BEFORE THE STATE ENVIRONMENTAL COMMISSION

STATE OF NEVADA

In Re:

Appeal of Air Operating Permit: Class I Operating Permit No. AP4953-1148.01 by Refuse, Inc.

REFUSE, INC.'S PREHEARING REPLY BRIEF

Refuse, Inc., ("RI") by and through its counsel, Richard J. Angell and Michael J. Tomko, respectfully submits this Prehearing Reply Brief (the "Reply Brief") in the above captioned matter.

INTRODUCTION

The Nevada Division of Environmental Protection, Bureau of Air Pollution Control's ("NDEP") Response Brief does not provide any relevant facts or law to counter the points and authorities presented in Refuse, Inc.'s ("RI") Opening Brief. Rather, NDEP presents a disparate collection of information that is largely tangential to the issue that is the subject of this appeal and, in some cases, incorrect. Furthermore, NDEP takes positions that are inconsistent with terms that it included in RI's air quality permit, as well as in direct conflict with the plain language of Nevada statutes and regulations.

In a nutshell, this appeal is about what monitoring requirements are sufficient to ensure compliance with the conditions of the operating permit. NDEP has not offered any defensible explanation for why continuous emissions monitoring systems ("CEMS") are required to continuously monitor emissions from three landfill-gas-to-energy ("LFGTE") engines that will be part of a renewable energy project at the Lockwood Landfill. In fact, the only jurisdiction to require CEMS for this type of emission source is the South Coast Air Quality Management District ("SCAQMD") in the greater Los Angeles area. However, the Lockwood Landfill and the Tracy Air Basin (attainment for Ozone, NO_x, and CO) do not present air quality issues even

remotely similar to what SCAQMD was facing when they elected to require CEMS for internal combustion engines, and it does not make any sense for NDEP to adopt measures that are only being implemented in extremely challenged areas such as Los Angeles when sufficient alternatives exist.

As this Reply Brief confirms, it is unnecessarily burdensome to require that RI continuously monitor emissions from the three LFGTE engines at the Lockwood Landfill. Accordingly, the State Environmental Commission (the "Commission") should exercise its statutory authority and require NDEP to eliminate the CEMS requirement for the engines at the Lockwood Landfill.[1]

STANDARD OF REVIEW

NDEP does not dispute any of the authority regarding the standard of review that RI cites in its Opening Brief. Rather NDEP attempts to improperly limit the Commission's authority with an inaccurate prognostication of how the Commission's *de novo* review of the disputed Lockwood Landfill permit could disrupt Nevada's air quality permitting regime. Nothing could be further from the truth. NDEP's arguments regarding the applicable standard of review for this matter reflect either a misunderstanding of the law or an attempt to usurp the statutory authority granted to the Commission for handling appeals such as this matter.

Contrary to NDEP's argument that the Commission is somehow limited to promulgating regulations and has no role in permitting decisions, Nevada statute expressly states that, **"[a]ny person aggrieved by...the modification...of an operating permit...may appeal to the Commission"** and **"[t]he Commission shall affirm, modify or reverse any action taken by the Director which is the subject of the appeal."** NRS 445B.360 (emphasis added). This is exactly

---

[1] NDEP also tacked on a "Motion to Dismiss, or Alternatively, for Summary Judgment" at the end of its Response Brief. Although this motion is not properly brought pursuant to either Nevada Rule of Civil Procedure ("NRCP") 12 or 54, RI points out that such a motion must fail in any case because: (i) RI's allegations in its appeal entitle it to relief under NAC 445B.3405 and NRS 445B.360; (ii) RI's request for relief is consistent with the Commission's authority under Nevada law; (iii) NDEP has not offered a concise statement of facts properly supported by affidavits or other testimony; and (iv) to the extent NDEP has offered any statement of facts, there are disputed issues of fact, such as the effect of the air basin being PSD-triggered for NOx, the potential to emit of the LFGTE engines and flare, source testing requirements in the permit, the utility of handheld analyzers and the potential for fluctuations in LFGTE engine emissions.

the basis for RI's appeal and rationale for its request that the Commission consider additional evidence, without granting any particular deference to NDEP's prior permitting action, and direct NDEP to modify the Lockwood Landfill operate permit to eliminate the CEMS requirement.

Furthermore, the Commission is authorized to:

- Establish such requirements for the control of emission as may be necessary to prevent, abate or control air pollution. NRS 445B.210.5.
- Cooperate with appropriate federal officers and agencies of the Federal Government. NRS 445B.220.1.
- Recommend measures for control of air pollution originating in this State. NRS 445B.220.2.
- Require the monitoring or source tests of existing or new stationary sources which can emit an air contaminant. NRS 445B.225.
- Hold hearings to carry out the provisions of NRS 445B.100 to 445.640. NRS 445B.210.7.
- Take evidence and make independent factual findings during such hearings. NAC 445B.895.
- Issue written findings of fact with a concise statement of facts supporting the Commission's findings after such hearings. NAC 445B.896.

