ENVIRONMENTAL APPEALS BOARD
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C.

In re:	)
	)
Palmdale Energy, LLC's	)
Palmdale Energy Project	) PSD Appeal No. 18-01
	)
PSD Permit No. SE 17-01	)
	)

REPLY BRIEF
SUBMITTED BY CENTER FOR BIOLOGICAL DIVERSITY, DESERT CITIZENS AGAINST POLLUTION, CALIFORNIA COMMUNITIES AGAINST TOXICS, AND SIERRA CLUB

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I. INTRODUCTION[1]

United States Environmental Protection Agency Region 9 (Region 9) made serious legal and factual errors in issuing the Prevention of Significant Deterioration (PSD) Permit for the Palmdale Energy Project (PEP). For example, in its new analysis in its response to comments, which obviously Petitioners could not have commented on, Region 9 assumed that PEP would have to purchase electricity to charge a battery system at retail rates rather than wholesale rates. This was a clear error of law because FERC Order 841 mandates that batteries energy storage facilities be allowed to purchase electricity from the grid at wholesale rates. In its Response to the Petition for Review (Response or R9 Br.), Region 9 does not dispute that it made this legal error. Region 9 tries to blame Petitioners for the error by saying that Petitioners did not comment on this error, even though doing so would have been impossible because Region 9 made the error in a new analysis in the Response to Comments (RTC). This legal error rendered invalid Region 9's Best Available Control Technology (BACT) Step 3 (rank technologies by emissions) and Step 4 (cost effectiveness) analysis of using batteries rather than duct burners.

[1] Petitioners do not address in this Reply Brief numerous issues from Region 9's Response Brief because Petitioners have already addressed them in their Petition for Review. Petitioners are not conceding any issues in its Petition even if they are not addressed in this Reply Brief.

In Region 9's Response, Region 9 counsel now offers new analysis to try to justify (or explain away) factual and legal errors, as well as put up a host of procedural objections. As to these new analyses, the Board must not accept *post-hoc* rationalizations from Region 9 counsel, especially since the public was never given any opportunity to comment on these analyses. *See generally Arrington v. Daniels*, 516 F.3d 1106, 1113 (9th Cir. 2008), *citing Fed. Power Comm'n v. Texaco, Inc*. 417 U.S. 380, 397 (1974); *In re Port Auth. of N.Y. & N.J.*, 10 E.A.D. 61, 94 (2001). In any event, as explained below, these new analyses are also in error and the procedural objections are unfounded.

II. REGION 9'S BACT ANALYSIS OF BATTERIES REPLACING DUCT BURNERS IS FATALLY FLAWED.

A. BATTERIES REPLACING DUCT BURNERS DOES NOT REDEFINE THE SOURCE FOR A GHG BACT ANALYSIS

Region 9 states in a footnote that they rejected "independent battery storage" as Greenhouse Gas (GHG) BACT at Step 1 because it would redefine the source. R9 Br. at 5, ftnt. 3. Petitioners already explained why replacing the duct burners with batteries would not redefine the source and will not repeat those arguments here. Petition for Review (Petition) at 26 and Conservation Group Comments at 5-6.

To begin with, the footnote in the Fact Sheet that Region 9's Response references stated that batteries would redefine the fundamental business purpose and design of the project because the "Project is clearly designed to generate power from natural gas-fired combined cycle units." FS at 29, n.49. Region 9's Fact Sheet made no mention of duct burners in this design of the Project. If the duct burners were replaced with batteries, the PEP would still generate power from natural gas-fired combined cycle units. The difference is peak generation would come from batteries, rather than duct burners.

Moreover, Region 9 offers no explanation for why or how replacing duct burners with batteries would redefine the source for a GHG BACT analysis, but would not redefine the source for a nitrogen oxides (NOx) or carbon monoxide (CO) BACT analysis. In fact, there is no possible explanation. Thus, to rely on this unjustified (and unjustifiable) distinction between the BACT analyses would be arbitrary decision making.

