the Bureau of Air Management in Wisconsin (Feb. 8, 2000) (“[W]here an emissions unit has not undergone a physical or operational change, BACT does not apply.”).

17. Here, UDAQ specifically found that Holly was not proposing any changes to its North Flare as part of the project. A shift of emissions from one flare to the other does not result in increased emissions, only *redistributed* emissions. In its NSPS regulations, the EPA discussed the analogous situation of two interconnected flares, stating “that interconnections between flares will not alter the cumulative amount of gas being flared (i.e., interconnecting two flares does not result in an emissions increase relative to the two single flares prior to interconnection).... Considering this, we agree that the interconnection of two flares does not necessarily result in a modification of the flare and we have specifically excluded flare interconnections from the modification provisions.... [W]e agree that connections that do not increase the emissions from the flare should not trigger a modification....” 77 Fed. Reg. 56,422, 56,438 (Sept. 12, 2012). Petitioners’ argument is not the law.

18. Moreover, to the extent Petitioners are arguing that the re-route of gases to the North Flare constitutes a change in operation, such a change occurred well before Holly initiated the current black wax crude project. This is evidenced by the language Petitioners themselves quote which reflects that “*currently* all gases are routed to the north flare.” [IR08200, Holly’s first revised netting analysis (emphasis added).]

19. Without a change in operation or an increase in emissions for the North Flare, Petitioners' argument (that a "modification" of the North Flare was part of this project triggering a BACT analysis for the North Flare) is not supported by the record and should be rejected.

20. Even if Petitioners could demonstrate by substantial evidence that Holly proposed to modify the North Flare, conducting a BACT analysis on the North Flare would be superfluous because the North Flare is already subject to Subpart Ja, which itself constitutes BACT for Holly's flares. [See IR008516-17, Source Plan Review ("The only technically feasible control options for emissions of all pollutants from flares are: (1) equipment design specifications and good combustion work practices...; and (2) flare gas recovery systems...DAQ NSR recommends compliance with the requirements of 40 CFR 60 Subpart Ja as BACT."); see also IR009183, Response to Comments Memo ("NSPS Subpart Ja applies to the Woods Cross refinery generally and to both the North and South Flares.").] Petitioners' argument fails for this independent reason as well.

21. Finally, the record suggests that Petitioners' argument is ultimately moot because Holly is required by the recently-adopted PM<sub>2.5</sub> SIP to install flare gas recovery technology at the Refinery,<sup>9</sup> which Petitioners do not contest is the most stringent pollution control device currently available for flares.<sup>10</sup> [See IR008516, Source Plan Review (referring to flare gas recover as "the top control technology").] This requirement is binding on Holly regardless of whether it is explicitly stated in the Holly AO. As such, even if Petitioners' argument were

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<sup>9</sup> The Utah PM<sub>2.5</sub> SIP requires "all major source petroleum refineries in or affecting a designated PM<sub>2.5</sub> non-attainment area within the State shall install and operate a flare gas recovery system." See Utah PM<sub>2.5</sub> SIP, Section IX, Part H, p. 43.

<sup>10</sup> Flare gas recovery is a system that captures gases that would otherwise be combusted in the flare and redirects those gases as fuel sources for other refinery operations. This reduces the emissions associated with flaring and is an economic use of excess fuel gas.

correct, there is no need for a remand regarding control technology on the North Flare because there are no additional pollution controls that could be required of Holly.

22. Accordingly, Petitioners have failed to demonstrate with substantial evidence in the record as a whole that UDAQ erred in not performing a BACT analysis on the North Flare and this claim should be dismissed with prejudice on the merits.

**IV. Emissions From Holly's Flares Were Properly Calculated and Are Regulated in Accordance With the Unavoidable Breakdown Rule.**

1. Petitioners next argue that the emissions from the flares have not been properly calculated and that UDAQ has not been appropriately regulating the flares in accordance with the Unavoidable Breakdown Rule ("UBR"). [Petitioners' Opening Brief at 16-22.] For the reasons stated below, this argument should be rejected.

**A. Findings of Fact**

2. In the Holly AO, UDAQ imposed a number of emission limits that included emissions from the flares, thereby limiting the routine emissions from the flares. [See IR009225, Holly AO ("Previous exclusions from the AO emission caps will be removed therefore the AO emission caps will be source wide caps."); IR009240, Holly AO ("PM<sub>10</sub> Combustion Emissions Cap Sources...Flares."); IR009247, Holly AO ("PM<sub>10</sub> emissions from all combustion sources shall not exceed 47.5 tons per rolling 12-month period or 0.13 tpd."); IR009245, Holly AO ("The emission of SO<sub>2</sub> into the atmosphere from all sources (excluding routine turnaround maintenance emissions) shall not exceed 110.3 tons per rolling 12-month period or 0.31 tons per day."); IR009245, Holly AO ("Emissions of SO<sub>2</sub> shall be limited as follows...All other sources 0.21 (tpd) 74.9 (tpy)."); IR009245, Holly AO ("For all the above listed emission points a CEM shall be used to determine compliance as outlined in II.B.3.e."); IR009247-48, Holly AO ("Total 24-hour PM<sub>10</sub> emissions for the sources shall be calculated by adding the daily results of the above

PM<sub>10</sub> emissions equations for natural gas, plant gas, and fuel oil combustion. Results shall be tabulated for every day, and records shall be kept.”); IR008568, Source Plan Review (discussion of inclusion of flares into SO<sub>2</sub> and PM emission caps).]

3. In response to Petitioners’ comments that the emission estimates for the flares were inaccurate because they did not include upset emissions, UDAQ explained that Holly’s emissions were capped and any exceedance due to an upset would constitute an exceedance of the cap. [IR009187, Response to Comments Memo (“The commenter is correct that there are no limits on the flares. This is because the flares are in place as control device[s] for upset conditions. However Holly Refinery does have to comply with the requirements of 40 CFR 60 Subpart Ja. The Commenter is incorrect that ‘upset’ conditions are not addressed...‘the refineries were allowed maximum never-to-be exceeded daily limits of PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>x</sub> based on the apparent variability. Emissions were capped at these maximum levels from the sources that could have their emissions metered by fuel metering/and calculations and from the other sources that would be stack tested every 1-3 years.” (quoting Utah SIP § IX.A.6.c.(2) (1991)).]

4. The assumption in determining the PTE for the flares was that upset emissions would be zero because they are not part of normal refinery operation. [IR002852, July 2012 NOI (“PM<sub>10</sub> and PM<sub>2.5</sub> emissions for the Woods cross refinery flares were assumed to be zero.”); *see also* IR002857, July 2012 NOI (“Startup, shutdown, malfunction events were considered to be zero.”).]

5. According to the evidence in the record, the PTE for the flares was calculated based on the purge gas flowing through the flare and planned startups and shutdowns, but did not include calculations for upset emissions. [IR003175-76, July 2012 NOI (recognizing emissions from the flares of SO<sub>2</sub> were estimated based on the assumption of 1700 scfh non-upset

throughput to the flare. This is the “purge gas” amount that must run to the flare to keep it from backdrafting); IR009196, Response to Comments (“startup and shutdown emissions were included in the analysis”); IR008560-8561, Source Plan Review (“to be conservative and representative of potential increases in emissions from SU and SD, UDAQ and Holly Refinery have agreed to include these emissions in Step 1 of the PSD and NNSR applicability analysis”); IR008522, Source Plan Review (“To ensure proper flare operation, Holly Refinery will install flow meters and gas combustion monitors on the flare gas line.”); IR009211 (“The combustion of flue gas through the pilot flame is accounted for in the emission calculations.”).]

6. According to the record, upset emissions from flares are unpredictable and uncontrollable because the flare is the safety valve for excess refinery gases generated in a period of malfunction. [IR008516, Source Plan Review (“The flare system at Holly Refinery provides for the safe disposal of hydrocarbon gases which are vented automatically from process units through pressure relief valves, control valves or are manually vented.”); IR008561, Source Plan Review (“Section 3.6 of the July 2012 NOI lists upset conditions for both the North and South Flares. These upset conditions (malfunctions) do not include normal process flow combustion at the flares and there is no reason to assume that upset condition emissions will be any greater after the project is complete than before the project. Although these emissions have not been included in the netting analysis, they are noted below for reference.”).]

7. The Holly AO does not contain exceptions for emissions due to malfunctions at the refinery; such excess emissions are subject to the UBR. [IR009196, Response to Comments Memo (“All limits of the permit apply at all times, which include periods of startup, shutdown and malfunction. The ITA contains no exclusion for these events.”); IR009211 (“Flare

emissions during malfunction/upset conditions are regulated through R307-107 (ITA Condition II.3).”).]

8. In connection with its independent review of the Holly AO, the EPA raised no procedural or substantive comments regarding with UDAQ’s regulation of the Refinery Flares, including the UBR. [See IR004001, EPA First Comment Letter; IR007840-7841, EPA Second Comment Letter.]

**B. Findings and Conclusions on Preservation**

9. Petitioners have partially preserved this argument in accordance with Section 19-1-301.5(4). In their comments, Petitioners challenged the calculation of the PTE for the flares but said nothing about misapplication or noncompliance with the UBR. [See IR009056-9057, Sagady second comment letter.]

10. Petitioners could have reasonably ascertained this issue as the UBR was specifically referenced in the ITA. [See IR008453.]

11. The argument that the issue is preserved because UDAQ referenced the UBR in the Response to Comments Memo is misplaced. In the responses, UDAQ simply referenced the UBR in response to an entirely unrelated comment. [See IR009210-9211, Response to Comments Memo (referring to R307-107 in response to the comment that “nothing provided by the applicant’s final revised notice of intent justifies the claimed 98% control efficiency claimed for VOC, HAP and CO Destruction efficiency from Applicant’s open air flares”).]

12. UDAQ’s unrelated response does not save Petitioners from the requirement to raise their issues and arguments in a way that gives UDAQ notice of the substance of the issue.

13. To the extent Petitioners argue that the UBR has been violated by Holly or is not being enforced by UDAQ, the argument is beyond the scope of what was raised during the



comment period and is unpreserved pursuant to Utah Code Section 19-1-301.5(4). Accordingly, it should be dismissed.

**C. Findings and Conclusions on Burden of Proof**

14. The claims Petitioners assert (both preserved and unpreserved) regarding the PTE for the flares constitute mixed questions of law and fact. The questions of law involve the interpretation of the UBR and the regulations and guidance relating to how PTE for flares should be calculated—specifically, whether upset emissions must be included in such calculations. The application of those laws to the facts of this case and the calculations performed by Holly create a mixed question. Accordingly, a reasonableness standard of review shall apply.

15. Petitioners have failed to meet their burden of proof for this claim because they failed in their briefing to marshal all of the relevant evidence from the record.

16. Petitioners ignore multiple pieces of evidence that explain how Holly calculated the PTE for the flares in accordance with applicable guidance and the UBR.

17. Having failed to meet their burden of proof, Petitioners' claim should be dismissed on this basis.

**D. Conclusions of Law on the Merits**

18. Even if Petitioners had properly preserved all of their arguments regarding the PTE calculations of the flare emissions, and even had carried their burden of proof (or to the extent marshaling is not properly applied to this claim (being a question of law)), Petitioners' claims fail on the merits for the independent reasons discussed below.

**i. UBR Application**

19. Petitioners claim that the UBR requires emission limits on sources of malfunction emissions. Nothing in the plain language of the UBR requires numeric limits on malfunction

emissions. Nor is there any other authority in support of requiring such a limit as part of the UBR. To the extent that Petitioners' arguments constitute a request for rulemaking, they must be rejected in these permit review proceedings.<sup>11</sup>

20. In any event, such limits are impossible for malfunction emissions because such emissions are, by their very nature, unpredictable and uncontrollable. [See IR008516.]

21. The UBR simply sets forth criteria that must be met in the event of excess malfunction emissions to allow UDAQ the enforcement discretion to forgo monetary penalties. See Utah Admin. Code R307-107-1 to -3.

22. Stated differently, the UBR assumes that malfunction emissions are violations of an applicable approval order but affords to UDAQ enforcement discretion regarding the imposition of fines and penalties if a source is otherwise in compliance with the other requirements of the rule, including monitoring and good combustion practices. Utah Admin. Code R307-107-1 to -3 (requiring reporting of breakdown emissions and giving UDAQ enforcement discretion).

23. The limit in the Holly AO for malfunction emissions from the flare is zero tpy, which is accounted for in the overall SO<sub>2</sub> and PM emission caps. [See IR002857, July 2012 NOI ("Startup, shutdown, malfunction events were considered to be zero.").] Any violation of those limits due to an upset or malfunction subjects Holly to the enforcement discretion of UDAQ under the UBR.

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<sup>11</sup> Petitioners may not advocate for a rulemaking change in a permit review adjudicative proceeding. [See In the Matter of: South Davis Sewer District, Order (*Remand to ALJ with Directions on Determining Whether There is a Basis to Grant Friends Standing to Intervene*), March 29, 2011, p. 11 ("a permitting proceeding is not the appropriate forum in which to advance adoption of new rules or challenge existing ones").] Such a request is only proper in a rulemaking proceeding under Utah Code Section 63G-3-101 *et seq.*

24. Any enforcement action by UDAQ, however, would be an independent proceeding separate from this adjudication and not a valid basis to remand the AO.

ii. **Flare PTE**

25. Petitioners challenge the PTE calculations of SO<sub>2</sub> and PM from the flares by arguing that the PTE inappropriately excluded upset and malfunction emissions. This argument fails for three reasons.

26. First, the law does not require the inclusion of upset emissions in a PTE calculation for flares because such upset emissions are not considered part of normal operation. *See Sierra Club v. Wyoming Dep't of Env'tl. Quality*, 251 P.3d 310, 314 (Wyo. 2011) (holding that “hypothesizing the worst possible emissions from the worst possible operation is the wrong way to calculate potential to emit...PTE includes only emissions that occur during normal operations” thus “cold start” emissions and “malfunctions” were properly excluded from the plant’s PTE); *see also Alabama Power Co. v. Costle*, 636 F.2d 323 (D.C. Cir. 1979); *United States v. Louisiana-Pacific Corp.*, 682 F. Supp. 1141, 1158 (D. Colo. 1988) (“[P]otential to emit does not refer to the maximum emissions that can be generated by a source hypothesizing the worst conceivable operation. Rather, the concept contemplates the maximum emissions that can be generated while operating the source as it is intended to be operated and as it is normally operated.”).

27. Holly excluded malfunction emissions from its PTE calculations for the flares and, instead, calculated emissions based on the “average non-upset throughput to [the] flare” and appropriate emissions factors. [See IR 003175.]

28. Second, Petitioners' arguments challenging the PTE calculations for the flares also fail because federally enforceable permit conditions in the Holly AO limit malfunction emissions to zero tons per year from the flares.

29. PTE is defined as:

the maximum capacity of a stationary source to emit a pollutant under its physical and operational design. *Any physical or operational limitation on the capacity of the source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is federally enforceable.*

40 C.F.R. § 52.21(b)(4) (emphasis added); Utah Admin. Code R307-101-2 (same definition).

30. Holly assumed a limit of zero tpy for malfunction emissions, which it factored into its emissions totals for the SO<sub>2</sub> and PM<sub>10</sub> emission caps in the Holly AO. [See IR002857, July 2012 NOI ("Startup, shutdown, malfunction events were considered to be zero.").] The SO<sub>2</sub> and PM<sub>10</sub> emission caps, which include emissions from all combustion sources including flares, are federally enforceable operational limitations. [See IR009245, Holly AO (Section II.B.6.a, "The emission of SO<sub>2</sub> into the atmosphere from all sources (excluding routine turnaround maintenance sessions) shall not exceed 110.3 tons per rolling 12-month period or 0.31 tons per day."); see also IR009247, Holly AO (Section II.B.7.a "PM<sub>10</sub> emissions from all combustion sources shall not exceed 47.5 tons per rolling 12-month period.").]

31. If Holly exceeds its emission caps due to an upset or malfunction, Holly will be in violation of its permit and subject to enforcement by UDAQ. [See IR009196, Response to Comments Memo ("All limits of the permit apply at all times, which include periods of startup, shutdown and malfunction.").] The UBR was put in place to deal with these very kinds of emissions.