While this is not an exhaustive description of the scope of the Commission's powers, these unequivocal grants of authority to the Commission are the most relevant for *de novo* consideration of the issues presented in this appeal. Such long-established provisions of Nevada law refute any claim by NDEP that the Commission would somehow be interfering with delegated Clean Air Act permit authority or jeopardizing Nevada's air quality program by conducting a *de novo* review of the Lockwood Landfill permit.

NDEP's arguments appear to be based on a misunderstanding of the structure of the Department of Conservation and Natural Resources (the "Department") and the Department's responsibility as the designated Air Pollution Control Agency for purposes of administering responsibilities delegated under the federal Clean Air Act. First, NDEP fails to recognize that

both the Commission and NDEP are component parts of the Department. The Commission was expressly created to function "within the Department." NRS 445B.200.1. Therefore, the Commission is not intruding on any of the Department's functions as the permitting authority by conducting a *de novo* proceeding in this case. The Commission is simply serving its designated role within the Department as the forum for RI—a party aggrieved by a permitting action which NDEP performed on behalf of the Department—to seek an administrative remedy as provided for by Nevada statute. *See* NRS 445B.350 and 445B.360.

Second, NDEP is one of six divisions that comprise the Department. NRS 232.090. The Department is the State Air Pollution Control Agency, not NDEP. NRS 445B.205. In its Response Brief, NDEP interchanges itself and the Department as the permitting authority with responsibility to implement the federal Title V program of the Clean Air Act. *See, e.g.,* Response Br. at 11 – 13. Although the Department has delegated some of its Clean Air Act responsibilities to NDEP, this does not change the fact that the Department is still the statutorily designated State Air Pollution Control Agency pursuant to NRS 445B.205. Since the Commission and NDEP are both part of the Department, there is no threat that the Commission could usurp any of the Department's, and therefore also NDEP's, Clean Air Act permitting authority by conducting a *de novo* review of the Lockwood Landfill permit. This is because the Commission is part of the Department and is simply performing its statutorily authorized functions for purposes of the permit appeal.

Accordingly, the Commission should apply a *de novo* standard of review and consider additional evidence presented and admitted in the course of this appeal without granting any particular deference to NDEP's prior permitting actions.[2] This is a simple application of clear statutory language regarding the relationship of the Department, the Commission and NDEP. It

[2] As an alternative justification for limiting the Commission's statutorily granted ability to conduct a *de novo* review of its permitting actions, NDEP also misinterprets a judicial notice provision applicable to administrative appeals. *See* NRS 233B.123.5. Judicial notice is an evidentiary shortcut for handling facts that are "[c]apable of accurate and ready determination by resort to sources whose accuracy cannot be questioned, so that the fact is not subject to reasonable dispute." NRS 47.130.2.b. Judicial notice applies to technical or scientific information, such as the data provided in Exhibit 5 to RI's Opening Brief, but it does not apply to agency determinations or actions. *See* NRS 233B.123.5. It certainly does not influence whether the Commission should accord any particular deference to a NDEP permitting action.

does not conflict with the Commission's prior standards or practice and it will not alter any aspect of the relationship among the Department, the Commission, NDEP, the United States Environmental Protection Agency ("EPA"), or any third parties, including regulated entities or interested members of the public. However, if the Commission adopts NDEP's position regarding the standard of review, it will both foreclose itself from exercising its statutorily delegated authority and deprive RI of its right to a proper administrative appeal under Nevada law.

ARGUMENT

The following sections highlight the reasons for rejecting NDEP's arguments for CEMS and ordering that the Lockwood Landfill permit be revised to provide for less burdensome monitoring requirements.

I. THE LOCKWOOD LANDFILL PERMITTING PROCESS DID NOT FOLLOW NDEP'S TYPICAL AND MORE PRODUCTIVE PERMITTING PROCESS

NDEP's Response Brief provides a lengthy, and sometimes inaccurate, description of the permitting process for the Lockwood Landfill; however, it does not present any defensible factual or legal support for the CEMS requirements it included in RI's Lockwood Landfill permit. One observation that can be made about NDEP's portrayal of the facts surrounding this appeal is that, for one reason or another, the Lockwood Landfill permit did not follow the typical track for this type of permit modification. NDEP, like most permitting agencies, typically provides a permittee with an opportunity to review a draft permit before putting it out to public and EPA review. This makes sense since the permittee initiates the permit process and has a clear interest in seeing that the terms of the permit are workable from its perspective. However in the case of the Lockwood permit, the first draft of the permit NDEP shared with RI was the version issued for EPA and public comment.