Finally, rejecting batteries in a footnote is exactly the "automatic off-ramp for energy storage as a consideration in Step 1" that the Board previously warned Region 9 not to use in the future. *In re Arizona Public Service Company*, 17 EAD 323, 347 (EAB Sept. 1, 2016). The Board should not countenance such blatant disregard for its previous guidance regarding how energy storage should be considered.

B. PETITIONERS PROPERLY RAISED THE ISSUE OF THE FAILURE TO CONSIDER BATTERIES REPLACING DUCT BURNERS IN A GHG BACT ANALYSIS.

Region 9 argues that Petitioners did not raise, with reasonable specificity in their comments, the issue that batteries replacing duct burners should be BACT for GHG as well as NOx and CO, although Region 9 only raises this issue in the context of the Step 4 analysis. R9 Br. at 14. Region 9 is wrong.

Region 9 admits that the Petitioners' comments stated that replacing duct burners with batteries is a technology that would reduce GHG emissions. *Id.* However, Region 9 believes that it is not enough because that section of the comments also mentioned that GHG BACT would also be discussed in another part of the comments. *Id.*

Petitioners comments stated:

> In step 1 of the NOx BACT analysis for emission units Gen 1 and Gen 2, EPA failed to consider using batteries rather than duct burners for meeting peak demand. Batteries would reduce both CO and NOx as well as GHG, which is discussed elsewhere. Therefore, when EPA does the cost effectively analysis in Step 4, EPA needs to consider the cost per ton by combining the tons of NOx, CO, and GHG.

Conservation Group Comments at 4. Thus, Petitioners told Region 9 in its comments that batteries replacing duct burners had to be considered in Step 1 of its GHG BACT analysis, which Region 9 had failed to do, because batteries replacing duct burners is a technology to reduce GHG BACT, and Step 1 of a BACT

analysis considers all technologies to reduce the pollutant in question. Petitioners made this point even clearer when they explained how they thought Step 4 of the GHG BACT analysis needed to be conducted. This would entail analyzing reductions of all pollutants controlled by the same technology so as to avoid double or triple counting costs that only get paid once but that reduce multiple pollutants. Petitioners did not comment on Region 9's GHG BACT cost analysis for batteries replacing duct burners because no such analysis existed during the public comment period. In their Petition for Review, Petitioners responded to Region 9's GHG BACT cost analysis for batteries replacing duct burners because that analysis appeared in the Response to Comments for the first time, and Petitioners are required to respond to the agency's Response to Comments in their Petitions for Review.

Nevertheless, Region 9 tries to prove its claim that the issue of batteries replacing duct burners for GHG BACT was not raised in Petitioners' Comments by pointing to the heading in the Petitioners' Comments. R9 Br. at 14, citing Comments at 4. It is true that this heading did not explicitly list GHGs. But headings are for convenience. *See generally Sunshine Jr. Stores, Inc. v. Sunshine-Jr. Stores Inc.*, 456 F.3d 1291, fn 28 (11th Cir. 2006) (headings are for convenience and are not used in interpreting this agreement). The heading does not change the actual text of the comments, which clearly indicate that Petitioners

believed that the GHG BACT analysis needed to consider batteries replacing duct burners.

In fact, Region 9 did the same thing with regard to headings. In its Response to Comments, when discussing the issue of including aircraft emissions, Region 9 has a section with the heading "Background Concentration." The next section has the heading "Aircraft Emission." However, Region 9 in its Response, justifies not including aircraft emissions in the NOx modeling by referring to the section with the heading "Background Concentration." R9 Br. at 30. Thus, Region 9 was relying on text in a section entitled Background Concentration rather than Aircraft Emission to justify their position on Aircraft Emission.