32. Finally, the 240 tpy that Petitioners contend will be emitted every year as a result of upset emissions was a conservative estimate of what malfunctions could be—not what they actually are. [See IR003780.]

33. In fact, the emission calculation documentation in the record demonstrates that actual recorded historic malfunction emissions from the flare averaged only 34 tpy of SO<sub>2</sub> from both flares combined.<sup>12</sup> [Id.]

34. An addition of 34 tpy of SO<sub>2</sub> from the flares, even if such emissions were required for purposes of calculating PTE, would not have changed the conclusions of the netting analysis or made this project major for SO<sub>2</sub> given that the netting analysis demonstrated a 150.69 tpy overall emission reduction in SO<sub>2</sub>. [See IR007574-7575.]

35. For all of these independent reasons, Petitioners' arguments regarding the PTE for the flares fail on the merits and should be dismissed.

***iii. Reporting Requirements for the Flares***

36. Petitioners' final argument relating to the flares is that the Holly AO lacks limits or enforceable reporting requirements for its flares. The substantial weight of record evidence shows that this contention is unfounded.

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<sup>12</sup> The prediction for malfunction emissions utilized three standard deviations of the average actual malfunction emissions to come up with the 120 ton per flare figure. [See IR003780] The actual total of SO<sub>2</sub> emitted from the North and South Flares *combined* was:

12.7 tons of SO<sub>2</sub> in 2009

25.5 tons of SO<sub>2</sub> in 2008

91.0 tons of SO<sub>2</sub> in 2007

19.7 tons of SO<sub>2</sub> in 2006

20.8 tons of SO<sub>2</sub> in 2005

*Id.* Accordingly, contrary to Petitioners' contention that 240 tons of SO<sub>2</sub> from the flares will be emitted on a yearly basis, the highest emissions in any one given year was only 91 tons and the lowest was 12.7 tpy.

37. Holly is required to perform continuous emissions monitoring (“CEM”) of SO<sub>2</sub> emissions on all sources of SO<sub>2</sub>, including flares. [IR009245, Holly AO, (“For all the above listed emission points a CEM shall be used to determine compliance as outlined in II.B.3.e.”).]

38. Holly also is required to install “flow meters and gas combustion monitors” on the South Flare gas line “to monitor flare combustion efficiency” [IR009251, Holly AO]; and Holly is required to calculate PM emissions from all PM sources based on the amount of fuel combusted, the totals of which are then added into Holly’s emission cap for PM and reported to the state. [IR009245-47, Holly AO.]

39. Finally, Subpart Ja—applicable to all Holly Flares—contains requirements for monitoring and recordkeeping. *See* 40 C.F.R. § 60.107a(a)(2) (requiring owners or operators of flares to install a continuous monitoring device to measure H<sub>2</sub>S in the fuel gases going to the flare); *see also* 40 C.F.R. § 60.108a (record keeping and reporting requirements).

40. These multiple record keeping and reporting requirements all apply to Holly’s flares. Accordingly, Petitioners arguments regarding the flares all fail and should be dismissed with prejudice on the merits.

**V. The Record Demonstrates That Holly’s Emissions Will Not Cause or Contribute to an Exceedance of the NAAQS.**

1. Petitioners next argue, at some length, that the Holly AO is insufficient to protect the short term National Ambient Air Quality Standards (“NAAQS”) because it does not contain short term emission limits on all of Holly’s emission sources. [Petitioners’ Opening Brief at 22-34.] For the reasons stated below, this argument should be rejected.

**A. Findings of Fact**

2. UDAQ determined that its regulations did not require short term emission limits when there was no risk of exceedance of the NAAQS. [IR009186, Response to Comments

Memo (“Where it is clear that a source would not cause or contribute to a NAAQS violation, there is no free-standing regulation requiring short-term emissions limits.”).]

3. Based on modeling information provided by Holly and reviewed by UDAQ’s modeling staff, UDAQ determined there was no risk of any exceedance of the NAAQS from Holly’s proposed project. [IR009190-91, Response to Comments Memo (“Holly Refinery’s October 9, 2012 memo...was based on a request by UDAQ for Holly Refinery to submit an initial impact analysis based on the July 2012 NOI. This analysis showed no impact on the NAAQS CO, PM<sub>10</sub>, NO<sub>2</sub>, or SO<sub>2</sub>.”); IR009209, Response to Comments Memo (“This modeling analysis demonstrates that the predicted 1-hour SO<sub>2</sub>, concentrations would be 50.4 µg/m<sup>3</sup>, much lower than the NAAQS of 195 µg/m<sup>3</sup>”).]

4. Holly submitted its plans for modeling to UDAQ and those plans were approved by UDAQ’s modeling staff. [IR00031-48, Modeling Protocol (prepared by MSI setting forth the plan for the modeling); IR001153-54, Letter from UDAQ to Holly (approving of the Modeling Protocol submitted for emissions impact modeling); IR003591-97, Tom Orth Memo (analyzing Holly’s modeling and agreeing with results).]

5. Holly’s emission modeling analysis contemplated the maximum emissions that Holly could generate on a lb/hr basis, thereby ensuring that any short-term spikes in emissions were accounted for in the modeling and would not cause exceedances. [IR002993-96, July 2012 NOI (explaining that emissions input for the modeling were measured in lb/hr); IR009209, Response to Comments Memo (“This modeling analysis demonstrates that the predicted 1-hour SO<sub>2</sub>, concentrations would be 50.4 µg/m<sup>3</sup>, much lower than the NAAQS of 195 µg/m<sup>3</sup>”).]

6. Malfunction emissions were not considered in the modeling analysis because federal and state guidance exclude malfunction emissions from the modeling protocols.

[IR009214, Response to Comments Memo (explaining the application of Appendix W and that malfunction emissions need not be included in modeling).]

7. The results of Holly's modeling efforts clearly demonstrated there would be no exceedance of the NAAQS, including short-term NAAQS. [IR003017, July 2012 NOI (Table 6-15) (demonstrating no exceedance of NAAQS).]

8. UDAQ determined that Holly's permit application was complete in an email sent on July 19, 2014. [See IR003767, email from Camron Harry to Eric Benson, dated July 19, 2012 ("I am notifying you that I have now determined Holly Refinery's NOI is administratively complete.")].

9. In connection with its independent review of the Holly AO, EPA submitted two separate comment letters to UDAQ but did not raise any comments regarding short-term NAAQS protection or otherwise exercise EPA's broad oversight or enforcement discretion over the final Holly AO for any real or perceived failure to protect the short-term NAAQS. [See IR004001, EPA First Comment Letter; IR007840-7841, EPA Second Comment Letter.]

#### **B. Findings and Conclusions on Preservation**

10. Petitioners preserved this argument in accordance with 19-1-301.5(4) by raising the issue during the public comment period. [See IR007861-7863, Petitioners' Second Comment Letter.]

#### **C. Findings and Conclusions on Burden of Proof**

11. Petitioners have not satisfied their burden of proof for this argument because they have failed to marshal all of the evidence that demonstrates the NAAQS will not be exceeded.

12. While Petitioners cite some of UDAQ's reasoning in the response to comments, they failed to marshal the actual modeling evidence showing that short term emissions were



calculated on a lb/hr basis. This evidence supports UDAQ's determination that the short-term NAAQS were being protected regardless of whether there are short term emission limits in the Holly AO.

13. Having failed to provide any contradictory evidence in the record, Petitioners cannot satisfy their burden of proof and their claims regarding the NAAQS fail.

**D. Conclusions of Law on the Merits**

14. Even if Petitioners had carried their burden of proof, or to the extent marshaling is not properly applied to this claim (being a question of law), Petitioners' claims fail on the merits for the independent reasons discussed below.

**i. Short-Term Emission Limits Are Not Required for Minor Modifications**

15. Petitioners contend that short-term emission limits are always required to ensure protection of the short-term NAAQS. However, the one-hour NO<sub>2</sub> and SO<sub>2</sub> guidance documents Petitioners rely upon for this contention, [Petitioners' Opening Br. at 23-24], by their terms apply only to "major" modifications. *See* Memorandum from Anne Marie Wood, Air Quality Policy Division, to EPA Regional Directors, General Guidance for Implementing the 1-hour SO<sub>2</sub> National Ambient Air Quality Standard in Prevention of Significant Deterioration Permits, at 6 (Aug. 23, 2010) ("We are issuing the following guidance to explain and clarify the procedures that may be followed by applicants for *Prevention of Significant Deterioration Permits*." (emphasis added)).

16. Moreover, the guidance expressly states that it does not bind state permitting authorities. *See* Memorandum from Stephen D. Page, Office of Air Quality Planning and Standards, to Regional Air Division Directors, at 2 (Aug. 23, 2010) ("This guidance does not bind state and local governments and permit applicants as a matter of law.").

17. According to UDEQ's analysis, Holly's proposed project fell into the "major" category for CO and GHG emissions, not for NO<sub>x</sub>, SO<sub>2</sub>, or PM. [IR009186, Response to Comments Memo.]

18. Whether a modification is "major" is determined on a pollutant-by-pollutant basis:

Applicability of the major NSR program must be determined in advance of construction and is pollutant-specific. In cases involving existing sources, this requires a pollutant-by-pollutant determination of the emissions change, if any, that will result from the physical or operational change .... Once a modification is determined to be major, the PSD requirements apply only to those specific pollutants for which there would be a significant net emissions increase.

67 Fed. Reg. 80,186, 80,188 & n. 5 (Dec. 31, 2002). Because the project is not major for NO<sub>x</sub>, SO<sub>2</sub>, or PM, the Director, as a matter of law, was not required to adhere to federal guidance or impose short-term emissions limits for these pollutants.<sup>13</sup>

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<sup>13</sup> Petitioners claim that the Utah Supreme Court has "held that BACT emission limits must protect short term NAAQS," citing *Sierra Club v. Air Quality Board*, 2009 UT 76, 226 P.3d 719. [Petitioners' Opening Br. at 23-27.] Petitioners incorrectly interpret the Court's holding. In that case, the court simply observed in dicta "the EPA has described the goals of BACT emission limitations in three-parts: (1) to achieve the lowest percent reduction, (2) to protect short-term ambient standards, and (3) to be enforceable as a practical matter." *Id.* at 734. The court never evaluated or held this was a correct interpretation of the relevant regulations. Moreover, the fact that a goal of BACT is to protect the short-term NAAQS does not mean that short-term limits must invariably be imposed as part of a BACT determination regardless of whether the project involves a major modification or poses any actual risk of an exceedance. EPA guidance indicates that while any BACT emissions limits are to be considered in determining whether the source will cause or contribute to a NAAQS violation, the BACT requirement is not an independent basis for imposing additional short-term emissions limits. See Memorandum from Anne Marie Wood, Acting Director Air Quality Policy Division to Regional Air Division Directors, at 7 (Aug. 23, 2010) ("Once a level of control is determined by the PSD applicant via the Best Available Control Technology (BACT) top-down process, the applicant must model the proposed source's emissions at the BACT emissions rate(s) to demonstrate that those emissions will not cause or contribute to a violation of any NAAQS or PSD increment.").

19. Petitioners' reliance on *In re: Mississippi Lime*, PSD Appeal No. 11-01 (Aug. 9, 2011) as an alternate basis for the requirement for imposition of short-term emission limits in the Holly AO is also misplaced. The decision is inapplicable for two reasons.

20. First, in *Mississippi Lime*, the permit applicant proposed to construct a facility that, unlike Holly's proposed expansion, would emit SO<sub>2</sub> and NO<sub>x</sub> in quantities well above the significance thresholds so as to render the proposed facility subject to the PSD requirements for those pollutants. See IEPA, Project Summary at 4 (2010) (noting that "Mississippi Lime's proposed lime manufacturing plant is subject to PSD for emissions of SO<sub>2</sub>, NO<sub>x</sub> and CO because the potential emissions of the plant are more than 100 tons/year"), *available at* <http://www.epa.state.il.us/public-notice/2010/mississippi-lime-pdr/project-summary.pdf>; see also *Mississippi Lime*, slip op. at 1 (noting that Mississippi Lime sought to construct a new lime manufacturing plant).

21. Second, as the Director explained in his response to comments—which Petitioners do not contest—in *Mississippi Lime*, the permit was remanded to the state permitting authority "not simply because it failed to establish a limit, but because IEPA failed to provide 'a coherent, well-reasoned explanation of the decision' not to impose such a limit." [IR009186, Response to Comments Memo.]

22. By contrast, UDAQ has a well-reasoned explanation for why it did not impose the short-term limits requested by Petitioners—the modeling demonstrated there would be no exceedance of the short-term NAAQS. [IR003017, July 2012 NOI (Table 6-15) (demonstrating no exceedance of NAAQS).]

23. Accordingly, Petitioners' argument that short-term limits were required in the Holly AO fails on the merits and should be rejected.

ii. **Holly's Modeling Constitutes Substantial Evidence That the NAAQS Will Be Protected**

24. Although UDAQ and Holly were not required to conduct modeling to demonstrate compliance with the NAAQS because Holly proposed only a minor modification for NO<sub>x</sub>, SO<sub>2</sub>, and PM, *see* 40 C.F.R. § 52.21(a)(2)(ii) ("The requirements of paragraphs (j) through (r) of this section apply to ... the major modification of any existing major stationary source."),<sup>14</sup> in an effort to be thorough, Holly conducted the modeling anyway.

25. Before conducting any modeling, Meteorological Solutions Inc. ("MSI"), Holly's technical consultant, developed a modeling protocol setting forth the procedure that MSI would use to demonstrate that there would be no exceedance of the NAAQS, including the short term NAAQS. This protocol was sent to the modeling staff at UDAQ, who approved of the protocol. [See IR00031-48, Modeling Protocol; IR001153; IR003593, Orth Modeling Memo ("The applicant had an approved modeling protocol for using AERMOD in PSD modeling protocols.")] MSI used the PTE calculations of all SO<sub>2</sub> and NO<sub>x</sub> emission sources at the refinery for input into the model for the short-term modeling. [See IR000038 ("Maximum hourly potential to emit (PTE) emissions for existing and proposed sources will be input to the model."); IR000041 (same).]

26. PTE is defined as "the maximum capacity of a stationary source to emit a pollutant under its physical and operational design," taking into account enforceable emissions limits. 40 C.F.R. §§ 52.21(b)(4), 51.165(a)(1)(iii), 51.166(b)(4). Using the maximum capacity of each unit, MSI determined the total emissions the refinery could generate in one hour of operation measured in terms of lbs/hr. [See IR002993-96, July 2012 NOI.] Because PTE is

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<sup>14</sup> *See also* Utah Admin. Code R307-403-3 ("Every...major modification must be reviewed by the director to determine if a source will cause or contribute to a violation of the NAAQS.")

based on maximum capacity, this calculation represented the maximum emissions that could be produced at the refinery in a one-hour period. These values were used in the model and, once the background concentrations were combined with the PTE emissions, the modeling results showed that there would be no exceedance of the NAAQS, including the short-term NAAQS. [See IR003017, July 2012 NOI (Table 6-15); IR003596, Tom Orth Memo (Table 3); *see also* IR009209 (“This modeling analysis demonstrates that the predicted 1-hour SO<sub>2</sub> concentrations would be 50.4 µg/m<sup>3</sup>, much lower than the NAAQS of 195 µg/m<sup>3</sup>...Accordingly there is no need to impose 1 or 24-hour SO<sub>2</sub> limits to protect the SO<sub>2</sub> NAAQS.”).]

27. UDAQ’s Orth Memorandum specifically found that “the proposed project’s impacts, when combined with other industrial sources and ambient background, would comply with federal standards,” including the one-hour NO<sub>x</sub> and SO<sub>2</sub> NAAQS. In light of all of this record evidence, it was reasonable for UDAQ not to include any additional short-term emission limits in the Holly AO.

28. Petitioners do not dispute that the modeling results showed no exceedance of the NAAQS. Instead Petitioners challenge the modeling itself. These challenges do not undermine UDAQ’s approval of and reliance on the modeling analysis, particularly given the deference that UDAQ is due with respect to technical issues such as air quality modeling: “[Q]uestions pertaining to the appropriate pollutant emissions rates and other inputs to air quality models raise scientific and technical concerns that generally are best left to the specialized expertise and reasoned judgment of the permitting authority.” *In re: N. Mich. Univ. Ripley Heating Plant*, PSD Appeal No. 08-02, at 53 (EAB Feb. 18, 2009).