After the subsequent April 14, 2011, meeting with NDEP to discuss the draft permit, RI was under the impression it was in a continuing dialogue with NDEP regarding the permit terms, including the CEMS requirement, and was surprised when NDEP issued the final permit on May 12, 2011. RI would have preferred working with NDEP, providing additional information to the

agency, and exploring other reasonable monitoring alternatives that would have satisfied both NDEP and RI's objectives rather than having to pursue an appeal with the Commission.

NDEP's recounting of the permitting process appears to have lost track of some of the terms that it ultimately included in the Lockwood Landfill permit and draws mistaken conclusions about RI's position on various issues.[3] If there had been better communication between NDEP and RI,[4] including the discussion of CEMS before the draft permit was posted for public comment, perhaps this appeal would not be necessary. However, it is not necessary or helpful for the Commission to wade through factual disputes that are not relevant to the central issue that is before the SEC: What are the appropriate monitoring requirements for the Lockwood engines necessary to provide a sufficient assurance of compliance?[5] As the following sections demonstrate, RI's original arguments that CEMS are unnecessary remain unscathed.

---

[3] For example, on the first page of its Response Brief NDEP states that "RI also sought maximum operating flexibility, including the ability to burn variable, dirty gas without first conditioning it; the ability to overhaul and swap out engines without conducting a source test to verify emissions; no hourly limitations on operations..." Response Br. at 1, ll. 17 – 20. NDEP then declares that it "accommodated all of RI's requests, in spite of concerns from [EPA]." Response Br. at 1, ll. 26 – 27. RI objects to such characterizations by NDEP on the grounds that they are only hearsay statements from discussions between NDEP and RI during the permitting process.

Furthermore, in addition to being largely irrelevant to the subject of this appeal, these statements are simply incorrect. Condition VI.I.3.a. (Page VI-56) of the permit states that the engines "may combust treated landfill gas (LFG) only. Treated LFG, for the purposes of this operating permit, shall be defined as LFG that is filtered, dewatered, and compressed prior to its introduction and combustion in [the engines]." Condition VI.I.4 (Page VI-57) of the permit provides that, "On and after the date of startup of [the engines], or any replacement engine, Permittee will ..." and this is followed by a laundry list of requirements including the requirement to conduct a stack test. Finally, the permit clearly establishes hourly limits on the amount of gas that can be combusted: "The maximum individual operating heat input for [the engines], each, from the combustion of LFG will not exceed 17.82 million Btu (MMBtu) per any one-hour period." Condition VI.I.3.b. (Page 56). Conditions VI.I.4.a. and b. (Page 57) specify detailed monitoring requirements to ensure compliance with this requirement. Hence, NDEP's assertions that the engines may burn untreated landfill gas, that replacement engines need not be tested, and that there are no hourly limitations on operation of the engines are incorrect as shown by the terms of the permit that NDEP issued.

[4] NDEP also tries to use EPA's comments as justification for the CO CEMS based on EPA's statements that a 5-10% buffer is usually required. *See* Response Br. at 8, ll. 8 – 17. If RI had understood that NDEP determined that it either needed to require CEMS or restructure the permit to provide better assurances that the cap would not be exceeded, RI would have pursued the latter option. As indicated by the data presented in RI's opening brief demonstrates, the allowable CO emissions from the engines could have been reduced with language in the permit explaining the interplay between flare and engine operations. For example, a cap of 235 tpy instead of 250 tpy of CO would be much more workable for RI than CEMS.

[5] NDEP also makes repeated assertions that CEMS are necessary to make the most for new and existing sources from the limited available air resource in the Tracy Air Basin. *See, e.g.,* Response Br. at 1, ll. 22 – 25. NDEP is wrong. CEMS will only provide information about instantaneous emissions from a particular source, in this case the Lockwood Landfill LFGTE engines. This has no bearing on the ambient air quality issues and the potential to emit of existing permitted sources that influence the remaining available air resource for new and existing sources.

II. THE PSD-TRIGGERED STATUS OF THE TRACY AIR BASIN DOES NOT JUSTIFY REQUIRING CEMS FOR NOx EMISSIONS AT THE LOCKWOOD LANDFILL

Regarding the status of the Tracy Air Basin and the fact that it has been PSD-triggered for NOx, NDEP asserts that "[m]ost of the 25 $\mu g/m^3$ has already been consumed. There is only a sliver remaining for new sources or existing sources seeking modifications." Response Br. at 17, ll. 14 – 15. This statement mischaracterizes the relationship between the Lockwood Landfill and the PSD increment. NDEP should know better than anyone that PSD increment is a function of location. In fact, later in its Response Brief, NDEP states, "[m]uch of the remaining increment has already been consumed throughout different portions of the basin." Response Br. at 20, ll. 7 – 8 (emphasis added). NDEP's use of this qualifier indicates its awareness of the locational aspect of PSD increment issues and highlights its refusal to acknowledge reality at the Lockwood Landfill—specifically, that the proposed LFGTE engine emissions do not implicate the NOx increment.