Underlying this issue, and elsewhere in this case, is the question of what commenters are required to comment on. Petitioners commented on Region 9's draft permit, and its analysis and record evidence supporting that analysis. If Region 9 failed to consider a control technology in a BACT analysis, Petitioners commented on that. For example, Petitioners commented on Region 9's failure to consider batteries replacing duct burners as a control technology for NOx, CO, and GHG. Petitioners did not comment on the Step 4 cost analysis on the option of batteries replacing duct burners because there was no such analysis. Petitioners are not the permitting authority. There is no statutory or regulatory provision that

requires Petitioners perform their own BACT analysis.[2] Yet Region 9's response is peppered with complaints basically amounting to complaints about Petitioners not doing a BACT analysis or steps of a BACT analysis. *See, e.g.,* R9 Br. at 11 (Conservation Group Comments did not explain how to conduct a Step 3 analysis for a battery system replacing duct burners). The Board should dismiss these complaints for lacking legal authority and being unreasonable.

C. REGION 9'S STEP 2 ANALYSIS IS STILL FLAWED TO THE EXTENT IT EVEN ACTUALLY IS CLAIMING THAT BATTERIES TO REPLACE THE DUCT BURNERS AT PEP ARE NOT TECHNOLOGICALLY FEASIBLE.

Region 9 tries to avoid its own overwhelming evidence that batteries systems of the size (by which we also mean duration) needed to serve the function of the duct burners at PEP are commercially available, and thus must be accepted in Step 2 of the NOx, CO, and GHG BACT analyses. R9 Br. at 7-8. Region 9 argues that the EAB cannot rely on the extensive evidence that Region 9 put in the record because Region 9 put it into the record for a slightly different reason than what Petitioners are citing it for. R9 Br. at 8. If we ignore this evidence which Region 9 itself put in the record, Region 9 says, then the batteries systems that

[2] Beyond no authority for a requirement for Petitioners to perform their own BACT analysis, it is not practical. Petitioners cannot get information from the permittee like the Region can. Also, Region 9 had a year and 10 months to work on the Application. FS at 2. In contrast Petitioners had less than two months to comment on the Application and draft permit. RTC at 2.

Petitioners referenced are all of a smaller size than the equivalent of PEP's proposed duct burners. Adopting this approach then makes batteries appear technologically infeasible and justified their rejection in Step 2.[3]

Region 9 claims the Board can ignore this evidence because Region 9 put this evidence into the record for a slightly different reason than determining whether batteries replacing duct burners is a feasible technology. R9 Br. at 8. Region 9 says that for the Board to consider this evidence now, Petitioners had to cite to this evidence in their comments. R9 Br. at 9. Region 9 provides no citation to authority for this claim—nor is there any. While commenters are required to raise all issues with reasonable specificity, there is no requirement for commenters to cite each piece of evidence that the permitting authority put in the record back to the permitting authority.

Rather, long-established rules of administrative law dictate that "[a]n agency rule would be arbitrary and capricious if the agency has … offered an explanation for its decision that runs counter to the evidence before the agency." *Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Auto Ins.*, 463 U.S. 29, 43 (1983) (emphasis added). The "whole record" "include[s] all materials that 'might have influenced the agency's decision,' and not merely those on which the agency relied in its final decision." *Amfac Resorts v. U.S. Dep't of the Interior*, 143 F. Supp. 2d 7, 12

[3] This argument fails because it does not consider technology transfer, which is discussed in the Petition. Petition at 30-31.

(D.D.C. 2001). The whole record encompasses "all the evidence that was before the decisionmaking body." *Pub. Power Council v. Johnson*, 674 F.2d 791, 794 (9th Cir. 1982). There is no reasonable dispute that the evidence about batteries systems as large, and even larger than, what PEP would need to replace duct burners was before Region 9 at the time it issued the Permit and Response to Comments. This is because Region 9 itself put that information in the record. Therefore, it would be arbitrary to ignore it.

Perhaps sensing the weakness in Region 9's request to ignore evidence that it put in the record, Region 9's counsel makes up a new argument on technical infeasibility. Region 9's counsel argues that Petitioners have not demonstrated that the "operational pairing" of utility scale batteries and combined cycle natural gas facility without duct burners has been demonstrated in practice. R9 Br. at 9. Region 9's counsel says that the ability to integrate two different energy generation units is a "**potential** technical barrier." *Id.* (emphasis added). Boiled down, counsel for Region 9's argument is they do not know if PEP will be able to turn the batteries on to release energy at the same time that the combined cycle combustion turbine units are operating.