29. First, Petitioners argue that DAQ’s Orth Memorandum is unreliable because it states that “[t]his report outlines the methodology used in the dispersion modeling analysis of

emissions of criteria and HAP proposed in the NOI and the subsequent modeling results. It makes no determination with respect to compliance with the NAAQS or UDAQ – Toxic Screening Levels for HAPs or compliance thereof.” [IR003591-92, Tom Orth Memo.] However, that language simply indicates that the Orth Memorandum, by itself, did not constitute a determination as to compliance with the NAAQS, as illustrated by the fact that the memorandum made only a “recommendation” as to what further steps to take. [IR003597, Tom Orth Memo.] It does not mean that the Director may not consider the Orth Memorandum in determining compliance with the NAAQS and whether short-term limits are required, as the Director did in the Response to Comments Memorandum. [See IR009190-91, IR009209, Response to Comments Memo.]

30. Second, Petitioners assert that the modeling analysis cannot be used because the modeling must be “based on short term limits specified in the AO,” and may not “merely estimate short term emission rates.” [Petitioners’ Opening Br. at 29-31.] However, the modeling done here was based on the *maximum* possible hourly emissions level based on the *maximum* capacity of each emissions unit as explained above, not an estimate of average short-term emission rates. [See IR002993-96, July 2012 NOI.] UDAQ acted within its discretion when it relied upon this modeling analysis.

31. Third, Petitioners argue that the modeling is inadequate to demonstrate compliance with the short-term NAAQS because the modeling does not include upset emissions from the flares. [Petitioners’ Opening Br. at 31-33.] In support of this argument, Petitioners rely on 40 C.F.R. § 51, Appendix W, for the proposition that such emissions must be modeled. Petitioners are incorrect. As UDAQ specifically explained in rejecting Petitioner’s argument:

The commenter references 40 CFR 51 Appendix W, Section 8.1.2(a) as reference that malfunction/upset emissions should be included in the modeling analysis.

However, the commenter neglected to include the following footnote from that same section: “Malfunctions which may result in excess emissions are not considered to be a normal operating condition. They generally should not be considered in determining allowable emissions. However, if the excess emissions are the result of poor maintenance, careless operation, or other preventable conditions, it may be necessary to consider them in determining source impact.”

[IR009214, Response to Comments Memo (quoting 40 C.F.R. pt. 51, App’x W, § II.B.7.a.1.2(a) n.a).] UDAQ’s explanation has not been rebutted by Petitioners.

32. UDAQ’s interpretation of Appendix W is supported by a 2011 EPA guidance document providing additional clarification of the modeling requirements under Appendix W. *See* Memorandum from Tyler Fox, Leader Air Quality Modeling Group to Regional Air Division Directors, *Additional Clarification Regarding Application of Appendix W Modeling Guidance for the 1-hour NO<sub>2</sub> National Ambient Air Quality Standard* (Mar. 1, 2011). There, EPA stated that modeling for compliance with the 1-hour NAAQS should only

address emission scenarios that can logically be assumed to be relatively continuous or which occur frequently enough to contribute significantly to the annual distribution of daily maximum 1-hour concentrations based on existing modeling guidelines, which provide sufficient discretion for reviewing authorities to not include intermittent emissions from emergency generators or startup/shutdown operations from compliance demonstrations for the 1-hour NO<sub>2</sub> standard under appropriate circumstances.

*Id.* at 2.<sup>15</sup>

33. In an attempt to fit within the language of Appendix W, Petitioners contend that Holly’s malfunction emissions must be the result of poor maintenance, careless operation, or

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<sup>15</sup> EPA further clarified that “we are concerned that assuming continuous operations for intermittent emissions would effectively impose an additional level of stringency beyond that intended by the level of the standard itself. As a result, we feel that it would be inappropriate to implement the 1-hour NO<sub>2</sub> standard in such a manner and recommend that compliance demonstrations for the 1-hour NO<sub>2</sub> NAAQS be based on emission scenarios that can logically be assumed to be relatively continuous or which occur frequently enough to contribute significantly to the annual distribution of daily maximum 1-hour concentrations.” *Id.* at 9. The same logic applies to the 1-hour SO<sub>2</sub> standard.

other preventable conditions, and therefore should have been included in the modeling analysis. Petitioners argue that because EPA's NSPS regulations relating to flares require a root cause analysis where a flare emits more than 500 pounds of SO<sub>2</sub> in a 24-hour period, emissions over that level are necessarily the result of poor maintenance, careless operation, or other preventable conditions. [Petitioners' Opening Br. at 33.] However, Petitioners cite no authority suggesting that the separate requirement to conduct a root cause analysis contained in the NSPS regulations somehow amounts to a determination that as a matter of law all upsets emitting more than 500 pounds of SO<sub>2</sub> are necessarily caused by preventable conditions for purposes of Appendix W. Petitioners cite no reason to conclude that, just because an investigation into the cause of all emission events over a certain size is required, all such emission events are necessarily caused by preventable conditions. Indeed, EPA recognizes that "the probability of successfully identifying a means to avoid future emissions from each root cause analysis performed is certainly less than 100 percent," 72 Fed. Reg. 27,178, 27,197 (May 14, 2007), indicating that far from all emissions that trigger a root cause analysis would be caused by preventable conditions. [Petitioners' Opening Br. at 32-33.] Petitioners' argument finds no support in the record. The record evidence is to the contrary, recognizing that

if SO<sub>2</sub> modeling would have been required, then the malfunction emissions for SO<sub>2</sub> would not have been included because they do not represent normal, controlled operations. The 120 tpy of SO<sub>2</sub> from the flares due to malfunctions, as documented in the SPR Reviewer Note 5 (pp81-82), are based on Holly Refinery's historical data and do not predict future malfunctions. Nor do they result from poor maintenance or careless operation of the flare.

[IR009214-15, Response to Comments Memo.]

34. In light of UDAQ's technical conclusion, it was well within UDAQ's discretion to determine that the malfunction emissions should not be included in the modeling analysis.



*iii. Holly Was Not Required to Model for PM<sub>2.5</sub>*

35. Petitioners raise one final challenge to Holly's modeling. Specifically, Petitioners argue the modeling did not address the revision of the annual PM<sub>2.5</sub> NAAQS that took place in January 2013. This argument does not relate to any purported need for short-term emissions limits but rather is a separate attack on the modeling analysis.

36. For the same reasons as stated above, Holly's modification was not determined to be "major" for PM<sub>2.5</sub> and therefore Holly was not required to do any modeling for PM regardless of whether the NAAQS were amended. *See* 40 C.F.R. § 52.21(k)-(m); *see also* Utah Admin. Code R307-410-4.

37. Additionally, Holly's application fell within the grandfathering provision of the revised PM<sub>2.5</sub> NAAQS and so did not need to be updated to address the revised NAAQS. In finalizing the PM<sub>2.5</sub> NAAQS, EPA explained:

To facilitate timely implementation of the PSD requirements resulting from the revised NAAQS, which would otherwise become applicable to all PSD permit applications upon the effective date of this final PM NAAQS rule, the EPA is finalizing a grandfathering provision for pending permit applications. This final rule incorporates revisions to the PSD regulations that provide for grandfathering of PSD permit applications that have been determined to be complete on or before December 14, 2012 or for which public notice of a draft permit or preliminary determination has been published as of the effective date of today's revised PM<sub>2.5</sub> NAAQS. Accordingly, for projects eligible under the grandfathering provision, sources must meet the requirements associated with the prior primary annual PM<sub>2.5</sub> NAAQS rather than the revised primary annual PM<sub>2.5</sub> NAAQS.

78 Fed. Reg. 3,086, 3,249 (Jan. 15, 2013).

38. Holly's application was determined to be administratively complete on July 19, 2012, long before the PM<sub>2.5</sub> NAAQS modeling requirements became effective. [*See* IR003767, email from Camron Harry to Eric Benson, dated July 19, 2012 ("I am notifying you that I have

now determined Holly Refinery's NOI is administratively complete."").] Therefore, no additional modeling was required.

39. In short, none of Petitioners' challenges to the modeling analysis itself succeed. Petitioners have failed to provide any evidence that would undermine the significant evidence in the record demonstrating there would not be an exceedance of the NAAQS. The modeling analysis demonstrated that Holly's project would not cause or contribute to any NAAQS violation, including the short-term NAAQS. EPA raised no comments about any of the foregoing issues in connection with its independent technical and legal review of the Holly AO. Therefore Petitioners' arguments fail on the merits and should be dismissed.

**VI. Holly and the Director Properly Calculated PM Emissions from the FCC Units.**

1. Petitioners next argue that the Director erred in failing to require Holly to count condensable emissions in determining compliance with the emission limits on the FCC Units. [Petitioners' Opening Brief at 34-36.] For the reasons stated below, this argument should be rejected.

**A. Findings of Fact**

2. UDAQ determined that condensable particle emissions would not be counted for compliance with FCC Unit limits, but would be included in inventory calculations. [IR009243, Holly AO ("The condensable particle emissions shall not be used for compliance demonstration, but shall be used for inventory purposes."").]

3. The Utah PM<sub>10</sub> SIP, approved by EPA in 1994 (64 Fed. Reg. 68031 (July 8, 1994)), excluded condensable PM emissions from compliance demonstration with the PM<sub>10</sub> emission caps in the SIP. [IR007826, PM<sub>10</sub> SIP (attached as Exhibit L to Holly's Comment

Letter, (“The back half condensibles are required for inventory purposes and shall be determined using the method specified by the Executive Secretary.”).]

4. UDAQ recognized that the language in the PM<sub>10</sub> SIP controlled for purposes of drafting the Holly AO and excluded condensable emissions from all compliance limits for all PM<sub>10</sub> SIP cap sources—including the FCC Unit 25. [IR008569, Source Plan Review (“Holly Refinery is listed in the PM<sub>10</sub> SIP. That document established several emission limitations, one of which is a cap on PM<sub>10</sub> emissions. At the time the SIP was written the cap on PM<sub>10</sub> emissions was established using only the filterable PM<sub>10</sub> emissions captured during stack testing. This limitation was then included in the AO (and subsequent revisions) issued to Holly Refinery. UDAQ has since agreed that all future particulate (PM<sub>10</sub> and PM<sub>2.5</sub>) limitations at all sources will also include the condensable fraction of particulate emissions (such as those found in the back half of a particulate sampling train or by reference test method 202). However, any limitation which is derived directly from the PM<sub>10</sub> SIP cannot be altered without similarly altering the SIP. Therefore, those limitations on SIP-listed sources will continue to retain the original ‘filterable emissions only’ language, with the condensable emissions being used only for inventory purposes. Such is the case with Holly Refinery’s PM<sub>10</sub> cap emission limit. It is the intent of the Division to update these types of conditions once new SIP limitations are established in the PM<sub>2.5</sub> SIP.”).]

5. UDAQ specifically determined that it would not set PM<sub>2.5</sub> limits on the new FCC Unit 25 because source wide limits of PM<sub>2.5</sub> were being set for Holly in the new PM<sub>2.5</sub> SIP that was being developed at the time UDAQ issued the Holly AO. [IR009183, Response to Comments Memo (“UDAQ has not set a condensable limit on the FCC Unit 25 in this permitting action because UDAQ is currently developing a SIP for PM<sub>2.5</sub>. In this SIP, the contribution of

Holly Refinery to the valley airshed will be part of that evaluation and condensable limitations will be addressed.”); IR009206, Response to Comments Memo (“PM<sub>2.5</sub> condensable emissions will be addressed in the PM<sub>2.5</sub> SIP.”).]

6. In connection with its independent review of the Holly AO, the EPA submitted two separate comment letters to UDAQ but did not raise any comments regarding condensable emissions in determining compliance with the PM emission limits on the FCC Units or otherwise exercise EPA’s broad oversight or enforcement discretion over the final Holly AO for any real or perceived failure regarding the same. [See IR004001, EPA First Comment Letter; IR007840-7841, EPA Second Comment Letter.]

**B. Findings and Conclusions on Preservation**

7. During the public comment period, Petitioners’ comments were limited to challenging the PTE calculations for the new FCC Unit 25 and whether such calculations properly included condensable emissions. [See IR007857, WRA Second Comment Letter (“Holly’s Permit Application Underestimates the Increase in PM Emissions from the new FCCU”).]

8. Petitioners’ challenge to the FCC Unit 25 emission limit and the exclusion of condensables was never raised in the comments notwithstanding the fact that this issue was reasonably ascertainable as the limit was included in the ITA. [See IR008469, ITA (“Condensable particle emissions shall not be used for compliance demonstration, but shall be used for inventory purposes”).]

9. Petitioners also appear to argue in their Opening Brief that the BACT analysis for the FCC Unit 25 was invalid because it did not address condensables. Petitioners failed to raise this argument during the comment period and therefore it was not preserved.

10. Because, Petitioners failed to preserve both of these arguments as required by Utah Code Section 19-1-301.5(4), they should be dismissed.

**C. Findings and Conclusions on Burden of Proof**

11. Even if Petitioners had preserved their claims, Petitioners have failed to meet their burden of proof.

12. Whether condensable emissions are required to be included for purposes of compliance with emission limits is a question of law. Because this question of law is one with which UDAQ has been charged to administer, the ALJ must apply a clearly erroneous standard of review.

13. Petitioners do not acknowledge the requirements of the PM<sub>10</sub> SIP. Although this is not an instance where marshaling is required, Petitioners' disregard of the PM<sub>10</sub> SIP requirements is fatal to their claim that condensable emissions must be included for compliance with the FCC Unit's limits.

14. Petitioners have failed to point to any valid legal basis that undermines UDAQ's conclusion that the PM<sub>10</sub> SIP does not require condensables to be included for compliance with the PM emission limits in the Holly AO.

**D. Conclusions of Law on the Merits**

15. Even if Petitioners had carried their burden of proof, or to the extent marshaling is not properly applied to this claim (being a question of law), Petitioners' claims fail on the merits for the independent reasons discussed below.

16. The PM<sub>10</sub> SIP imposes a cap on all PM<sub>10</sub> sources at the Holly refinery including the new FCC Unit 25 but does not require condensable PM emissions to be calculated for compliance with that cap. [IR007826, PM<sub>10</sub> SIP (attached as Exhibit L to Holly's Comment

Letter (“The back half condensibles are required for inventory purposes and shall be determined using the method specified by the Executive Secretary.”); IR009243, Holly AO (“The condensable particle emissions shall not be used for compliance demonstration, but shall be used for inventory purposes.”); IR008569, Source Plan Review (recognizing the PM<sub>10</sub> SIP cap).]

17. At the time the Holly AO was being considered, the PM<sub>10</sub> SIP was the only applicable PM SIP and any provisions in the Holly AO that conflicted with that SIP would have required a SIP amendment. [See IR008569, Source Plan Review (“any limitation which is derived directly from the PM<sub>10</sub> SIP cannot be altered without similarly altering the SIP”); IR007826; Attachment L to Holly’s second comment letter (excerpt from PM<sub>10</sub> SIP stating “[t]he back half condensibles are required for inventory purposes...[t]he PM<sub>10</sub> captured in the front half...shall be considered for compliance purposes”).]

18. Although the recently adopted PM<sub>2.5</sub> SIP now requires condensable PM emissions to be calculated for compliance purposes, such a requirement was not in place prior to the issuance of the Holly AO. Utah law is clear that permits are only required to incorporate regulatory requirements that exist at the time of permit issuance. [See, e.g., In the Matter of Petroleum Processing Plant Emery Refining, LLC, Order Returning Recommended Order Re Motions to Stay to Administrative Law Judge for Further Action, April 8, 2014 (“Emery Order”) at 4 (limiting ALJ’s review to the record before her and prohibiting consideration of a separate NOI that could be granted or denied sometime in the future.).]