As described in detail in RI's Opening Brief, NDEP has evaluated the potential for adverse impacts by RI on the increment. NDEP's analysis demonstrates that RI's project does not adversely or even marginally impact the NOx increment in the air shed. *See* Opening Br. at 7 – 10. In fact, in its Response Brief, NDEP concurs with RI on the lack of increment consumption associated with the Lockwood Landfill. *See* Response Br. at 20, ll. 12 – 19.

Accordingly, the Commission should disregard NDEP's continued attempts to rely on the NOx increment consumption for the Tracy basin as a justification for requiring CEMS in RI's permit.

III. CEMS ARE NOT NECESSARY TO ASSURE COMPLIANCE WITH THE CARBON MONOXIDE CAP

NDEP's justification for CO CEMS relies heavily on the emission cap for meeting PSD thresholds. NDEP explains that "the three IC engines alone have a potential to emit more than the cap." Response Br. at 17, l. 20; *see also* Response Br. at 24, ll. 8 – 9. While that is theoretically possible, it is not a realistic possibility and certainly not sufficiently likely so as to warrant CEMS. If all three engines operate continuously for a full year, each at its maximum

operating rate and each at its maximum allowable emissions, they would emit 252 tpy, 2 tpy over the 250 threshold. In reality, however, the engines will not and cannot operate at such high utilization. More importantly is the emissions data that show the engines' actual emissions, as compared to permitted emissions, are well below the maximum allowable emission limit. *See* Opening Br. at 17, ll. 19 – 20 (noting that the average CO emissions for the Caterpillar Model 3520 engines that RI will be install are 11.63 lb/hr compared to an emission limit of 19.2 lb/hr). Thus, there is not any realistic possibility of an excursion above the PSD threshold that CEMS would help protect against.

In response to RI's explanation that the flare and engines will not operate simultaneously and therefore should not be additive for purposes of calculating emissions for the CO PSD threshold, NDEP refers to the definition of potential to emit ("PTE") and observes that "permit issuance is based on the potential to emit, not on what RI is likely to emit depending on how it operates the facility." Response Br. at 24, ll. 10 – 11. NDEP goes on to say that "RI did not request such [an] operational limitation in its permit." *Id.* at ll. 6 – 7. However, by definition, PTE is to be based on the maximum capacity of a source to emit "under its physical and operational design," *id.* at n. 7 (emphasis added). NDEP's own technical review document acknowledges that the flare "will serve as a back-up LFG control device" to the engines. Accordingly, and consistent with the definition of PTE cited by NDEP, operation of the flare as a backup to the engines is part of the facility's operational design which should be taken into account in assessing PTE. That is, landfill gas will be combusted in either the flare or the engines so the potential emissions from the flare and the engines are not additive. In fact, it is not functionally possible for the same landfill gas to be combusted in both devices.

In any event, and as noted above, if NDEP had communicated this concern to RI, the parties could have likely agreed to a condition that would have been an acceptable solution for both NDEP and RI.

IV. ENGINE PERFORMANCE DOES NOT VARY ENOUGH TO REQUIRE CEMS AND PERIODIC MONITORING WITH A HANDHELD ANALYZER WILL PROVIDE A SUFFICIENT ASSURANCE OF COMPLIANCE WITH ANNUAL LIMITATIONS FOR CO AND NOx