Despite the long-standing experience of integrating different generating units at power plants, Region 9 fails to identify any physical or chemical characteristics of PEP that would make technology transfer of collocating a battery

system and a combined cycle combustion turbine without duct burners impossible, or even questionable. This is because there are none. For well over half a century, different energy generation units have been integrated at power plants. For example: Georgia Power's Plant Bowen included, until it retired, a small oil-fired simple cycle combustion turbine and four massive pulverized coal boilers; and East Kentucky Power Cooperative includes two pulverized coal boilers and two circulating fluidized bed boilers. Pulverized coal boilers and circulating fluidized bed boilers are very different technologies. There are thousands, if not tens of thousands, of residential systems that combine solar PV and batteries which have existed for decades.[4] There are utility-scale integrated wind and solar farms.[5] There are wind farms and solar farms with battery systems.[6] Region 9 admits that there is an operational hybrid natural gas-battery storage project that involves a simple cycle combustion turbine and a battery storage system. R9 Br. at 9-10. However, Region 9 notes that Region 9 rejected this hybrid technology as technically infeasible but fails to acknowledge that technical infeasibility was not related to the ability to operationally integrate the battery system at PEP if the battery system was operating to serve the purpose of the duct burners.

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[4] *See e.g.*, https://www.solarpowerworldonline.com/2014/05/basics-battery-back-solar/.
[5] *See e.g.*, https://www.vestas.com/en/about/hybrid?gclid=EAIaIQobChMIgKni6qH32wIVQluGCh1eFABgEAAYASAAEgKG3fD_BwE#!louzes-project.
[6] *See e.g.*, https://www.vestas.com/en/about/hybrid?gclid=EAIaIQobChMIgKni6qH32wIVQluGCh1eFABgEAAYASAAEgKG3fD_BwE#!lem-kaer-project.

Region 9 is simply imagining obstacles without the slightest bit of factual support. The bottom line is once past the battery system's inverter, electricity is electricity. The grid does not care if the electricity comes from batteries or a duct burner, and neither should the Board.

D. REGION 9'S STEP 3 ANALYSIS IS STILL FATALLY FLAWED

Region 9 argues that batteries may not rank higher than duct burners because the amount of NOx and CO savings would not be meaningful. R9 Br. at 11. To begin with, this section is all a *post hoc* rationalization from Region 9's counsel because Region 9 committed the legal error of assuming the battery system would have to pay retail rates to charge the batteries system contrary to FERC Order 841. The Board should reject this *post hoc* rationalization, send the Permit back to EPA to redo the analysis based on the correct state of the law, and allow public comment on the new analysis.

This argument is also premised on the claim that GHG do not need to be considered in Step 3 because Petitioners did not raise this issue. As explained above, this is incorrect.

Region 9 also offers a new argument that batteries are not better than duct burners because they may only reduce hourly emissions. *Id.* Even if that were the case, reducing hourly emissions is an important benefit. EPA created NOx and CO

NAAQS based on a one-hour averaging time. Therefore, EPA concluded that short-term emissions, like emissions based on a one-hour averaging time, are important to protect public health. Counsel for Region 9's cannot override this determination.

Region 9 goes on to admit that in its Response to Comments, they wrongly stated that the NOx and CO reductions would be half of what they would actually be. R9 Br. at 12. The Board should reject counsel for Region 9's dismissal of this admitted factual error as unimportant.

What the Region determined in the Response to Comments was that a 0.7% reduction in NOx and CO emissions is not enough to rank batteries above duct burners. Region 9's counsel, for the first time, now says that a 1.4% to 1.5% reduction is not enough to rank batteries above duct burners. R9 Br. at 9. Again, the Board should reject this made up exception to the well-established approach of ranking control technologies based on what their emissions reductions would be and the *post hoc* use of it by counsel to ignore even twice the emissions reductions.