19. Petitioners’ references to Federal Register notices and guidance requiring PM condensable emissions for compliance purposes are misplaced because such requirements had not yet become binding on Holly. See 73 Fed. Reg. 28321, 28334 (May 16, 2008) (describing a

transition period for incorporation of condensable requirements into state implementation plans but only requiring such inclusion on major NSR projects).

20. If EPA believed UDAQ erred in its handling of condensables in the Holly AO, it had the jurisdiction and obligation to raise that issue in connection with its independent review of the Holly AO. EPA declined to do so. [See IR007840-7841, EPA comment letter (raising no issues about permit limits or the inclusion of condensables for compliance purposes).]

21. Petitioners also appear to argue that the BACT analysis for the new FCC Unit 25 is invalid because it does not account for condensable emissions. This argument fails not only because Petitioners did not preserve it during the comment period but also because any emission control technology that reduces filterable emissions will necessarily control for condensable emissions, both being post-control components of Holly's emission sources. Petitioners do not present any evidence that an alternative emission control technology would more effectively control condensable emissions beyond that which Holly is already required to install.

22. All of Petitioners' arguments regarding UDAQ's treatment of condensable PM emissions in the Holly AO fail on the merits and should be dismissed with prejudice.

**VII. Holly Properly Calculated and Included in its Netting Analysis VOC Emissions Reductions From its Cooling Towers.**

1. Petitioners next argue that Holly improperly claimed a 39.28 tpy VOC emission reduction from its cooling towers in the netting analysis it submitted to UDAQ. [Petitioners' Opening Brief at 36-41.] For the reasons set forth below, this argument should be rejected.

**A. Findings of Fact**

2. In 2009, Holly implemented a voluntary monitoring program in which it identified leaks in its cooling tower operation and fixed those leaks, thereby reducing emissions of VOCs from its cooling towers. [IR009203, Response to Comments Memo ("The reduction in

VOC emissions reported in Holly Refinery's NOI was a result of a voluntary monitoring program of the cooling towers that identified leaks from the towers that Holly Refinery fixed, thereby reducing its VOC emissions.”.)]

3. This monitoring program was made mandatory in the Holly AO on a going forward basis to ensure that the emission reductions Holly experienced by fixing its equipment remained at the reduced level. [IR007236, email from Mike Astin (environmental manager for Holly) to Camron Harry (permit writer for UDAQ), dated March 26, 2013 (“For the cooling towers, we monitor the cooling water return lines monthly for volatile organics using the Texas El Paso method. If any leaks are identified, we use screening methods to identify the leaking heat exchanger and repair it.”); IR009230; Holly AO (requiring that “all cooling towers implement the Modified El Paso Method.”); IR009244, Holly AO (requiring repair of any leaks detected “as soon as practicable, but no later than 45 days after identifying the leak...[v]erification of the repair shall be done through additional testing”).]

4. Prior to implementing the leak detection and monitoring program, Holly utilized an “uncontrolled” emission factor to calculate emissions from its cooling towers. [IR009203, Response to Comments Memo (“Prior to using the Modified El Paso Method, the AP-42 VOC ‘uncontrolled’ emissions were the basis for refineries to report cooling tower VOC emissions.”).]

5. After implementation of the monitoring program made mandatory by the Holly AO, Holly utilized a “controlled” emission factor to calculate emissions from its cooling towers. [IR008558, Source Plan Review (“VOC emissions from cooling towers 4 through 8 were previously estimated using the uncontrolled emission factor listed in AP-42 Section 5.1 of 6 lb/10<sup>6</sup> gal cooling water. In 2009, Holly Refinery began a voluntary daily monitoring program to detect VOC leaks into cooling water and to eliminate those leaks. In 2012, the monitoring



method was replaced with monthly monitoring using the Texas El Paso method. With continued use of regular monitoring, it is proposed to utilize the ‘controlled’ emission factor of 0.7 lb/10<sup>6</sup> gallons cooling water in AP-42 Section 5.1. This method will also be implemented for cooling towers 10 and 11.”.)]

6. It is the difference between the calculations with the “uncontrolled” and “controlled” emission factor that makes up the emission reduction that Holly included in its netting analysis. [*Id.*]

7. In connection with its independent review of the Holly AO, EPA submitted two separate comment letters to UDAQ. [*See* IR004001, EPA First Comment Letter; IR007840-7841, EPA Second Comment Letter.] While the Second Comment Letter requested more information regarding “the basis for the estimate of emissions reduced by converting from gas fired to electric motors for the compressors” [IR007840], the EPA raised no concerns about the netting issues raised by Petitioners here. Moreover, EPA’s request for supplemental information on this issue was satisfied in UDAQ’s response to comments.

#### **B. Findings and Conclusions on Preservation**

8. Petitioners preserved this argument in accordance with 19-1-301.5(4) by raising the issue during the public comment period. [*See* IR004214-4216, Mark Hall First Comment Letter.]

#### **C. Findings and Conclusions on Burden of Proof**

9. Petitioners’ claim that Holly incorrectly included a VOC emission reduction from its cooling towers is a mixed question of law and fact. The correct interpretation of the regulations governing when a source can utilize an emission reduction in a netting analysis is a

question of law. However, the application of those regulations to the facts in this case presents a mixed question to which the ALJ must apply a reasonableness standard of review.

10. Because this is a mixed question of law and fact, Petitioners had the burden to marshal the relevant factual evidence that pertained to this claim.

11. Petitioners failed to meet this burden by failing to reference the requirements in the Holly AO that make monitoring and leak repairs for the cooling towers enforceable permit conditions. This evidence undermines Petitioners' argument that the cooling tower emission reductions are not enforceable or creditable.

12. Having failed to marshal this and other relevant evidence, Petitioners cannot satisfy their burden to prove that UDAQ acted unreasonably in accepting Holly's netting analysis.

#### **D. Conclusions of Law on the Merits**

13. Even if Petitioners had carried their burden of proof, or to the extent marshaling is not properly applied to this claim (being a question of law), Petitioners' claims fail on the merits for the independent reasons discussed below.

14. Petitioners challenge the creditability and enforceability of the VOC emission reduction from the cooling towers because they claim it resulted from a voluntary monitoring program and therefore was unenforceable. *See* 40 C.F.R. § 52.21(b)(3) (requiring decreases in actual emissions be creditable and enforceable in order to be included in a netting analysis); [*see also* Petitioners' Opening Br. at 36-37]. Petitioners also claim that Holly was precluded from including the emission reduction in its netting analysis because the State of Utah arguably relied upon the emission reduction for demonstration of attainment of the PM<sub>2.5</sub> SIP. [*Id.*] Both arguments fail on the merits.

*i. Creditability of the VOC emission reduction*

15. The UDAQ reasonably found that Holly's VOC emission reduction to be creditable because it resulted from a physical change to refinery equipment and will be maintained through an enforceable permit condition in the Holly AO. [See IR009230; Holly AO (requiring that "all cooling towers implement the Modified El Paso Method."); IR009244, Holly AO (requiring repair of any leaks detected "as soon as practicable, but no later than 45 days after identifying the leak...[v]erification of the repair shall be done through additional testing").]

16. Under applicable law, an emission reduction is creditable if "(a) the old level of actual emissions exceeds the new level of actual emissions; (b) it is enforceable as a practical matter; [and] (c) it has approximately the same qualitative significance for public health and welfare as that attributed to the increase from the particular change." 40 C.F.R. § 52.21(vi)(a)-(c). The VOC emission reduction Holly claimed satisfies each of these three requirements.

17. First, Holly's VOC cooling tower emissions were higher prior to Holly's physical repairs to the cooling towers. [See IR009203, Response to Comments Memo ("The reduction in VOC emissions reported in Holly Refinery's NOI was a result of a voluntary monitoring program of the cooling towers that identified leaks from the towers *that Holly Refinery fixed*, thereby reducing its VOC emissions.") (emphasis added); see also IR007236, email from Mike Astin (environmental manager for Holly) to Camron Harry (permit writer for UDAQ), dated March 26, 2013 ("For the cooling towers, we monitor the cooling water return lines monthly for volatile organics using the Texas El Paso method. If any leaks are identified, we use screening methods to identify the leaking heat exchanger and repair it.").]

18. Petitioners argue that these emissions are merely estimated from emission factors and do not represent actual emission reductions, and therefore are not credible. Contrary to

Petitioners' arguments, however, the applicable regulations contemplate the calculation of emissions through emission factors. *See* 40 C.F.R. § 52.21(b)(21)(i) (providing that emissions "shall be calculated"). The EPA-drafted preamble to the relevant regulation explains that emission factors may be used in calculating "actual emissions." 67 Fed. Reg. 80,186, 80,195 (Dec. 31, 2002) ("When you calculate the baseline actual emissions for an existing emissions unit...you may select any consecutive 24 months of source operation within the past 10 years. Using the relevant source records for that 24-month period, including such information as the utilization rate of the equipment, fuels and raw materials used in the operation of the equipment, *and applicable emission factors*, you must be able to calculate an average annual emissions rate, in tpy, for each pollutant emitted by the emissions unit that is modified, or is affected by the modification." (emphasis added)).

19. I find that a "calculation" of emissions from cooling towers would necessarily be an estimate based on operating hours, production rates, and types of materials. Holly's VOC calculation was based on these same factors. [*See* IR008558, Source Plan Review (noting that Holly used the 'controlled' emission factor of 0.7 lb/10<sup>6</sup> gallons cooling water as described in AP-42 Section 5.1)]; *See also* AP-42 5.1 Petroleum Refining emission calculation descriptions, available at <http://www.epa.gov/ttnchie1/ap42/ch05/final/c05s01.pdf> (including in the emission calculation for cooling tower emissions the cooling water rate and refinery feed rate).]

20. Prior to Holly's voluntary monitoring program and physical changes to its cooling towers to reduce and eliminate VOC leaks, Holly utilized the "uncontrolled" AP-42 emission factor to calculate the VOC emissions from the cooling towers. [*See* IR009203, Response to Comments Memo ("Prior to using the Modified El Paso Method, the AP-42 VOC 'uncontrolled' emissions were the basis for refineries to report cooling tower VOC emissions.").]

21. After the units were repaired, Holly used the AP-42 “controlled” emission factor which resulted in a calculated emission reduction. [IR008558, Source Plan Review (“VOC emissions from cooling towers 4 through 8 were previously estimated using the uncontrolled emission factor listed in AP-42 Section 5.1 of 6 lb/10<sup>6</sup> gal cooling water. In 2009, Holly Refinery began a voluntary daily monitoring program to detect VOC leaks into cooling water and to eliminate those leaks. In 2012, the monitoring method was replaced with monthly monitoring using the Texas El Paso method. With continued use of regular monitoring, it is proposed to utilize the ‘controlled’ emission factor of 0.7 lb/10<sup>6</sup> gallons cooling water in AP-42 Section 5.1. This method will also be implemented for cooling towers 10 and 11.”).]

22. Where actual emissions are not easily measured—such as VOC emissions leaking from cooling towers—calculation estimates can provide reliable information to satisfy 40 C.F.R. § 52.21(vi)(a)-(c). *See* 74 Fed. Reg. 55,670 55,679 (Oct. 28, 2009) (noting that certain historical inventory data based on the AP-42 factors and “the AP-42 emission factors are the best available data by which to estimate cooling tower emissions”).

23. Second, the VOC emission reduction from the cooling towers is enforceable because it was the result of a physical change to the refinery equipment, which must be monitored and maintained under the terms of the Holly AO. [IR009224, Holly AO (condition II.B.4.a *Id.*; *see also* 40 C.F.R. § 52.21(b)(3)(vi)(b) (reduction is creditable if it is enforceable “at and after the time that actual construction on the particular change begins”).]

24. Holly is required, pursuant to the terms of the Holly AO, to continue monitoring for leaks from the cooling towers and must fix any discovered leaks in order to maintain the lower VOC emission levels from the cooling towers. [*See* IR009230; Holly AO (requiring that “all cooling towers implement the Modified El Paso Method.”); IR009244, Holly AO (requiring

repair of any leaks detected “as soon as practicable, but no later than 45 days after identifying the leak...[v]erification of the repair shall be done through additional testing”).] Any failure to do so subjects Holly to enforcement action by UDAQ—making these requirements, and the associated emission reduction, enforceable.

25. Third, Holly has satisfied the qualitative significance requirement that Petitioners claim has been violated. EPA’s NSR Manual states that “[c]urrent EPA policy *is to assume that an emissions decrease will have approximately the same qualitative significance* for public health and welfare as that attributed to an increase” unless the state has reason to believe otherwise. [Petitioners’ Reply Brief at 34 (emphasis added) (quoting EPA NSR Workshop Manual, 1990, A-38-39).]

26. Holly’s modeling demonstrates that there will be no violation of any NAAQS or PSD increments and overall, VOC emissions will be reduced. [See IR002980-3021, Holly’s NOI, section 6.0; *see also* IR003591-3597, Tom Orth Memorandum; IR007575, UDAQ information sheet (indicating a -17.02 overall VOC emission decrease from the project).]

27. Consequently, UDAQ had no reason to believe that the qualitative presumption would not be met in this case, and Petitioners have not identified any contrary evidence. *See, e.g., In re Inter-Power of N.Y., Inc.*, No. 92-8, 5 E.A.D. 130, 153-54 (EAB Mar. 16, 2014) (rejecting the argument that EPA should have conducted a health assessment to demonstrate that the qualitative significance of emissions was approximately the same, and holding that the burden was on the petitioner to “document[] that [the source’s] fuel change has increased its heavy metals emissions or created any health concerns. Accordingly, [petitioner] has not pointed to any record evidence” that indicates that this provision was not satisfied). Holly’s inclusion of the VOC emission reductions from the cooling towers therefore was proper.

28. Petitioners also argue that the 52.95 tpy VOC emission baseline referenced in the July 2012 NOI is inflated and, therefore, the emission reduction of 39.28 tons of VOC is inflated. Petitioners overlook that the emission spreadsheet they cite indicates that if 52.95 tpy was the VOC baseline, the associated emission reduction would have been 48.08 tons—not 39.28. [IR003059, July 2012 NOI.] Holly had two different baseline calculations for VOC emissions because at different points in the application process it used different baseline years for its netting calculations. [Compare IR003059, July 2012 NOI, with IR007300, Revised NOI.] In its Revised NOI, Holly used 44.15 tpy as a baseline for VOC emissions, which resulted in the reduction of 39.28 tons of VOC. [IR007300.] Had it used the higher baseline, the emission reduction would have also been higher, which means Holly’s netted VOC reduction is conservatively low. All of these baseline totals are derived from emission inventory reports that Holly submitted to DAQ, and they were all calculated with AP-42 emission factors. [IR003059, July 2012 NOI (citing “VOC Baseline 2008-2009” inventory years; IR007300, Revised NOI (citing “VOC baseline 2008-2009” inventory years”).]

ii. **Holly Was Not Required to Adjust Downward its Baseline VOC Emission Calculations**

29. Petitioners also challenge the VOC emission reduction on the basis that Holly should have adjusted downward its baseline VOC emission calculations because the El Paso monitoring method is required by a Maximum Achievable Control Technology (“MACT”) requirement under a National Emission Standard for Hazardous Air Pollutants and has been relied upon by UDAQ as a Reasonably Available Control Technology (“RACT”) requirement in the PM<sub>2.5</sub> SIP to demonstrate attainment.

30. Any requirements that are otherwise required to be imposed as MACT standards under section 112 of the Clean Air Act that result in emission reductions can still be used for

netting purposes unless the state has specifically relied upon the emission reduction in demonstrating attainment of a NAAQS in a SIP. *See* 40 CFR § 52.21(b)(48)(ii)(b) & (c) (“[I]f an emission limitation is part of a maximum achievable control technology standard..., the baseline actual emissions need only be adjusted if the State has taken credit for such emissions reductions in an attainment demonstration or maintenance plan.”); *see also* Memorandum from John S. Seitz, Director, Office of Air Quality Planning and Standards, to Bob Hanneschlager, Acting Director, Multimedia Planning and Permitting Division, Region VI (Nov. 12, 1997) (“Since the MACT program is not designed to limit criteria or other pollutants regulated by NSR programs of parts C and D of title I of the Act, EPA’s policy is that actual emissions reductions of hazardous or other air pollutants that result from complying with MACT regulations codified at 40 CFR part 63 may be considered ‘surplus’ for purposes of NSR netting and are not precluded from NSR netting as long as the reductions are otherwise creditable under NSR.”).