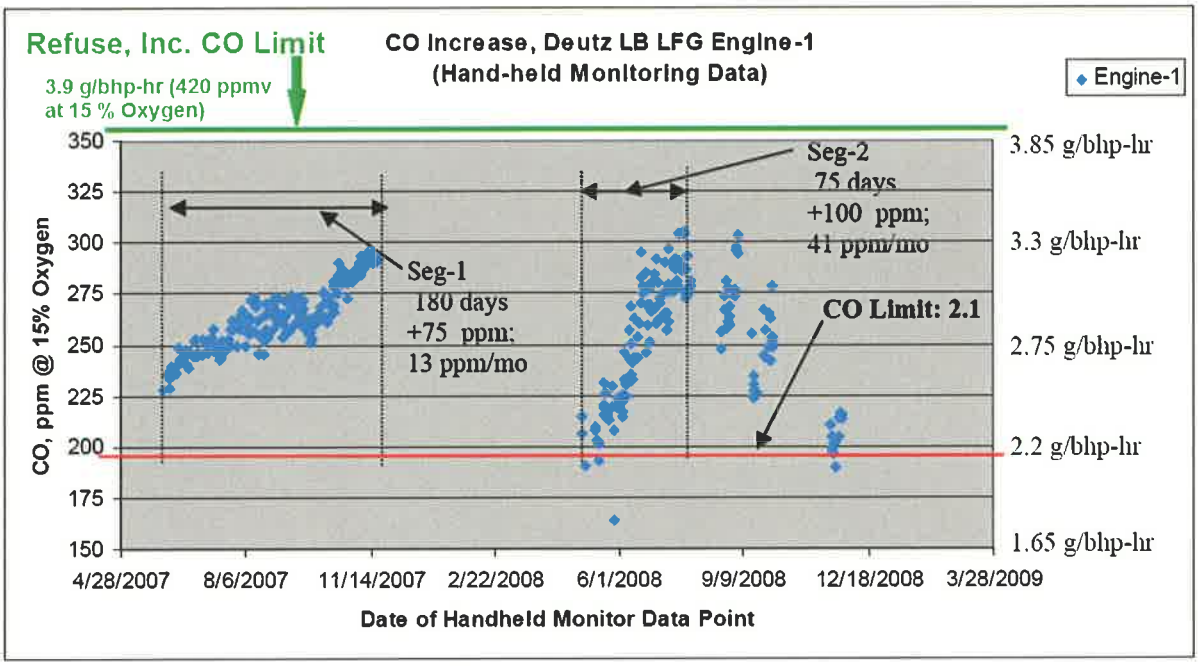
NDEP claims that it "utilized its own experience and familiarity with how engines operate before issuing the permit" to reach conclusions regarding the potential emissions variability of the Lockwood Landfill LFGTE engines. Response Br. at 17, ll. 23 – 25. This is an unconvincing assertion for two reasons. First, as RI noted in its Opening Brief, it was not until after NDEP issued the permit and after RI filed its appeal, that NDEP got around to "wondering just what the variability of emissions would be for a landfill gas ICE [internal combustion engine]." Opening Br. at 15, ll. 1 – 7 (quoting email from Pat Mohn, NDEP to Scott Wilson, SCAQMD). Second, in its Response Brief, NDEP cites a Bay Area Air Quality Management District ("BAAQMD") White Paper for the premise that CO emissions exhibit sufficient variability to support NDEP's determination to require CEMS. NDEP points specifically to Figure 2 of the White Paper. Response Br. at 25, ll. 15 – 17 (citing BAAQMD White Paper (NDEP558-580 at 566)).[6] While Figure 2 does show some variability, NDEP fails to recognize that all of the emission fluctuations that it points to as a justification for requiring CEMS are occurring well below the limit for hourly CO emissions in RI's permit, which is 3.9 g/bhp-hr (420 ppmv at 15% oxygen).[7] A copy of Figure 2 from the BAAQMD White Paper is set forth below with an additional line and notation identifying the CO limit for RI in comparison with the data points NDEP refers to for rationalizing the CEMS requirement.

---

[6] It should be noted that RI provided this White Paper to NDEP.

[7] The CO limit in the permit is expressed on a pounds per hour basis (19.2 lb/hr) which, in turn, is based on 3.9 g/bhp-hr (420 ppmv at 15% oxygen).

Figure 2 Deutz Engine-1: Daily CO emission Trends, ppm CO at 15% Oxygen



BAAQMD White Paper (NDEP558-580 at 566)). As Figure 2 plainly shows, while there may be some variability in CO emissions, it occurs at levels that have no bearing on whether emissions from these engines will comply with the limits in RI's permit. Furthermore, NDEP does not dispute that all of the data from similar engines at other locations that RI provided in Exhibit 5 to its Opening Brief demonstrates that CO emissions have never exceeded the Lockwood emission limit. *See* Opening Br. at 17 and Ex. 5.

NDEP acknowledges that handheld analyzers "may be used as indicators of engine performance, but are not designed to be used for compliance and enforcement." Response Br. at 18, ll. 5 – 6. This is exactly the purpose for which RI has proposed use of the analyzers: to provide additional verification of engine performance.[8] To be clear, NDEP has required CEMS in very limited circumstances for any type of source let alone uncontrolled, relatively small sources such as the engines in RI's permit. Further, RI believes that monitoring and annual

[8] Also, in the same White Paper, which subsequently became the BAAQMD Best Available Control Technology ("BACT") standard for landfill engines, handheld analyzers are required by the BAAQMD for the exact purpose proposed by RI.

testing consistent with the vast majority of NDEP issued permits would be sufficient; however, in order to provide NDEP with additional assurance of consistent "engine performance," RI has offered periodic monitoring with the analyzers. There is simply no need to determine the exact, second-by-second emissions from these engines. The non-CEMS monitoring requirements specified in the Lockwood permit in conjunction with periodic monitoring using analyzers is more than adequate to confirm proper engine performance and compliance with the annual limitations on NOx and CO.