Region 9's counsel also offers a new analysis of CO_2 emission savings from replacing the duct burners with batteries. The Response to Comments stated that the savings would be approximately 170,000 tons per year. Region 9's counsel offers a new analysis in footnote 15 of the Response. This has never been subject to public comment, and is fatally flawed. It is based on the GHG emission factor

of the whole facility as expressed in CO_2/MWh. R9 Br. at 15. The analysis then equally proportions the emissions for the duct burners and the combined cycle units. *Id.* But duct burners are essentially a natural gas boiler. The whole point of a combined cycle natural gas unit is to be more efficient, and thus have lower CO_2/MWh than a natural gas boiler. This efficiency is gained through both the use of a combustion turbine and then use of the waste heat from the combustion turbine to generate steam in a Heat Recovery Steam Generator (HRSG). These combined cycles mean one gets more MWh per unit of gas burned than just burning natural gas in a boiler and letting the waste heat go up the stack. Region 9's counsel's analysis ignored this fact and thus is wrong.

Step 3 of a BACT analysis requires the ranking of the control technologies in terms of their effectiveness of the technology in reducing pollution. The top technology is the technology most effective at reducing the pollutant. *Helping Hand Tools v. US EPA*, 836 F.3d 999, 1002 (9th Cir. 2016).

In this case, Region 9 is trying to create some sort of exception to the Step 3 ranking by declaring one technology "close enough" to another technology. Region 9 provides no basis for this new "close enough" standard. Moreover, Region 9 does not tell us what the close enough standard is, except to tell us that it can double between the response to comments stage and the response brief stage of a PSD permitting process. This new, "close enough" standard is not an actual

standard and is arbitrary. Region 9 cannot simply say they "know it when they see it."

In any event, this "close enough" standard is not allowed. The D.C. Circuit has previously warned EPA that the Clean Air Act does not provide for *de minimis* exceptions from BACT. *Alabama Power Co. v. Costle*, 636 F.2d 323, 361 (D.C. Cir. 1979).

Furthermore, the "close enough" standard fails because Region 9 offers no data to support its trivial claim. *See e.g.*, *NRDC v. US EPA*, 966 F.2d 1292, 1305-1306 (9th Cir. 1992) (Court rejects EPA's creation of an exemption for construction sites because EPA did not cite to any information to support its perception that construction activities on less than five acres are non-industrial in nature). To create an exemption to the requirement that they rank the most efficient control technology highest in Step 3, Region 9 would have to provide evidence that the reductions in NOx and CO from batteries replacing duct burners would be not meaningful. This analysis cannot only rely on annual emissions, because EPA determined that short-term emissions of NOx and CO are relevant to public health, as evidenced by its one-hour averaging time NAAQS for these pollutants.

It is important to keep in mind that this is not a case where putting a control technology with more emissions, like duct burners, will reduce the burden on

Region 9. Rather, Region 9 would have to go through Step 3 even if it ranked the choice with more pollution over the choice with less pollution.

E. REGION 9'S STEP 4 ANALYSIS IS STILL FATALLY FLAWED

To try to get around Region 9's legal error of assuming that batteries would have to be charged by buying electricity at retail rates, Region 9's counsel now offers a new cost analysis in its Response. For the reasons stated above, the Board should reject counsel's *post hoc* rationalization. Also, as explained above, the Board should reject counsel's argument that CO_2 is not relevant because Petitioners did not comment on it. The CO_2 analysis did not exist when Petitioners submitted their comments, and therefore the Board should reject that argument. Finally, to the extent that CO_2 is considered by Region 9, the cost analysis relies on the same flawed calculations of CO_2 emission savings discussed above.