31. Petitioners argue that UDAQ relied upon the MACT standard of the Texas El Paso Method in the PM<sub>2.5</sub> SIP to demonstrate compliance. However, that assertion is misplaced because the PM<sub>2.5</sub> SIP had not been formally adopted at the time UDAQ issued the Holly AO. Petitioners overlook that the regulation upon which they rely for this assertion provides only that emissions must be adjusted downward where such emissions “would have exceeded an emissions limitation with which the major stationary source must *currently comply*,” with “currently comply” referring to the time of permit issuance. 40 C.F.R. § 52.21(b)(48)(ii)(c) (emphasis added).

32. That Holly may have been on notice that the El Paso Method might subsequently be required as a RACT standard is irrelevant in this analysis and Petitioners cite no authority holding otherwise.



33. Accordingly, UDAQ acted reasonably in accepting Holly's netting analysis with the VOC emission reductions included therein. Petitioners' claims to the contrary should be dismissed with prejudice on the merits.

**VIII. The FCC Unit 25's PTE Was Accurate and its Emission Limits Are Adequate.**

1. Petitioners challenge the accuracy of Holly's PTE calculations for the FCC Unit 25, arguing that the Holly AO is insufficient because it does not impose specific PM emission limits on the unit. [Petitioners' Opening Brief at 41-46.] For the reasons stated below, this argument should be rejected.

**A. Findings of Fact**

2. The emissions from the FCC Unit 25 are limited by the maximum capacity of the unit of 8500 barrels per day ("bpd"). [IR002811, July 2012 NOI ("A Fluid Catalytic Cracking Unit (FCCU) with a capacity of processing 8500 barrels per day will be constructed along with a 45 MMBtu/hr feed heater. Emissions from the FCCU will be controlled by a wet gas scrubber."); IR002820, July 2012 NOI ("A Fluid Catalytic Cracking Unit (FCCU) from an idled New Mexico refinery will be relocated to the Woods Cross Refinery. This unit is capable of processing 8500 barrels of gas oil per day and is similar in size to the existing FCCU."); IR003078, July 2012 NOI ("FCC Capacity Limit based on Equipment Specifications 8500 bbls/day."); IR003160, July 2012 NOI ("New FCCU...Capacity...8500 bbpd."); IR008491, Source Plan Review ("To process the additional bottom cut from the new crude unit (Unit 24), an additional Fluid Catalytic Cracking Unit ('FCCU Unit 25') with a capacity of processing 8500 barrels per day will be constructed."); IR009227, Holly AO ("Unit 4: Fluid Catalytic Cracking Unit (FCCU) 8,880 bpd annual average capacity"); IR009229, Holly AO ("Unit 25: FCCU 8,500

bpd annual average capacity”); IR009192, Response to Comments Memo (explanation for why the FCC Unit 25 emissions are limited by the operational capacity of the unit).]

3. The information relating to the capacity of the FCC Unit 25 contained in Holly’s NOI was certified as accurate by the Plant Manager, Mike Wright. [IR007836, certification signature page (Mike Wright certified that the information provided for the approval order was accurate and complete.).]

4. UDAQ determined that a coke burn rate of 6200 lb/hr was reasonable based on the data Holly provided. [IR009219, Response to Comments Memo (“Based on UDAQ’s technical expertise and experience,” UDAQ determined that “the 6200 lb/hr value is a fair and reasonable estimate of the quantity of coke burn in FCC Unit 25.”); IR008052, November 7, 2013 letter (Holly’s emission calculations for PTE of the FCC Unit 25).]

5. UDAQ also determined that Holly was subject to a PM emission cap that included the FCC Unit 25, and that any exceedance of the PTE calculated for the unit would subject Holly to enforcement for exceedance of the emission cap. [IR009208, Response to Comments Memo (“regardless of maximum throughput rates, the emissions are limited at the values established in ITA”); IR009219, Response to Comments Memo (explanation for why the PTE for the FCC Unit #25 was correct because the unit is subject to the PM emission cap and any exceedance of that cap would be a violation).]

6. In connection with its independent review of the Holly AO, the EPA submitted two separate comment letters to UDAQ but did not raise any comments regarding UDAQ’s PTE calculations for any FCCU or otherwise exercise EPA’s broad oversight or enforcement discretion over the final Holly AO for any real or perceived failure regarding the same. [See IR004001, EPA First Comment Letter; IR007840-7841, EPA Second Comment Letter.]

## **B. Findings and Conclusions on Preservation**

7. In their public comments, Petitioners only challenged the accuracy of the PTE calculations for Holly's FCC Unit 25. Specifically, Petitioners argued there was insufficient evidence to support the 6200 lbs/hr coke burn rate calculation, and that as a result, additional limits were needed for the unit. [See IR008598-8599, Mark Hall Second Comment Letter.]

8. In response to this comment, UDAQ requested that Holly provide additional documentation and calculations to support the 6200 lb/hr coke burn rate. [IR008021.]

9. Holly responded by providing the calculations it used to determine the coke burn rate. [IR8022-8023; IR008052.]

10. Petitioners argued differently in their Motion for Stay, that the 6200 lb/hr figure would not effectively limit PM emissions because emissions would increase if more coke was burned.

11. In Petitioners' briefing on the merits, Petitioners challenge for the first time the accuracy of the maximum capacity of the FCC Unit 25, claiming that there was no evidence in the record to support the 8500 bpd figure.

12. This maximum capacity was expressly stated in multiple places in the NOI and ITA. Any concern with the accuracy of the number was therefore reasonably ascertainable during the public comment period. [IR002811, July 2012 NOI ("A Fluid Catalytic Cracking Unit (FCCU) with a capacity of processing 8500 barrels per day"); IR008491, Source Plan Review ("To process the additional bottom cut from the new crude unit (Unit 24), an additional Fluid Catalytic Cracking Unit ('FCCU Unit 25') with a capacity of processing 8500 barrels per day will be constructed.").]

13. Accordingly, the only issue that has been adequately preserved by Petitioners is their challenge to the 6200 lb/hr coke burn rate and their assertion that additional limits are required for the FCC Unit 25. Their most recent challenge to the accuracy of the 8500 bpd capacity limit on the FCC Unit 25 has not been preserved in accordance with Utah Code Section 19-1-301.5(4) and should be dismissed for the reasons described above.

**C. Findings and Conclusion on Burden of Proof**

14. Even if Petitioners had preserved their challenge to the accuracy of the 8500 bpd capacity limit on the FCC Unit 25, Petitioners have failed to satisfy their burden of proof.

15. Whether the PTE emission calculations for the FCC Unit 25 are supported in the record is a highly technical factual issue that requires this tribunal to give deference to UDAQ in its review of the issue. Petitioners must demonstrate that UDAQ lacked substantial evidence in the record to support its decision that the PTE was calculated correctly.

16. Accordingly, Petitioners carry a heavy burden of proof to marshal the evidence relating to this issue to allow this tribunal to adequately evaluate and weigh the evidence relating to the claims at issue.

17. Petitioners have failed to meet their burden here by ignoring the relevant evidence in Holly's NOI explaining how Holly calculated the emissions that would be generated by the FCC Unit 25. Petitioners also provide no evidence contradicting Holly's certification that all of the numbers contained in the NOI were accurate.

18. DAQ invited commenters, including Petitioners here, during the public comment period to provide technical evidence of alternate coke burn rates that commenters argued would be more appropriate. Neither Petitioners nor other commenters responded to DAQ's request. [IR009219, Response to Comments Memo ("The commenter makes general reference to the

‘UOP yield estimates’ and ‘other more generic publications,’ but provided no documents or primary data to support or detail to which estimate, if any, was used to derive the suggested range of coke burn estimates. Based on UDAQ’s technical experience and expertise, the 6200 lb/hr value is a fair and reasonable estimate of the quantity of coke burn in FCC Unit 25. The commenter has not provided any specific technical information to UDAQ that would suggest a higher value is more appropriate.”)

19. Failing to carry their burden of proof on this highly technical issue, Petitioners’ claims fail.

**D. Conclusions of Law on the Merits**

20. Even if Petitioners had carried their burden of proof, or to the extent marshaling is not properly applied to this claim (being a question of law), Petitioners’ claims fail on the merits for the independent reasons discussed below.

21. The question of whether Holly and UDAQ correctly calculated the potential emissions for the FCC Unit 25 is a highly technical issue that requires this tribunal and any reviewing court to give deference to the agency because the agency, in its technical expertise, is in the best position to evaluate these issues.

22. Holly based its conclusion that the new FCC Unit 25 would burn coke at a rate of 6200 lb/hr on empirical data it obtained from the FCC Unit 4 that was in current operation at the refinery. [IR008052.] UDAQ requested and reviewed Holly’s calculation information and was satisfied that it justified the coke burn rate. [IR009219, Response to Comments Memo (“Based on UDAQ’s technical expertise and experience,” UDAQ determined that “the 6200 lb/hr value is a fair and reasonable estimate of the quantity of coke burn in FCC Unit 25.”); IR008052, November 7, 2013 letter (Holly’s emission calculations for PTE of the FCC Unit 25).]

23. The 6200 lb/hr figure was a conservative estimate. The original calculations showed a rate of 5653.964 lb/hr, and the FCC Unit 4 is a larger unit than the new FCC Unit 25. [IR008052; *see also* Holly AO at IR009227-009229 (The FCC Unit 4 processes 8,880 barrels per day (“bpd”) while the proposed FCC Unit 25 can only process 8,500 bpd).]

24. Petitioners are incorrect in their assumption that because the rate is not included as a limit in the Holly AO that Holly will exceed the PM limit of 0.30lb/1000 lbs of coke burned. The FCC Unit 25 emissions will not exceed the PTE because there is a finite capacity limit on the FCC Unit 25 that acts as a physical limitation on the amount of PM that can be emitted.

25. Even were this not the case, the refinery is limited to an overall PM<sub>10</sub> emission cap of 47.5 tpy and 0.13 tpd for combustion sources. [See IR009219, Response to Comments Memo.] “If these limitations are not met, the refinery will be out of compliance until it remedies the problem with additional control equipment or redesign of the system until it meets these limits.” [*Id.*]

26. Petitioners have failed to point to any evidence in the record that undermines the reasonableness of UDAQ’s reliance on the calculations Holly provided.

27. Petitioners’ only challenge to the PM cap that limits emissions from the FCC Unit 25 is the contention that EPA generally disfavors source wide cap limits. This assertion is without merit.

28. In the PM<sub>10</sub> SIP that EPA approved, UDAQ specifically noted that due to the significant variability of emission sources at a refinery, emission caps are appropriate. [See IR07768, PM<sub>10</sub> SIP language attached to Holly Comment letter as Exhibit I, (because “there was significant variability from day to day and from year to year...the refineries were allowed maximum never-to-be exceeded daily limits of PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>x</sub> based on the apparent

variability”).] This is true even though EPA generally disfavors source wide caps. In this case, EPA recognized an exception to the general approach in approving such caps in the PM<sub>10</sub> SIP.

29. In light of the highly technical nature of this issue, UDAQ must be afforded the greatest degree of deference in its conclusions regarding the evidence in the record supporting the FCC Unit 25’s PTE calculations. *See* Utah Code § 19-1-301.5(14). Lacking any evidence that would undermine UDAQ’s conclusions,<sup>16</sup> Petitioners’ challenge to the PM emission calculations fail.

**IX. Holly is in Compliance with Title V.**

1. Petitioners next argue that the Holly AO may not be issued if Holly is not in compliance with Title V of the Clean Air Act. Petitioners make three distinct arguments related to this claim: (1) Holly’s Title V application is not complete because the AO and Source Plan review lack certain Title V requirements; (2) Holly has not adequately supplemented its Title V application; and (3) not all applicable parts of Subpart Ja are included in the Holly AO in violation of Title V regulations. [Petitioners’ Opening Brief at 46-51.] For the reasons stated below, these arguments should be rejected.

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<sup>16</sup> For the first time in their Reply Brief, Petitioners appear to suggest that that the Holly AO is purportedly deficient because the Director’s use of PM<sub>10</sub> modeling as a surrogate for PM<sub>2.5</sub> modeling was invalid. Specifically, Petitioners assert that the FCC Unit 25 must contain a separate PM<sub>2.5</sub> limit to ensure its emissions will not contribute to a NAAQS violation. [Petitioners’ Reply Brief at 42.] Even were it permissible to raise a new argument in a Reply Brief, Petitioners never raised any concerns about this alleged surrogate policy in their comment letters; thus the issue is not preserved. Moreover, Holly is now subject to a source wide emission cap in the PM<sub>2.5</sub> SIP that will limit its PM<sub>2.5</sub> emissions. [Utah PM<sub>2.5</sub> SIP, January 8, 2014, p. 21 (setting a source wide PM<sub>2.5</sub> limit of 47.6 tons per rolling 12-month period).] UDAQ was reasonable in determining that its regulation of Holly’s PM<sub>2.5</sub> sources in the PM<sub>2.5</sub> SIP would limit Holly’s emissions and that a separate limit in the Holly AO was unnecessary.

**A. Findings of Fact**

2. Holly's predecessor-in-interest received a letter from UDAQ in 1995 that stated Holly's operating permit application was administratively complete, which provides Holly with an application shield from Title V enforcement action. [IR007725, Letter from UDAQ to the Phillips 66 Company, Holly's predecessor in interest (stating that "the Operating Permit application for Phillips Refinery (application #47) has been reviewed and determined to be complete in accordance with Utah Administrative Code (UAC) R307-15-5(1)(b)," that "the above site is shielded from enforcement action for operating without a permit until a permit is issued," and that additional information would be requested if needed).]

3. UDAQ recognized that Holly had a Title V application shield letter in its response to Petitioners' comments regarding Title V. [IR009175, Response to Comments Memo (Holly submitted at UDAQ's request "a July 29, 1995 letter from UDAQ indicating that a complete Title V Permit application had been received [and it] has been included in the record."); IR009184, Response to Comments Memo ("In any event...Holly Refinery is operating under an application shield...[t]he Title V application is currently pending.").]

4. UDAQ also recognized that Petitioners pointed to no statute or regulation that would preclude Holly from receiving an approval order without first obtaining a final Title V permit. [IR009184, Response to Comments Memo ("UDAQ does agree that Holly Refinery is a major source and is thus bound by R307-415, but the commenter has not referenced regulations that prevent a major source without a Title V permit from obtaining an AO, nor is UDAQ aware of such a regulation.").]

5. UDAQ determined that Holly was still subject to all applicable federal regulations regardless of whether Holly was in receipt of a final Title V permit. [IR008571, Source Plan



Review (“Title V of the Clean Air Act of 1990 applies to Holly Refinery as a major source. The absence of a Title V permit does not negate the requirements of Holly Refinery, it is still subject to all AO conditions and federal regulations that would be included in the Title V permit.”).]

6. In connection with its independent review of the Holly AO, the EPA submitted two separate comment letters to UDAQ but did not raise any comments regarding non-compliance with Title V or otherwise exercise EPA’s broad oversight or enforcement discretion over the final Holly AO for any real or perceived failure regarding the same. [See IR004001, EPA First Comment Letter; IR007840-7841, EPA Second Comment Letter.]

#### **B. Findings and Conclusions on Preservation**

7. Petitioners did raise a Title V issue during the comment period that focused on the allegation that Holly was illegally operating without a Title V permit. [See IR007860-7861, Petitioners’ Second Comment Letter (“Holly Refinery is illegally operating and will continue to do so until it receives a valid Title V permit.”).]

8. However, this is a much different claim than what Petitioners advocate in their briefing on the merits—that somehow Holly’s approval order and supporting documentation turned into a Title V application that is insufficient, leaving Holly in violation of Title V of the Clean Air Act.

9. This new argument was also not raised by Petitioners in their RAA even though the source plan review signature page they rely upon in the briefing was available for Petitioners to review. [See IR007834-7835 (attached to Holly’s Second Comment Letter).]

10. The relief requested in the RAA was simply that the Director must issue a Title V permit for Holly prior to authorizing the expansion project—not that Holly’s Title V application was incomplete or insufficient. [See RAA at 38.]