Additionally, NDEP's focus on the enforceability of handheld analyzer results is misplaced. As explained in the preceding paragraph, the analyzers will serve as an indicator of engine performance and will be used to complement and supplement other monitoring provisions required by the permit. As RI noted in its Opening Brief, other state permitting jurisdictions have successfully used these analyzers. Opening Br. at 24, ll. 12 – 16.

V. NDEP'S PRIOR DECISION TO NOT REQUIRE CEMS AT THE NANIWA FACILITY IS A GOOD EXAMPLE OF WHY CEMS ARE UNNECESSARY AT THE LOCKWOOD LANDFILL

NDEP acknowledges that the Naniwa facility was not required to install a CEMS for CO even though, like RI's facility, it too has a CO emission cap of 249 tpy in order to avoid PSD review. NDEP asserts that this is because the "Naniwa facility is radically different from RI's facility." Response Br. at 27, ll. 3 - 4. NDEP makes several points that are unpersuasive and in some cases erroneous or tending to support a conclusion that is the opposite of which it seeks to make. These are discussed in turn.

NDEP asserts that the fact that the Naniwa facility relies on an emission control to reduce CO emissions is a reason for not requiring CO CEMS. Response Br. at 27, ll. 9 - 10. NDEP also makes this same point when evaluating EPA's monitoring guidance: "RI did not request add-on controls, and, accordingly, NDEP did not require add-on controls. Lack of such controls, however, underscores the need for continuous monitoring of emissions to ensure compliance with emission limit." Response Br. at 28, ll. 17 - 19. NDEP has misconstrued EPA's guidance and its position does not comport with common sense. When a source must rely on the proper operation of an emission control in order to comply with an emission limit, that is more of a reason, not

less, to require more robust monitoring. This is because a control is susceptible to failure, potentially resulting in significantly greater emissions than if there is no control subject to potential failure. EPA Region 9 periodic monitoring guidance explains that its Periodic Monitoring Criteria requires "less ongoing [monitoring, recordkeeping and reporting] for units without external control devices." Guidelines, Periodic Monitoring at III-94 (Sept. 9, 1999) found at http://www.epa.gov/region9/air/permit/titlev-public-part.html#resources (last viewed Sept. 19, 2011). NDEP's view of the presence or absence of an emission control and the attendant need for monitoring is exactly the opposite of what EPA guidance and commons sense dictates.

NDEP asserts that another reason for not requiring CO CEMS for the Naniwa facility is because "when NDEP initially issued the permit to Naniwa Energy, there was much more resource left in the air basin. Significantly less of the increment had been consumed." Response Br. at 27, ll. 10 – 12. As NDEP should be aware, there is ***no*** PSD increment for CO and its assertion is misleading at best.[9]

NDEP's final and, in its own words, "most important" point for distinguishing the Naniwa facility from RI's facility and requiring CEMS for the latter but not the former is that the Naniwa "facility has rarely run its turbines more than 1,000 hours per year over the last decade." Response Br. at 27, ll. 12 – 15. The failure of this argument is highlighted by comparing NDEP's failure to mention that the Naniwa facility is unrestricted in its annual hours of operation (*see* Naniwa Permit Condition VI.A.4.d (NDEP 2848), attached as Exhibit T to NDEP's Response Brief) with NDEP's prior statement three pages earlier in its Response Brief that "RI's compliance obligations and NDEP's permit issuance is based on the potential to emit, not on what RI is likely to emit depending on how it operates the facility. NDEP cannot issue a permit with no operational conditions that limit the potential to emit and then base the emissions limits on how the owner or operator is likely to operate the facility." Response Br. at 24, ll. 13 – 15

[9] Additionally, as noted above, the amount of increment available in an air shed is a function of the location within the air shed and hence, even if there was a PSD increment for CO, NDEP's statement characterizing the air quality in the entire basin is overly broad so as to be meaningless.

(citations and parentheticals omitted). NDEP offers no explanation for this disparate application of permitting requirements, especially in light of the potential for the source that is not required to use CEMS to emit CO at levels that so greatly exceed the potential of the CEMS-burdened source to emit CO.

For example, if Naniwa were to operate continuously at its permitted emission limit, it would emit 2,365 tpy of CO. Moreover, even at 1,000 hours of operation per year (which NDEP acknowledges the facility has exceeded) at the permitted emission limit of 90 pounds per hour of CO for each of its six turbine engines, the Naniwa facility would emit 270 tpy; that is, 20 tpy above the 250 tpy threshold. In contrast, if RI's three engines operated for 1,000 hours each at their permitted emission limit they would emit 29 tpy.