There are numerous flaws in the new analysis by Region 9's counsel. To begin with, Region 9 tries to defend sticking with a capital cost of batteries derived from a 2017 Forbes magazine article. R9 Br. at 15. Region 9 states that Petitioners provide no precedent or reasoning for guessing when a facility may purchase required piece of equipment. *Id.*

But there is no guesswork involved. Petitioners cited to the Permittee's own web page that says PEP is not scheduled to commence operations until 2021. *See*

Petition, Ex. 1. Region 9 constantly defends its actions by saying that it has to conduct its analysis consistent with the Permittee's business plan and purpose. Here, the Permittee stated that its business plan was to commence operations in 2021. But for this analysis, Region 9 thinks it can revise the Permittee's business plan and assume it would buy batteries system at the 2017 price although the prices are dropping.

There is also the fact that PEP did not have its PSD permit, and thus could not legally commence construction in 2017. Region 9's analysis is based on the Permittee illegally commencing construction; this is not a rational basis.

The Board has already acknowledged that the field of energy storage is rapidly evolving. *In Re APS*, at 347. This evolution is largely due to the dramatic drop in the cost of energy storage, and in particular lithium ion batteries as production scales up. Region 9 cannot rationally ignore this important aspect of the analysis.

It would be humorous, but for the fact that peoples' health hangs in the balance, that Region 9 uses one cost figure from a 2017 non-technical magazine as the basis its capital costs, then claims Petitioner's use of an authoritative source like the New York State Energy Research and Development Authority (NYSERDA) is too speculative to be relied upon. R9 Br. at 16. And Region 9 offers no other source which is not speculative. Furthermore, Region 9 had no

problem using a natural gas value of $4 for the life of the facility even though natural gas prices historically fluctuate significantly and are influenced by unpredictable geo-political situations and weather.

Perhaps the biggest flaw in the new analysis is that Region 9's counsel assumes, as did the analysis in the Response to Comments, that PEP would not buy electricity on the wholesale market when it is cheap and sell it when it is expensive. R9 Br. at 16. Region 9's counsel justifies this by saying it is incorrect to assume the facility would have full control over when it purchases and sells electricity. *Id.* Region 9's counsel provides no citation or even rationale for this claim, and there is none. PEP is a merchant plant and can operate when it deems it is in its economic interest. Furthermore, again, Region 9 says the business purpose of PEP is to help integrate the large amount of PV in the California Independent System Operator (California ISO). That would mean buying electricity to charge the batteries when there is a lot of PV generation driving down prices, and selling electricity when PV drops off, driving up prices. It is arbitrary to ignore this aspect of the problem in Step 4 of the BACT analysis but use it in Step 1 to reject control technologies like integrating concentrating solar power.

Region 9's counsel also argues that pretending that the electricity in the batteries is purchased and then disappears is justified because if there were duct burners, they would also generate electricity for sale at an assumed profit. *Id.* It is

arbitrary for Region 9 to ignore the "buy low, sell high" nature of batteries. It is true that electricity generated from duct burners will be sold. Petitioners do not dispute that that income must be accounted for in Step 4 analysis. But duct burners do not have that option because they cannot store nature gas. The BACT analysis must take this into account. Region 9's counsel's use of an "average wholesale value" of electricity fails to do this. *Id.* (using "average wholesale value of $31.19/MWh").

Region 9's counsel goes on to speculate about the cost savings from not buying duct burners while acknowledging that this speculation is dubious. R9 Br. at 18. Rather than accept dubious speculation, the Board should remand the matter for a proper analysis and new public comment period. In addition to admitting that the analysis in the Response to Comments failed to consider capital savings from not buying the duct burners, Region 9's counsel admits that the analysis failed to consider the cost savings of buying fewer carbon credits. However, the new analysis used the current cost of carbon credits to represent the costs over the life of the facility. *Id.* at 19. This is also arbitrary.

The solution to all of these errors, even in the new analysis, is to vacate and remand for a new analysis to be performed by Region 9 personnel outside of this litigation type context, with a new opportunity for public comment.