11. To the extent Petitioners' arguments extend beyond their initial contention that Holly is allegedly illegally operating without a valid Title V permit, such arguments have not been adequately preserved and should be dismissed on this basis.

**C. Findings and Conclusions on Burden of Proof**

12. The question of whether Holly is in compliance with Title V and whether UDAQ properly interpreted the Title V statute and rules to allow UDAQ to issue the Holly AO presents a mixed question of law and fact. The questions regarding interpretation of the Title V rules and regulations are questions of law. The application of that law to this specific case presents a mixed question of fact and law that must be reviewed under a reasonableness standard.

13. Petitioners are required to marshal all of the relevant evidence on this issue to allow this tribunal to adequately evaluate whether there is substantial evidence in the record to support UDAQ's decision to issue the Holly AO.

14. Petitioners have failed to satisfy their burden of proof for this claim. In fact, Petitioners' fail to reference the only piece of record evidence related to Title V compliance: UDAQ's letter to Holly's predecessor expressly stating that the refinery *is in compliance* with Title V. [See IR007725.]

15. Petitioners also fail to identify any final determination on Holly's pending Title V application that would restrict UDAQ's ability to issue Holly its approval order.

16. Lacking this evidence, Petitioners cannot satisfy their burden of proof and their claims regarding Title V must fail.

**D. Conclusions of Law on the Merits**

17. Even if Petitioners had carried their burden of proof, or to the extent marshaling is not properly applied to this claim (being a question of law), Petitioners' claims fail on the merits for the independent reasons discussed below.

18. Petitioners argue that before the Director may issue Holly an approval order, he must purportedly determine whether Holly is in compliance with Title V. *See* Utah Admin. Code R307-401-8(1)(b)(x) (an approval order may only be issued if "the proposed installation will meet the applicable requirements of...all other provisions of R307"); [*see also* Petitioners' Opening Br. at 47].

19. Petitioners assert that Holly is in violation of Title V because its Title V application is not complete and it has violated its duty to supplement its application "as necessary to address any requirements that become applicable to the source." Utah Admin. Code R307-415-5b. In support of this assertion, Petitioners rely on the fact that, as part of Holly's approval order application, Holly signed an optional signature page allowing the information in the Source Plan Review to be included in Holly's pending operating permit application. [*See* IR007836, SPR signature page.] Because this signature page signifies that the AO application is an update to Holly's Title V application but lacks certain Title V requirements, Petitioners argue that Holly's Title V application is legally deficient.

20. Petitioners similarly argue that by omitting the Subpart Ja requirements in the Holly AO, Holly also has violated the application requirements under Title V. On these bases, Petitioners assert that UDAQ may not issue an approval order to Holly while it is in violation of the Title V permit application requirements.

21. These arguments fail for four reasons.

22. First, any arguments related to Title V compliance or the sufficiency of Holly's Title V application is outside of this tribunal's jurisdiction. The Executive Director of DEQ has made clear that an ALJ's jurisdiction is limited to the administrative record before him or her and the particular permit under review. [See Emery Order (limiting ALJ's jurisdiction to the record before her and prohibiting consideration of an NOI application that could be granted or denied at some point in the future.).] Any other permits or applications for permits that Holly may have submitted—all of which involve separate administrative records—are beyond the scope of these proceedings. *Id.* More important, Petitioners do not point to any final Title V permit decision that could be reviewed by this tribunal even if it had jurisdiction to do so.

23. Second, even if I had jurisdiction, it is clear from this record that Petitioners have not presented any evidence or authority that renders invalid the application shield letter issued to Holly's predecessor-in-interest. [See IR007725.] This shield remains in place until the permitting authority takes action on the entire Title V permit application, which it appears has not yet occurred. See 42 U.S.C. § 7661c(d) ("if a part 70 source submits a timely and complete application for permit issuance (including for renewal), the source's failure to have a part 70 permit is not a violation of this part until the permitting authority takes final action on the permit application"); see also 40 C.F.R. § 70.7(b) (same); see also Utah Admin. Code. R307-415-5a(3)(e) (same). This means every approval order that Holly has received is an update to its Title V permit application. The Holly AO is no exception and does not independently give rise to a cause of action under Title V's separate rules or regulations.

24. Third, even if I had jurisdiction, this argument fails as a matter of law: Nothing in the Title V statute or applicable regulations contains any time period for supplementation of the Title V application. See Utah Admin. Code R307-415-5b. That Holly continues to provide

information to EPA and UDAQ regarding NSPS compliance (which is a Title V requirement) effectively evidences that Holly's Title V permit application is being updated on an ongoing basis. [See IR004138-59, Exhibit 7 to Petitioners' first comment letter (containing a compliance report, sent to the EPA and UDAQ, including compliance demonstration for NSPS requirements).] Thus, Petitioners' reliance on the signature page as evidence of an incomplete Title V application is without merit.

25. Fourth, even if I had jurisdiction, Petitioners' argument that UDAQ's failure to recite the entire Subpart Ja regulation in the Holly AO violates Title V is incorrect. [Petitioners' Br. at 10-11.] As previously explained, UDAQ is not required to recite the entire 43-page Subpart Ja regulation in the Holly AO. In any event, the record demonstrates that Subpart Ja *does apply* and that Holly is in compliance with all federal requirements. [See IR007725.]

26. For all of these reasons, Petitioners' claims regarding Title V fail on the merits and should be dismissed with prejudice.

**X. The Record Supports the Use of the NEI Emission Factors in Holly's Emission Calculations.**

1. Petitioners next argue that the Director erred when he authorized the use of the NEI emission factors to calculate PM emissions from certain of Holly's heaters and boilers. [Petitioners' Opening Brief at 51-58.] For the reasons discussed below, this argument should be rejected.

**A. Findings of Fact**

2. Holly submitted to UDAQ two independent expert reports explaining why the NEI emission factors were more accurate and better predictors of emissions than the AP-42 emission factors—namely, because of the newer dilution testing methodology that was used to develop the NEI emission factors. [IR007238-58, First Glen England Report ("England I")]

(explaining why the NEI emission factors more accurately predict PM<sub>2.5</sub> emissions from gas fired heaters and boilers); IR008024-44, Second Glen England Report (“England II”) (same).]

3. Because the NEI emission factors were untested at the Holly refinery, UDAQ imposed stack testing requirements to verify the accuracy of the emission factor calculations. [IR009215-16, Response to Comments Memo (explaining that UDAQ imposed stack testing requirements to verify the accuracy of the NEI emission factors, reviewed the Glen England Reports and maintained the original conclusion that use of the NEI emission factors was appropriate); IR009217, Response to Comments Memo (explaining that Holly was subject to a stringent emission limit for its heaters and boilers that matched the NEI emission factor calculations and that Holly is subject to stack testing requirements to verify compliance).]

4. UDAQ also imposed an emission limit of 0.00051 lb/MMBtu in Section II.B.7.a.2 of the Holly AO. [IR009248, Holly AO.]

5. UDAQ only imposed this limit on Holly’s NSPS heaters and boilers. [IR008558-59, Source Plan Review (explaining use of NEI emission factors for NSPS sources); IR009218, Response to Comments Memo (explaining use of NEI emission factors for NSPS sources).]

6. Presumably at the request of Mark Hall, a commenter on the draft Holly AO, EPA staff members sent emails to an undisclosed Gmail account discussing the accuracy of the NEI emission factors and the ability of EPA to approve new emission factors generally. [IR008911-8922; IR009043.] Neither the attachments to these emails nor the complete emails were included with the comments. [*Id.*]

## **B. Findings and Conclusions on Preservation**

7. Petitioners preserved some aspects of their argument regarding their challenge to the NEI emission factors in accordance with 19-1-301.5(4) by raising the issue during the public comment period. [See IR008584-8595, Mark Hall Second Comment Letter.]

8. Petitioners did not, however, preserve the argument that § 7430 of the Clean Air Act precluded the use of the NEI emission factors.

9. Section 7430 of the Clean Air Act was not cited anywhere in the comments submitted during the public comment period but was reasonably ascertainable because it was codified in the U.S. Code during the public comment period.

10. Petitioners did not raise this substantive argument until their briefing on their request for a stay in this proceeding.

11. Accordingly, any arguments relating to § 7430 of the Clean Air Act are unpreserved and should be dismissed.

12. In their Reply Brief, Petitioners, argued for the first time that the § 7430 claim was made in response to additional information submitted to UDAQ after the close of the public comment period and was therefore not barred by the preservation rules found in Utah Code Section 19-1-301.5(4). Petitioners asserted that any prohibition to their ability to address information submitted after the close of the public comment period would be a violation of their due process rights.

13. Petitioners' due process argument relating to their ability to assert the § 7430 claim was not briefed until the Reply. Issues raised for the first time in a reply brief are rejected in appellate contexts. *See e.g., Coleman ex rel. Schefski v. Stevens*, 2000 UT 98, ¶ 9, 17 P.3d 1122 (refusing to consider matters raised for the first time in the reply brief). Accordingly, this

tribunal will not entertain Petitioners' due process arguments briefed for the first time in their Reply Brief.

14. Additionally, even if such an argument were properly before this tribunal, the only information Holly submitted after the close of the public comment period relating to the NEI emission factors was the second Glen England Report, in which Mr. England expanded on his prior report (submitted before the public comment period) explaining why the NEI emission factors were the most representative factor for determining emissions from Holly's new heaters and boilers. [See IR008024-44.]

15. Petitioners' § 7430 argument is not directed at this second Glen England report and does not address any of the technical findings contained therein. Instead, as Petitioners admit, the § 7430 argument is purely a legal argument relating to whether UDAQ could use emission factors other than the AP-42 factors, officially approved by EPA.

16. Therefore, in light of the fact that the § 7430 argument has nothing to do with the Glen England Report and is a purely legal argument that was reasonably ascertainable during the public comment period, the claim has not been adequately preserved, and no due process rights have been infringed.

### **C. Findings and Conclusions on Burden of Proof**

17. Even if Petitioners' claims had all been adequately preserved, they have failed to meet their burden of proof.

18. Petitioners' claim that UDAQ erred in relying on the NEI emission factors to calculate the PTE for Holly's NSPS heaters and boilers presents a mixed question of law and fact. Whether UDAQ is legally authorized to use an emission factor other than AP-42 is a question of law and UDAQ has been given discretion to interpret this law, requiring the



application of a clearly erroneous standard of review. The question of whether UDAQ was reasonable in accepting the NEI emission factor data is a highly technical mixed question of law and fact that is reviewed for reasonableness.

19. Although Petitioners reference, in a footnote, the Glen England Reports, they do not analyze any of the information contained in those reports. Instead, Petitioners focus on a paper that Glen England published in 2004, which discusses generally the NEI emission factors as well as several emails from EPA staff discussing the adequacy of the NEI emission factors.

20. Petitioners also focus their argument on the assertion that UDAQ is prohibited by Section 7430 of the Clean Air Act from using any emission factors not specifically approved by EPA.

21. Petitioners have failed to adequately marshal all of the relevant evidence for this highly complicated issue. Accordingly, they have not satisfied their burden of proof to challenge Holly's use of and UDAQ's acceptance of the NEI emission factors.

#### **D. Conclusions of Law on the Merits**

22. Even if Petitioners had carried their burden of proof, or to the extent marshaling is not properly applied to this claim (being a question of law), Petitioners' claims fail on the merits for the independent reasons discussed below.

23. Petitioners advance multiple arguments as to why the use of the NEI emission factors to calculate emissions from Holly's heater and boilers was improper. Each of these arguments fails for the reasons discussed in detail below.

i. *There is No Legal Requirement that UDAQ use AP-42 Emission Factors*

24. Petitioners argue that the law mandates UDAQ use AP-42 emission factors to calculate PM emissions from Holly's NSPS heaters and boilers. This argument fails for three reasons.

25. First, nothing in Utah's minor source permitting regulations and nothing in the federal PSD/NSR regulations requires the use of AP-42 emission factors. In fact, those regulations do not mention the AP-42 factors at all.

26. While EPA has identified the AP-42 factors as one method of estimating potential emissions under the PSD/NSR program, the AP-42 factors are not the only authorized method. EPA also has sanctioned numerous other methods, including "emissions from technical literature." [EPA New Source Review Workshop Manual, Prevention of Significant Deterioration and Nonattainment Area Permitting, draft dated October 1990 ("EPA Puzzlebook"). The NEI emission factors are "emissions from technical literature" that Holly used to calculate potential PM<sub>2.5</sub> emissions from its gas fired heaters and boilers.

27. Moreover, the AP-42 factors themselves caution that they are not to be mechanically applied, but may be superseded by more specific or appropriate technical information. As EPA has advised:

Before simply applying AP-42 emission factors to predict emissions from new or proposed sources, or to make other source-specific emission assessments, the user should review the latest literature and technology to be aware of circumstances that might cause such sources to exhibit emission characteristics different from those of other, typical existing sources. Care should be taken to assure that the subject source type and design, controls, and raw material input are those of the source(s) analyzed to produce the emission factor. This fact should be considered, as well as the age of the information and the user's knowledge of technology advances.

EPA, *Introduction to AP-42*, 4 (Jan. 1995), available at [www.epa.gov/ttnchie1/ap42/c00s00.pdf](http://www.epa.gov/ttnchie1/ap42/c00s00.pdf).

In this fashion, EPA delegates to the relevant permitting authority discretion to determine how to calculate emission rates.

28. Second, Petitioners' argument that the NSPS regulations mandate the use of AP-42 is also misplaced because the NSPS program is entirely separate from the PSD program and regulations from one program cannot dictate action in the other. *See, e.g., Env'tl. Defense v. Duke Energy Corp.*, 549 U.S. 561, 577 (2007) (recognizing the definitions of "modification" under the PSD and NSPS programs are distinct and the "PSD regulations on 'modification' simply cannot be taken to track the Agency's regulatory definition under the NSPS").

29. Finally, Petitioners' argument that 42 U.S.C. § 7430 prohibits the use of the NEI emission factors because EPA has not specifically approved such factors also fails.

30. The plain language of this statute contradicts Petitioners' argument because Section 7430 applies only to emission factors used "to estimate the quantity of emissions of *carbon monoxide, volatile organic compounds, and oxides of nitrogen* from sources of such air pollutions."<sup>17</sup> 42 U.S.C. § 7430 (emphasis added). The statute says nothing about the use of emission factors to estimate the quantity of PM<sub>2.5</sub> and PM<sub>10</sub>—the only emissions for which Holly used NEI factors to estimate emissions from its heaters and boilers.

31. In any event, Section 7430 does not dictate that UDAQ use any specific emission factors in a permitting proceeding, but requires EPA to update emission factors, saying nothing

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<sup>17</sup> Consistent with the plain language of the statute, EPA has repeatedly explained that this provision applies only to "the emission factors used to estimate emissions of volatile organic compounds (VOC), carbon monoxide (CO), and oxides of nitrogen (NO<sub>x</sub>) from area and mobile sources," not to emission factors for PM<sub>2.5</sub> and PM<sub>10</sub>. 67 Fed. Reg. 56289 (Sept. 3, 2002); 62 Fed. Reg. 45802 (Aug. 29, 1997).

about when such factors must be used. UDAQ retains discretion to decide which emission factors are appropriate, in its expert technical opinion.

32. As EPA has explained in evaluating the use of emission factors generated under Section 7430:

These procedures are *not* a means for individual facilities to obtain EPA approval of a site-specific emission factor or to determine the appropriateness of applying a published EPA factor to a specific facility. *EPA does not approve site-specific factors or judge the appropriateness of its factors for specific facilities. The responsibility for such decisions continues to be that of the State or local regulating authority, as well as the facility operators themselves.*

EPA's published emission factors are intended to provide an affordable method of estimating emissions where no better data are available. They are best used to characterize the total emissions loading of a large geographic area containing many individual facilities. Therefore, these factors attempt to represent a typical or average facility or process in a given industry. *EPA recognizes that other methods of obtaining emissions estimates may be more accurate than industry-average emission factors, and encourages the use of better methods whenever the source and/or the State or local regulating authority is able to support those methods.*

Public Participation Procedures for EPA Emission Estimation Guidance Materials, at 2 (May 1997) (second and third emphasis added).<sup>18</sup>

33. EPA has specifically recognized that state permitting authorities may use other methods *without* obtaining approval under § 7430, so long as the permitting authority "is able to support these methods." *Id.*

34. UDAQ had substantial evidence in the record to support its decision to use the NEI emission factors as set forth in section *ii.* below.