NDEP concludes by asserting that there is "[o]ne other important item to note about the Naniwa permit – which RI conveniently failed to mention … CEMS for NOx is required." Response Br. at 27, ll. 16 -17. RI is disappointed that NDEP would suggests that this was a piece of information that RI was somehow trying hide. In fact, the requirement for NOx monitors derives from EPA's acid rain requirements as made clear in Conditions IV.B.1 (NDEP 2842) and VI.A.5.b.(5) (NDEP 2852) of the Naniwa permit attached as Exhibit T to NDEP's Brief. This is not a discretionary monitoring requirement as NDEP suggests. In fact, RI's Opening Brief noted that NDEP had, prior to issuing the RI permit, rarely required CEMS, but that large, utility units subject to EPA's acid rain program which mandates CEMS constituted one of the few exceptions.[10]

[10] In addition to the points addressed above, NDEP asserts that the turbine engines at Naniwa "run very differently from IC engines" and that the Naniwa facility will operate on natural gas which is cleaner and more consistent than landfill gas. With respect to the first point, NDEP does not elaborate beyond its bare assertion that the turbine engines run very differently and what if any difference that makes. With respect to the second point, it is true that natural gas will vary compositionally from landfill gas; however, that variance is not significant in terms of the impact on emissions relative to the permitted emission limits that have been specified for the Lockwood engines. Furthermore, the permit requires that the landfill gas must be treated; that is, filtered, dewatered, and compressed prior to its being combusted.

VI. THE PRINCIPLES OF PERIODIC MONITORING DEMONSTRATE THAT CEMS ARE UNNECESSARY AND OVERLY BURDENSOME FOR THE LOCKWOOD LANDFILL

RI's opening brief reviewed EPA's criteria for making decisions regarding the level of monitoring appropriate to provide a sufficient assurance of compliance. Application of those criteria to the Lockwood renewable energy project weighs heavily against requiring CEMS. Opening Br. at 17-18. In its responsive brief, NDEP misinterprets or otherwise misapplies EPA's criteria in an unsuccessful attempt to reach a contrary conclusion. The following subsections explain the errors in NDEP's analysis of the principles of periodic monitoring.

1. The likelihood of violating the applicable requirement (i.e., margin of compliance with the applicable requirement).

NDEP incorrectly asserts that the applicable margin of compliance relates to the difference between the emission cap of 249 tpy and the PSD trigger of 250 tpy. A review of EPA's guidance shows that the focus is properly on the expected margin of compliance between the emission limit and the actual expected emissions. In other words, in the case of Lockwood, the appropriate question would be, "What is the likelihood of the engines exceeding 249 tpy." As explained above, there is no realistic chance of this limit being exceeded.

2. Whether add-on controls are necessary for the unit to meet the emission limit.

NDEP incorrectly asserts that the absence of controls supports the need for CEMS. However, as discussed above, exactly the opposite conclusion is supported by EPA's guidance. If compliance with an emission limit does not depend on a control, there is, obviously, no potential for a control to malfunction, an event that could lead to a substantial increase in emissions. Hence, the absence of post-combustion emission controls on the Lockwood engines supports a determination that CEMS should not be required.

3. The variability of emissions from the unit over time.

While not evaluating the potential for emission variability at the time it made a determination to require CEMS, NDEP now points to emission data that RI provided to NDEP to make its point that that data shows sufficient variability to mandate CEMS. In fact, however, as shown above, the data that NDEP relies upon to make its point supports exactly the opposite

conclusion; that is, the maximum variability shown in the data is comfortably in compliance with the emission limit established for the Lockwood engines.

4. The type of monitoring, process, maintenance, or control equipment data already available for the emission unit.

As RI's opening brief makes clear, the permit imposes (aside from the CEMS requirement) the type of monitoring requirements that NDEP considers adequate in the vast majority of its permitting decisions to provide a ***sufficient*** demonstration of compliance. NDEP does not address that point head-on. NDEP suggests, for the first time, that CEMS are needed to also ensure compliance with short-term emission limits and that annual source tests cannot be used to enforce the short-term limit; however, NDEP does not explain why annual source tests are deemed adequate for almost every other emission unit for which it has issued a permit, including those with short-term emission limits.

NDEP also states that there is "no limit on the amount of landfill gas that [RI] may combust" and "no conditioning of the fuel source to make it more uniform." Both statements are incorrect. First, the permit specifically limits the amount of landfill gas that may be combusted by each engine to 17.82 million Btu per hour. Condition VI.I.3.a. Consistent with this requirement, the permit requires the measurement of the volume of "treated" landfill gas, the power output of each engine and the heating value of the gas. Conditions VI.I.a., b. and d. Second, with respect to the assertion that there is no conditioning of the fuel source, as noted in footnote three of this brief, the permit specifically requires that the landfill gas must be treated; that is, filtered, dewatered, and compressed prior to being combusted in the engines.