III. THE AMBIENT IMPACTS ANALYSIS FAILS TO DEMONSTRATE THAT PEP WILL NOT CAUSE OR CONTRIBUTE TO A VIOLATION OF THE 1-HOUR NOx NAAQS

A. REGION 9 INCORRECTLY STATES THE AMBIENT IMPACT ANALYSIS ISSUES ARE HIGHLY TECHNICAL WHEN REALLY THEY ARE ABOUT THE REGULATORY DEFINITION OF AMBIENT AIR

As to the ambient impact analysis, Region 9 argues that these are highly technical issues on which Petitioners bear a heavy burden. R9 Br. at 20. This mischaracterizes Petitioners' issue. The issue is largely over the definition of "ambient air."

B. REGION 9 FAILS TO JUSTIFY LEAVING OUT MODELING RECEPTORS AT THE PALMDALE REGIONAL AIRPORT

Contrary to Region 9's claim, (R9 Br. at 26), Petitioners clearly raised the issue in their comments of Region 9's failure to include receptors on the Palmdale Regional Airport. The comments stated that "PEP does not own Plant 42 and therefore Plant 42 is ambient air which must have receptors in it for all of the modeling." Petitioners Comments at 16. Petitioners also included an exhibit which stated that Palmdale Regional Airport had commercial flights, as well as local and transient general aviation flights. Petitioners Comments, Ex. 12. "General aviation" means private flights. Thus, Petitioners raised the issue of lack

of receptors on the Palmdale Regional Airport in the cumulative 1-hour NOx NAAQS analysis with reasonable specificity.

In Response to these Comments, Region 9 claimed that contrary to Petitioners' comments, receptors at the Palmdale Regional Airport (which Region 9 refers to as Plant 42) can be excluded because the public does not have access to it. RTC at 56. Petitioners then addressed this issue in their Petition for Review. Petition for Review at 47-52. Thus, the issue of whether Region 9 was justified in leaving out receptors on Palmdale Regional Airport in the cumulative 1-hour NOx NAAQS is properly before the Board.

Turning to the merits, Region 9 argues that it assumed that transient aircraft where military aircraft and thus the Palmdale Regional Airport is not open to the public. R9 Br. at 28. But Region 9 fails to respond to exhibit 12 to Petitioners' comments showing the presence of general aviation (GA) transient aircraft.

C. REGION 9 FAILS TO JUSTIFY LEAVING OUT EMISSIONS FROM AIRCRAFT AT PALMDALE REGIONAL AIRPORT

In addition to failing to include receptors on the Palmdale Regional Airport, Region 9 failed to include emissions from jet engines using the Palmdale Regional Airport in the cumulative 1-hour NOx NAAQS analysis. In Region 9's response to comments, they stated that emissions from aircraft should not be included in the cumulative impact analysis. RTC at 58 ("We disagree that the EPA should include

emissions from aircraft using the Plant 42 runway in its cumulative impact analyses for the Project.”). But in its response brief, Region 9 claims that the “1-hour NO2 NAAQS analysis appropriately took these emissions into account[.]” R9 Br. at 29.

Region 9 admits that the Petition says PSD regulations do not allow for the substitution of *post-hoc*, non-modeling qualitative analysis. R9 Br. at 31. But then Region 9 says that Petitioners fail to respond to the Region’s explanation in the Fact Sheet and RTC that the background monitoring data adequately accounted for aircraft emissions and thus need not be included in the modeling. *Id.* Apparently, Region 9 did not understand that the Region’s explanation in the Fact Sheet and RTC is the *post-hoc*, non-modeling qualitative analysis Petitioners stated could not substitute for modeling as required by 40 C.F.R. 52.21(l)(1).

IV. CONCLUSION

Therefore, for the reasons stated above and in the Petition for Review, the Board should vacate and remand the Permit.

Respectfully submitted,

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Dated: June 29, 2018

STATEMENT OF COMPLIANCE WITH WORD LIMITATION

I certify that the foregoing Reply Brief does not exceed 7,000 words. As calculated by Petitioners' word processing software, this Reply Brief contains no more than 5,169 words.

/s/ Robert Ukeiley

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CERTIFICATE OF SERVICE

I certify that I had the above Reply Brief on June 29, 2018 on the following:

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