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<sup>18</sup> Available at <http://tinyurl.com/EPA-guidance>.

35. Petitioners have failed to establish any valid legal basis mandating the use of AP-42 emission factors for estimating PTE for permitting purposes. Therefore this claim fails on the merits.

ii. *It Was Reasonable for UDAQ to Accept Holly's Use of the NEI Emission Factors*

36. UDAQ did not abuse its discretion by following EPA's instruction and looking to alternative methods of calculating emissions in this case. As noted above, the determination of which emission factors to use falls squarely within the discretion of UDAQ. That determination is entitled to substantial deference, particularly given its technical nature. *See, e.g., Utah Code § 19-1-301.5(13)(b); accord In re: N. Mich. Univ. Ripley Heating Plant*, PSD Appeal No. 08-02, at 53 (EAB Feb. 18, 2009) ("[Q]uestions pertaining to the appropriate pollutant emissions rates and other inputs to air quality models raise scientific and technical concerns that generally are best left to the specialized expertise and reasoned judgment of the permitting authority."); *In re: Newmont Nev. Energy Inv., LLC, TS Power Plant*, 12 E.A.D. 429, 444 (EAB 2005) ("[W]e accord broad deference to permitting authorities with respect to issues requiring the exercise of technical judgment and expertise."); *Utah Dep't of Admin. Servs. v. Pub. Serv. Comm'n*, 658 P.2d 601, 610 (Utah 1983) ("[A] court should afford great deference to the technical expertise or more extensive experience of the responsible agency.").

37. Before explaining why UDAQ's acceptance of the NEI emissions factors is reasonable, supported by substantial evidence, and does not constitute an abuse of discretion, it is necessary to provide some brief background regarding PM and emission factors generally.

38. Particulate matter (PM) is comprised of a complex mixture of extremely small particles and liquid droplets. [Utah PM<sub>2.5</sub> State Implementation Plan, adopted December 4, 2013 ("2013 SIP"), § 1.1.] PM<sub>10</sub> is particulate matter with an aerodynamic diameter of 10 microns or

less. 40 C.F.R. § 51.50. PM<sub>2.5</sub> is particulate matter with an aerodynamic diameter of 2.5 microns or less. *Id.*

39. There are two types of PM emissions: primary and secondary. The type on which Petitioners focus in their challenge, primary PM, is comprised of particles that are directly emitted from a source as a solid or liquid (“filterable PM”) or vapor that immediately condenses after discharge to form solid or liquid PM (“condensable PM”). *See* 40 C.F.R. § 51.50. According to EPA’s AP-42 emission factors, condensable PM accounts for 75% of PM emissions from the type of natural gas combustion sources at issue here. [*See* AP-42 Compilation of Air Pollutant Emission Factors (1998); *see also* England II at IR008029.]

40. An emission factor attempts to estimate the quantity of a pollutant released into the atmosphere with an activity associated with the release of that pollutant. 47 Fed. Reg. 52723-01, 52724 (Oct. 14, 2009). EPA’s AP-42 emission factors were “initially developed for emission inventory purposes only”—i.e., to assist national, regional, state, and local regulatory authorities with making air quality management decisions and developing emission control strategies. *Id.* at 52723, 52725. Since then, however, EPA has recognized the AP-42 emission factors have been “used for many other air pollution control activities for which they were not designed,” including permitting and enforcement. *Id.*

41. Various testing methods have been developed for calculating primary PM<sub>2.5</sub> emissions (both filterable and condensable). The AP-42 factors on which Petitioners rely were originally developed almost twenty years ago using a “stack test impinger method,” which draws a gas sample through a heated filter and then a series of iced “impingers.” [England I at IR007240.] As explained in the England Reports, the problem with this method is that cooling the sample with chilled water causes emissions—and particularly SO<sub>2</sub> emissions—to condense

and particulate out as “pseudo-particulate” matter. Although the gas emissions would not condense to form particulate matter under normal operating conditions, the AP-42 factors nevertheless measure this pseudo-particulate matter as primary PM<sub>2.5</sub>. [England II at IR008027-8029; England I at IR007240, IR007242.]

42. EPA has recognized this same problem with the stack test impinger method. EPA has observed, for example, that “sulfur dioxide (SO<sub>2</sub>) gas (a typical component of emissions from several types of stationary sources) can be absorbed partially in the impinger solutions and can react chemically to form sulfuric acid. This sulfuric acid ‘artifact’ is not related to the primary emission of [condensable particulate matter] from the source, but may be counted erroneously as [condensable particulate matter].” 75 Fed. Reg. 80,118, 80,121 (Dec. 21, 2010). EPA also has acknowledged “that SO<sub>2</sub> in particular, and perhaps other gaseous compounds, can react with the collecting liquids used in the [stack test impinger] method to form materials (artifacts) that would not otherwise be solid or liquid or would not condense upon exiting the stack.” 72 Fed. Reg. 20,586, 20,653 (Apr. 25, 2007).

43. The Glen England Reports explain that this problem is particularly acute for gas-fired sources. EPA developed its test methods for sources such as coal-fired boilers, which emit PM concentrations at much higher levels than gas-fired sources, and EPA has never evaluated the performance of these methods for gas-fired sources. [England II at IR008029, IR008034.] These measurement errors caused by the hot filter/iced impinger methods “are so significant when applied to gas-fired boilers and heaters ... that they partially or completely obscure the true emission level.”<sup>19</sup> [England II at IR008029.]

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<sup>19</sup> In addition to being based on flawed test methods which measure artifacts that do not actually constitute particulate matter, the relevant AP-42 PM<sub>2.5</sub> factors are based on limited data. The AP-42 PM<sub>2.5</sub> factors are based on only 11 tests of four emissions units for condensable

44. The NEI factors, by contrast, were developed using a newer “dilution method.” Unlike the old stack test methods, dilution-based testing does not create artificial pseudo-particulate matter because the gas sample is cooled with filtered air, similar to what happens to emissions in the course of actual operations. According to the England Reports, this results in much more representative and accurate PM<sub>2.5</sub> measurements. [England II at IR008027, IR008030-8032; England I at IR007241.]

45. EPA has recognized the benefits of this newer testing method, observing “that a dilution sampling method for measuring direct PM<sub>2.5</sub> eliminates essentially all artifact formation *and provides the most accurate emissions quantification.*” 72 Fed. Reg. 20,586, 20,653 (Apr. 25, 2007) (emphasis added). In fact, EPA has expressly identified certain applications “where dilution sampling provides advantages over the standard test methods,” and actively “encourage[d] sources that encounter these situations to request that the regulatory authority ... use this method to approve the use of dilution sampling as an alternative to the test method specified for determining compliance.” 75 Fed. Reg. 80118-01, 80132 (emphasis added).

46. In this case, EPA raised no objection to use of the NEI emission factors during the public comment period.<sup>20</sup> [See Response to Comments at 43 (noting that “during the public comment period, EPA did not object to the use of [the NEI] emission factors”).] Nor has EPA

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particulate matter (which forms the majority of PM<sub>2.5</sub> emissions). [England II at IR008039.] These tests were not performed by EPA, but by contractors on behalf of individual facilities or industry trade associations. [England II at IR008035.] Moreover, the measurement uncertainty of the AP-42 PM<sub>2.5</sub> factors for gas-fired sources is greater than the average estimate of emissions. [England II at 4.] The England Reports describe these and a number of other flaws with the AP-42 PM<sub>2.5</sub> factors that are not reiterated in detail here. [See England II at 3.]

<sup>20</sup> While EPA did ask for more information as to the basis for the reduction of PM<sub>10</sub> and PM<sub>2.5</sub> potential-to-emit numbers in Holly’s second netting analysis, [see IR007840-7841], UDAQ addressed this inquiry in its Response to Comments, explaining that the calculations were “based on the 2006 EPA-published National Emissions Inventory (NEI) Information.” [IR009176] Subsequent to this direct identification of the use of NEI emission factors, EPA has raised no further questions concerning the netting analysis or otherwise challenged Holly’s AO.



challenged the issuance of the AO. EPA also has raised no objection to UDAQ's recent authorization of the NEI factors for purposes of calculating PM<sub>2.5</sub> under UDAQ's PM<sub>2.5</sub> State Implementation Plan. [See Utah SIP § I.X.H.11(k)(i), dated January 8, 2014 ("SIP Part H") at 60.]

47. In arguing that UDAQ must use the AP-42 emission factors, Petitioners do not defend the accuracy of the AP-42 factors on a technical basis. Nor do they address any of the criticisms, expressed by both EPA and the England Reports, about the inaccuracies of the stack test impinger methods on which the AP-42 factors are based.

48. The fact that AP-42 factors have been used in the past does not mean that UDAQ must continue to rely on those same factors for the Holly AO. UDAQ's determinations—including the "technical" and "scientific" questions such as what emission factors are to be used—are to be made on the basis of the evidence provided to UDAQ and placed in the administrative record in a particular permitting action. Utah Code § 19-1-301.5(13)(b). Holly provided UDAQ with data regarding the flaws in the AP-42 PM<sub>2.5</sub> factors and outlining the superior accuracy of the NEI PM<sub>2.5</sub> factors. UDAQ evaluated this evidence and "determined that the NEI emission factors can be used." [IR009216, Response to Comments Memo.] Prior use of the AP-42 PM<sub>2.5</sub> factors does not undermine this conclusion.<sup>21</sup>

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<sup>21</sup> Petitioners' claim that the May 2011 RTI International Emission Estimation Protocol for Petroleum Refineries endorses the use of the AP-42 emission factors and does not identify the NEI PM<sub>2.5</sub> data. [See IR008661, attachment F to Mark Hall Second Comment Letter.] However, the purpose of the protocol was not to identify the *absolute* level of PM<sub>2.5</sub> emissions from each refinery, but to require the tested refineries to use the same emissions factor so that their *relative* emissions could be compared. In responding to comments on the protocol, EPA explained that "it is important that default emission factors are consistent between different reporters so we can properly compare the results." [Summary of Comments and Responses, EPA-HQ-OAR-2010-0682 (Feb. 2, 2011), Appx. V of Holly's Opposition to Motion for Stay, also available at [www.regulations.gov/#!documentDetail;D=EPA-HQ-OAR-2010-0682-0028](http://www.regulations.gov/#!documentDetail;D=EPA-HQ-OAR-2010-0682-0028).] In any event, the protocol itself states that the "emission factors in AP-42 are *the recommended default* emission

49. Based on the substantial evidence in the record providing technical support for UDAQ's decision to accept use of the NEI emission factors and the emission calculations based on those factors, and given the lack of contradictory technical evidence, Petitioners cannot meet their burden to demonstrate that UDAQ acted unreasonably.

*iii. The NEI PM<sub>2.5</sub> Emission Factors are Based on Sound Technical Data and Petitioners' Reference to Other Information Does Not Undermine the Data.*

50. The majority of the technical data supporting the NEI emission factors is found in the England Reports, which state that "[t]he NEI PM<sub>2.5</sub> emission factors were derived by EPA staff from data contained in GE EER's comprehensive test reports published from 2002-2004," along with "detailed supporting test data." [England II at IR008032.]

51. This testing program "included extensive quality assurance measures," and more comprehensive data than is provided in the compliance tests used to develop the AP-42 factors. [England II at IR008034-8035.] These results have been subject to peer review and have been corroborated by other independent scientific studies. [England II at IR008032.] The NEI test data is also quantitatively superior when it comes to condensable particulate matter emissions, which form the majority of PM<sub>2.5</sub> emissions: the AP-42 factors were based on 11 test runs of four units, while the NEI factors were based on 20 test runs of six units. [England II at IR008039, IR008041.]

52. The cautionary statements regarding the NEI emission factors upon which Petitioners rely "do not suggest in any way that those factors are insufficiently supported by data or should not be used." [England II at IR008033.] The AP-42 PM emission factors are accompanied by similar language explaining that the emission factors are based on limited data factors," not that the AP-42 factors are the only permissible emission factors. [IR008715 (emphasis added).]

and may not be accurate. [England II at IR008029-8030.] Such cautionary language is generally found in all instances where emission factors are used.

53. The boiler sampling data and performance guarantees from the John Zink Company are an incomplete compilation of data that is not explained, nor relatable to Holly's gas fired heaters and boilers. The boiler standards were provided to UDAQ on a one-page sheet of test results, without the full test reports or any explanation as to the testing methodology or nature of the emissions sources. [See IR008586, Mark Hall Second Comment Letter.] Additionally, two of the four boilers did not burn natural gas during their tests and so are not analogous to the gas-fired sources at issue here. [England II at IR008030 n.1.] The emissions from the remaining two sources vary widely, resulting in "very low" confidence in the average. [England II at IR008040.] Accordingly, this data does not undermine use of the NEI emission factors.

54. The Zink guarantees were similarly provided without context or explanation. Without the testing data, it is impossible to verify that these factors were not based on the same flawed test methods as the AP-42 factors. Moreover, the Zink guarantees are not emission factors or estimates, but rather guarantees provided by a commercial manufacturer that emissions will not exceed a certain level. Equipment manufacturers have an incentive to guarantee emissions that are conservatively high so that the commercial risk associated with failing to meet the guarantee is low. [England II at IR008034 ("If PM guarantees are not met during performance tests on a new unit, tens or hundreds of millions of dollars in customer payments may be at stake.").]

55. In weighing the evidence in the record, as this tribunal must do in accordance with Utah Code Section 19-1-301.5, it is clear that the use of the NEI emission factors is

supported by the majority of sound scientific evidence in the record and UDAQ was therefore reasonable in its acceptance of the NEI factors.

iv. **UDAO Was Reasonable in its Reliance on Enforceable Emissions Limits in the Holly AO in Determining the Potential to Emit for Holly's Heaters and Boilers.**

56. Petitioners argue that emission limits on Holly's heaters and boilers cannot be used to limit the facility's potential to emit and so UDAQ erred in its determination that Holly's project was minor for PM<sub>2.5</sub>. This tribunal disagrees.

57. The AO imposes an enforceable limit on PM<sub>2.5</sub> emissions from each of the emissions units for which the NEI emission factors were used in an amount equal to the NEI emission factors. [IR009248, Holly AO (providing that "[t]he emissions of PM<sub>10</sub> from the following NSPS Boilers and heaters shall not exceed 0.00051 lb/MMBtu").]

58. The methodology used in this case to determine whether the proposed modification was "major" for PSD/NSR purposes was a comparison of the refinery's potential to emit after the expansion project versus its baseline actual emissions before the expansion. *See* 40 C.F.R. § 52.21(a)(2)(iv)(d). [*See also* IR008560, Source Plan Review (noting that Holly has used the potential to emit methodology to determine the projected increases from the expansion project).] Under this method, the estimated potential emissions are compared to the baseline emissions; if the difference between the two exceeds a certain quantity, the modification is deemed "major" for that pollutant.

59. "Potential to emit" is defined as

the maximum capacity of a stationary source to emit a pollutant under its physical and operational design. *Any physical or operational limitation on the capacity of the source to emit a pollutant*, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted,

stored, or processed, *shall be treated as part of its design if the limitation or the effect it would have on emissions is federally enforceable.*<sup>22</sup>

40 C.F.R. § 52.21(b)(4) (emphasis added); Utah Admin. Code R307-101-2 (same definition).<sup>23</sup>

60. The emissions limit imposed on the NSPS boilers and heaters is an enforceable limitation in the Holly AO. [See IR009218, Response to Comments Memo (“If the stack testing indicates that Holly Refinery cannot comply with these emission factors, it would be out of compliance with its AO....”)]; *see also* 67 Fed. Reg. 80,186, 80,190-91 (Dec. 31, 2002) (explaining when an emissions limitation is enforceable). Accordingly, the potential to emit of these emissions units was properly limited to 0.00051 lb/MMBtu – the same level as established by the NEI emission factors.