5. The technical and economic considerations associated with the range of possible monitoring methods.

NDEP entirely discounts the implications of costs in making monitoring determinations, claiming that Nevada law does not allow it to consider cost when imposing monitoring requirements. This is surprising. If cost were not a consideration, shouldn't CEMS be required for all emission units? After all, CEMS would provide the most comprehensive assessment of emissions. In reality, of course, NDEP usually does consider costs in making monitoring

determinations and CEMS are not routinely required; indeed, as pointed out in RI's opening brief, CEMS are rarely required absent exceptional circumstances such as a federal mandate such as the Acid Rain Program.

6. The kind of monitoring found on similar emission units.

NDEP entirely side-steps the fact that monitoring for engines of the type and size of the Lockwood engines is unprecedented nationally and in Nevada. The only exception, which RI brought to NDEP's attention, is in the Los Angeles area which faces extraordinary air quality problems that are, fortunately, not problems shared by Nevada. NDEP dismisses this compelling issue by claiming that it makes its monitoring decisions on a case-by-case basis.

CONCLUSION AND REQUESTED RELIEF/PERMIT CONDITIONS

For the reasons described above, RI respectfully requests that the Commission order NDEP to eliminate the CEMS requirement for the engines at the Lockwood Landfill on the basis that CEMS are unnecessary under the Nevada "requirements for monitoring that are sufficient to ensure compliance with the conditions of the operating permit, including ... [a]s necessary, requirements concerning the use, maintenance and the installation of the equipment, or methods for monitoring." NAC 445B.3405.1(c)(3). As demonstrated above, this standard can be easily achieved with annual source testing and verification of engine performance with handheld analyzers on a periodic basis in between the annual source tests. Requiring CEMS in RI's permit is simply overkill and inconsistent with the application of such requirements by NDEP or other air quality agencies around the country. Thus, it would be arbitrary and capricious to affirm such a requirement for the Lockwood Landfill.

RI recommends the following replacement permit conditions to accompany the Commission's order to NDEP to remove the CEMS requirements from RI's permit.[11] These proposed permit conditions are intended to provide monitoring requirements that are more than sufficient to ensure compliance with the conditions of RI's operating permit.

[11] Footnote 8 of NDEP's brief requested that RI provide this language in its reply brief.

Proposed Periodic Monitoring Condition in Lieu of CEMS

The Permittee shall monitor and record the stack concentration of NOx, CO, and O2 concurrently at least bimonthly using a portable emission monitor that meets specifications approved by the Director. (In-stack O2 monitors may be used to provide the O2 measurement.) Monitoring shall not be required if the engine is not in operation, i.e., the engine need not be started solely to perform monitoring. Monitoring shall be performed within five days of restarting the engine unless monitoring has been performed within the last month. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. Monitoring with the portable analyzer shall be conducted during the annual source test. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations. NOx and CO readings at 15% oxygen shall be averaged over a consecutive 15-minute period.

If the portable analyzer measures either a NOx concentration greater than 36 ppmv or a CO concentration greater than 417 ppmv (measurements corrected to 15% oxygen on a dry basis) the Permittee shall conduct corrective action and subsequent monitoring with the portable analyzer as soon as reasonably possible but no later than five days following the initial measurement of the excursion. Alternately, upon monitoring an excursion of the above concentrations, the Permittee may conduct, or NDEP may require that the Permittee conduct, a reference method stack test in accordance with Condition VI.I.4.h.(3) or (4), respectively, in order to demonstrate compliance with the emission limit specified in Conditions VI.I.2.f. or g., respectively. Such source test shall be conducted within 30 days of measuring a concentration excursion.

DATED this 21st day of September, 2011.

MICHAEL J. TOMKO
RICHARD J. ANGELL
Nevada State Bar No. 9339
PARSONS BEHLE & LATIMER
One Utah Center
201 South Main Street, Suite 1800
Salt Lake City, UT 84111
Telephone: (801) 532-1234
Facsimile: (801) 536-6111

CERTIFICATE OF SERVICE

I, Michael J. Tomko, certify that I am an employee of Parsons Behle & Latimer, and that on this 21st day of September, 2011, I deposited for mailing a true and correct copy of the foregoing **REFUSE, INC.'S PREHEARING REPLY BRIEF,** via electronic mail and United States Postal Service in Salt Lake City, Utah, by first class mail, postage prepaid, to the following:

Jasmine K. Mehta
Deputy Attorney General
Nevada Attorney General's Office
100 North Carson Street
Carson City, NV 89701