61. UDAQ was reasonable in relying on this limiting factor in its determination that Holly’s project would only be a minor modification for PM.

62. Ultimately, none of Petitioners’ arguments challenging Holly’s use of the NEI emission factors undermines’ UDAQ’s reasonable decision to accept Holly’s emission calculations based on those factors. Petitioners’ arguments on this claim all fail on the merits and should be dismissed with prejudice.

**XI. The Emission Reductions From the Decommissioning of the Propane Pit Flare Were Properly Included in Holly’s Netting Analysis.**

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<sup>22</sup> The term “federally” in this definition is interpreted as meaning “practically enforceable” by a federal, state, or local entity. 67 Fed. Reg. 80,186, 80,191 (Dec. 31, 2002). [See also Memorandum from John S. Seitz re: Release of Interim Policy on Federal Enforceability of Limitations on Potential to Emit, at 3 (Jan. 22, 1996).]

<sup>23</sup> Petitioners suggest that the NSPS regulations provide a definition for calculating “potential to emit.” This is incorrect. The NSPS rules nowhere use the concept of “potential to emit” to determine whether a modification has taken place. Instead, the NSPS definition of modification is based on whether there has been a change in the hourly emissions rate, while the PSD regulations are based on total annual emissions. *See Duke Energy Corp.*, 549 U.S. at 577-78.

1. Petitioners final argument is that Holly inaccurately calculated the emission reductions from its decommissioning of the propane pit flare and should not have included such emissions in its netting analysis. [Petitioners' Opening Brief at 60-61]. For the reasons stated below, this final argument should be rejected.

**A. Findings of Fact**

2. The emission reductions that Holly claimed from its decommissioning of the propane pit flare came from actual emission inventory information submitted to UDAQ in 2008 and 2009 and were not re-calculated specifically for purposes of this project. [IR009218, Response to Comments Memo ("flare emissions came from the UDAQ inventory record for reported actual emissions from 2008-2009 based on 259 MMBtu/hr and actual throughput data").]

3. The historic modifications to the propane pit flare to bring it into compliance with NSPS did not affect the baseline calculations or the AP-42 emission factor calculations. [IR007337, Revised NOI ("Compliance with NSPS affects neither the AP-42 emission factor calculation, which is based on the amount of propane used, nor the baseline calculations.").]

4. None of Holly's modifications to the Propane Pit Flare affected overall emissions. Therefore Holly was free to take credit for the emission reductions when the flare was decommissioned. [IR009182, Response to Comments Memo ("Because compliance with 40 CFR 60 Subparts A & J did not affect emissions, reductions from the removal of this propane pit flare are creditable reductions.").]

5. In connection with its independent review of the Holly AO, EPA submitted two separate comment letters to UDAQ. [See IR004001, EPA First Comment Letter; IR007840-7841, EPA Second Comment Letter.] While the Second Comment Letter requested more

information regarding (a) “the basis for the estimate of emissions reduced by converting from gas fired to electric motors for the compressors” [IR007840] and (b) the netting calculations relating to the new benzene saturation unit #23 and applying a boiler #5 NOx limit [IR007841], the EPA raised no concerns about the netting issues raised by Petitioners in their final argument on appeal. Moreover, EPA’s request for supplemental information on this issue was satisfied in UDAQ’s response to comments.

**B. Findings and Conclusions on Preservation**

6. Petitioners preserved this argument in accordance with 19-1-301.5(4) by raising this issue during the public comment period. [See IR007857 Petitioners’ Second Comment Letter.]

**C. Findings and Conclusions on Burden of Proof**

7. The issue of whether Holly accurately estimated reduction of PM emissions from the removal of its propane pit flare presents highly technical factual questions. It also presents legal questions about what data may be used for reduction purposes in a netting analysis. Accordingly, this issue is a mixed question of law and fact and UDAQ’s decision to include the emission reductions in the netting analysis will be analyzed under a reasonableness standard.

8. Petitioners failed to marshal all of the evidence pertaining to this issue—namely the 2008 and 2009 emission inventory data. Petitioners merely question the final calculations without presenting any conflicting evidence or analyzing the evidence in the record.

9. Accordingly, Petitioners have not met their burden of proof on this claim and it fails on that basis.

**D. Conclusions of Law on the Merits**

10. Even if Petitioners had carried their burden of proof, or to the extent marshaling is not properly applied to this claim (being a question of law), Petitioners' claims fail on the merits for the independent reasons discussed below.

11. Petitioners argue that the propane pit flare emissions were overestimated based on Holly's use of AP-42 emission factors. Petitioners contend the emission reduction must be overestimated because based on the calculated reduction, the propane pit flare would have been burning every day of the year.

12. Petitioners submit no evidence in support of this contention. Specifically, Petitioners do not address the fact that the emission reduction was based on the 2008 and 2009 historic emission inventory data that Holly submitted to UDAQ as required by Utah Admin. Code R307-150.

13. Part of this calculation involved the use of AP-42 emission factors to calculate the emissions from the flares because emission factors are necessary where emissions are generated from an open flame. [See IR007337, Revised NOI, ("Baseline emissions for the flare at the propane pit were calculated based on the AP-42 emission factors for flares.").]

14. For purposes of netting, the regulations expressly provide that the historical inventory information may be used as a baseline for calculating emissions increases and decreases. See 40 C.F.R. § 52.21(b)(48)(ii).

15. That Holly used NEI emission factors to calculate emissions from its heaters and boilers is irrelevant to the question of whether the flare emissions were properly calculated with AP-42 factors. Petitioners have pointed to no statute or regulation that would require Holly or UDAQ to re-calculate historic inventory information every time new emission factors are developed.



16. Petitioners' claim that there is no evidence in the record to support these historic emission calculations also fails because all parties, including Petitioners, agreed to exclude the emission inventory calculations from the record given the volume of those files. [See Holly's Surreply at 28; *see also* UDAQ's Surreply at 33.] If Petitioners thought there was an error in the calculations, the information could have been made available to them for their review. Petitioners may not now argue, without having asked to review the calculations, that the lack of such evidence supports their claim.


17. Petitioners have failed to present any evidence that would undermine the significant deference afforded to UDAQ in its review of highly technical emission calculations and review of netting analyses. Moreover, Petitioners have presented no technical evidence that undermines the accuracy of the historical inventory information. Accordingly, Petitioners' challenge to the propane pit flare emission calculations fails on the merits and should be dismissed with prejudice.

### **CONCLUSION AND PROPOSED ORDER**

1. Based on the foregoing, Petitioners have not met their burden to demonstrate that UDAQ erred in issuing the Holly AO.

2. Further based on the foregoing and having satisfied my charge to undertake a permit review adjudicative proceeding in connection with this matter in accordance with Utah law, I recommend that the Executive Director deny Petitioners' Request for Agency Action and affirm UDAQ's issuance of the Holly AO.

DATED this 11<sup>th</sup> day of March, 2015.

A handwritten signature in black ink, appearing to read "B. Randall", written over a horizontal line.

BRET F. RANDALL  
Administrative Law Judge

**CERTIFICATE OF SERVICE**

I HEREBY CERTIFY that on the 11<sup>th</sup> day of March 2015, I served the foregoing  
**FINDINGS OF FACT, CONCLUSIONS OF LAW AND RECOMMENDED ORDER**  
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/s/ Bret F. Randall, ALJ \_\_\_\_\_

# **APPENDIX A**

**Table of Waived Claims Petitioners Raised in Their RAA But Failed to Brief on the Merits**

<b><u>RAA Page Number</u></b>	<b><u>Description of Waived Claim</u></b>	<b><u>Claim # in Briefs</u></b>
27-29	"The AO Does Not Adequately Address Co Emissions and CO BACT"	8
29-30	"The Director Failed to Respond to Public Comments as Required by Law"	9
43-44	"It is Impossible to Verify the Facility's SO <sub>2</sub> Potential to Emit"	17
47-48	"The BACT for the South Flare is Inadequate"	20
50	"The AO Does Not Comply with the Federally Enforceable PM <sub>10</sub> SIP"	24
51	"There is No Adequate Basis in the Record for the AO as the Record Does Not Reflect Independent Analysis of the Assertions and Calculations Made in the NOI"	25
51-52	"There is Insufficient Information and Analysis in the Record to Support the AO"	26
53	"The Netting Analysis is Insufficient and Does Not Support the Finding that the Expansion Project is a Minor Modification"	28
53-55	"The Holly Refining NOI is Incomplete for its Failure to address Hydrogen Sulfide, Total Reduced Sulfur and Sulfuric Acid Aerosol as Required NSR-Regulated Pollutants"	29
55-57	"The AO is Not Based on PM Emissions During Emission Characterization, Project Related Emission Increases, Netting and Net Increase Calculations and in the Required BACT Determinations; the Refinery Onsite Road Network is an Emission Unit Not Listed in the AO Approved Installations and Holly Refining Plans to Increase Site-Road-Related PM, PM <sub>10</sub> & PM <sub>2.5</sub> Emissions Through a Physical Change or Change in the Method of Operation of this Emission Unit"	30
59-60	"Table 3-4 and 3-5 NO <sub>2</sub> Reference [is incorrect]"	32

60-61	"Facility Configuration and Operations in Compliance with Holly Refining's Notice of Intent"	33
61-62	"Holly Refining's NOI Contains Significant Errors on the Matter of the Specific Start of the Contemporaneous Period"	34
62-63	"The AO is Based on an Improper Characterization of the Contemporaneous Period"	35
63-65	"The AO is Unlawful Because the Director Failed to Require and Base his Permitting Analysis on the Necessary Process Flow Diagrams and New Source Review Forms"	36
65-67	"The Evaluation and Characterization of Contemporaneous Emission Increases is Inadequate"	37
67-69	"The Section 2.3.1 "Fuel Gas" Process Support Group Analysis and Related Section 3 Emission Tables Do Not Show an Adequate 40 C.F.R. §52.21(b)(3)(i)(b) Determination of Contemporaneous Creditable Emission Increases and Decreases"	38
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70	"The Section 2.3.3 Disclosure Concerning Flares Does Not Provide Sufficient Information to Determine Contemporaneous Creditable Emission Increases at Non-Modified Flare Emission Units"	40
70-71	"The Section 2.3.6 Discussion of Wastewater Treatment and the Refinery Wastewater Sewer System Does Not Provide Sufficient Information to Determine Contemporaneous Creditable Emission Increases"	41
74-75	"Holly Refining's Section 3 Emission Increase and Net Emission Increase Tables Contain Erroneous Specification of Volatile Organic Compound and Hazardous Air Pollutant Emissions from Cooling Tower #11"	43
76-77	"VOC Emissions and Waxy Crude Handling, Transfer and Storage"	45
78	"Holly Refining Erroneously Claimed VOC Emission Reduction from Removal of a Floating Roof"	46

79-81	"The Director Fails to Enforce Notice of Intent and Compliance Report Certification by Holly Refining"	48
81	"Condition II.B.1.b in the AO is Too Vague to be Enforceable"	49
81	"The AO Production Rates During Compliance Stack Tests Are Insufficient"	50
81-82	"The AO Fails to Contain a Section Addressing the Regulatory Status, Method of Emission Control and Monitoring-Inspection-Recordkeeping-Reporting Requirements for Tank Sources of VOC and HAP"	51
83-84	"The AO Fails to Enforce Specific Requirements of the July, 2008 EPA Consent Decree Covering PM Emission Limitations for FCCU Unit 4 and Fails to Require Sufficient Monitoring Necessary to Assure Compliance with PM Emission Requirements from FCCU Units 5 and 25"	53
84-86	"The AO Fails to Provide a Best Available Control Technology Emission Limitation for PM, PM10 or PM2.5 to Control Emissions from FCC Unit 4"	54
86-87	"Setting NO <sub>x</sub> Emission Limitations for 4FCCU and 25FCCU Catalyst Regenerator Exhaust Must be Explained and Justified on the Record to Eliminate Error and Ambiguity"	55
87-88	"The AO Omits Oxygen Corrections for NO <sub>x</sub> and SO <sub>2</sub> Emission Limitations that are Stack Flue Gas Concentration Limits"	56
91-93	"The Record Does Not Include Maximum Potential to Emit for Short Term SO <sub>2</sub> Emissions from the FCC Unit 25 Wet Scrubber Exhaust Vent Compliance Determination Point that are Associated with Sulfur Recovery Unit/SRU Incinerator Outages"	59
93-94	"The AO Fails to Contain Oxygen Monitoring and Wet Scrubber Outlet Volumetric Flow Rate Determination at FCC Units 4 & 25 Wet Scrubber Controlled Vent Stacks"	60
95-96	"The Director Eliminated a Previously Established PM Limits for FCC Unit 4 Without Replacing Such a Limit with a Revised BACT Determination"	62
96-97	"Holly Refining Has Not Demonstrated that the 15% Opacity Limit for 25 FCCU Constitutes a BACT Visible Emission Limitation"	63

97-98	"The Director Must Regulate the FCC 34" Flue Gas Bypass"	65
98-99	"Nothing Provided by Holly Refining's Final Revised Notice of Intent Justifies the Claimed 98% Control Efficiency Claimed for VOC, HAP and CO Destruction Efficiency from the Open Air Flares"	66
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108-109	"The AO Fails to Incorporate a VOC BACT Determination and Fails to Address EPA Consent Decree Requirements for LDAR Programs at Holly Refining's Facility"	76
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111-112	"The Director Must Address the Heater/Boiler NO <sub>x</sub> CEM Requirement"	79
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## **ADDENDUM E**

Order Adopting Findings of Fact, Conclusions of Law, and  
Recommended Order on the Merits



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**BEFORE THE EXECUTIVE DIRECTOR  
UTAH DEPARTMENT OF ENVIRONMENTAL QUALITY  
DIVISION OF WATER QUALITY**

---

**In the Matter of:**

Approval Order No. DAQE-AN101230041-13

Holly Refining & Marketing Company –  
Woods Cross, LLC  
Heavy Crude Processing Project  
Project No. N10123-0041

**ORDER ADOPTING FINDINGS OF FACT,  
CONCLUSIONS OF LAW, AND  
RECOMMENDED ORDER ON THE MERITS**

Date: March 31, 2015

On March 11, 2015, the administrative law judge issued a *Findings of Fact, Conclusions of Law, and Recommended Order on the Merits* (proposed dispositive action) in the above referenced Division of Air Quality permit review adjudicative proceeding, conducted in accordance with Utah Code Ann. §19-1-301.5 and Utah Admin. Code r. 305-7. When an administrative law judge submits a proposed dispositive action, I may adopt, adopt with modifications, or reject the proposed dispositive action; or return the proposed dispositive action to the administrative law judge for further action as required. Utah Code Ann. § 19-1-301.5(13)(a). I am required to uphold all factual, technical, and scientific agency determinations that are supported by substantial evidence taken from the record as a whole. Utah Code Ann. § 19-1-301.5(13)(b).

Having reviewed the *Findings of Fact, Conclusions of Law, and Recommended Order on the Merits* and the accompanying record, I am satisfied that the factual, technical, and scientific agency determinations are supported by substantial evidence taken from the record as a whole.

**ORDER**

WHEREFORE, I adopt the *Findings of Fact, Conclusions of Law, and Recommended Order on the Merits*. For the reasons stated therein, I affirm the Division of Air Quality's decision to issue the approval order described above and I order the dismissal with prejudice of each of the Petitioners' arguments.

**NOTICE OF RIGHT TO PETITION FOR JUDICIAL REVIEW**

Judicial review of this final order may be sought in the Utah Court of Appeals in accordance with Sections 63G-4-401, 63G-4-403, and 63G-4-405 of the Utah Code Ann. and the Utah Rules of Appellate Procedure by filing a proper petition within thirty days after the date of this order.

DATED this 31 day of March, 2015.

  
\_\_\_\_\_  
AMANDA SMITH  
Executive Director  
Utah Department of Environmental Quality

**CERTIFICATE OF SERVICE**

I HEREBY CERTIFY that on the 31<sup>st</sup> day of March 2015, I served the foregoing

**ORDER ADOPTING FINDINGS OF FACT, CONCLUSIONS OF LAW AND RECOMMENDED ORDER**

**ON THE MERITS** via email on the following:

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