## SCS ENGINEERS

April 21, 2011 File No. 01200266.06

Mr. Pat Mohn Nevada Division of Environmental Protection Bureau of Air Pollution Control, Class I Permitting Branch 901 South Stewart Street, Suite 4001 Carson City, Nevada 89701 (775) 687-9345

SUBJECT: INFORMATION REQUESTED AT MEETING, COMMENTS ON DRAFT CLASS 1 AIR QUALITY OPERATING PERMIT NO. AP4953-1148.01, LOCKWOOD LANDFILL, STOREY COUNTY, NEVADA

Dear Mr. Mohn:

SCS Engineers (SCS), on behalf of Refuse, Inc. (RI), submits this additional information discussed during our meeting with the Nevada Division of Environmental Protection (NDEP) on April 14, 2011. As we discussed, we have offered a handheld monitoring alternative instead of a continuous emissions monitoring system (CEMS) for the engines. These alternatives are accepted across the Country including by the agencies listed below:

- Rule language from Maricopa County, Arizona and a permit example from the Northwest Regional Landfill.
- Rule language from the San Joaquin Valley Air Pollution Control District (SJVAPCD) and a permit example from the Foothills Landfill.
- Rule language from the Ventura County APCD (VCAPCD) and a permit example and referenced Engine Operator Inspection Plan for the Simi Valley Landfill.
- Rule language from the State of Texas. Texas permits LFGTE plants by rule, so there are no permit language examples (they just reference the rule), but Waste Management, Inc (WM) has six such facilities in the state.
- Best Available Control Technology (BACT) guidance ("White Paper") from the Bay Area Air Quality Management District (BAAQMD) on landfill gas (LFG)-fired engines, including permit language they use for such sources.

As Renewable Energy projects operate in steady-state with limited swings in emissions and they are very sensitive to capital and operating costs, we believe that the hand-held monitoring alternative with the annual source test versus CEMS makes sense for the NDEP to adopt for LFG Renewable Energy projects. We are willing to schedule a further meeting or conference call to discuss potential permit language around a handheld monitoring solution, and we provided suggested language during the meeting (attached herein). Also attached to this letter (Attachment 1) are rule and/or permit examples from the agencies listed above, as requested.

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This project is a "win-win" project for Nevada as the first of its kind for the state. It will provide 4.8 megawatts of Renewable Energy and GHG benefits of over 23,000 metric tons of carbon dioxide equivalent per year as well as create jobs and prevent the waste of a valuable resource that is currently being flared.

Also attached to this letter (Attachment 2) are the following permit examples for the type of language we would like you to consider for the "like kind" replacement issue.

- Two from U.S. Environmental Protection Agency (EPA), Region 8 (BP America Production Company Treating Site # 6 and Devon Energy Production Company, LP, Riverton Dome Facility) where EPA was the permitting authority
- One from the Illinois EPA (Woodland Recycling and Disposal Facility). The Illinois example is another WM LFG-to-energy (LFGTE) plant.
- One from the Florida Department of Environmental Protection (FDEP) for the Naples Landfill LFGTE project (a WM facility)
- One from the Tennessee Air Pollution Control Board for the West Camden Sanitary Landfill LFGTE project (another WM facility)

RI would certainly like to see language in the Lockwood permit similar to Condition No. 12 of the Illinois EPA permit.

Attached as Attachment 3 please find a brochure on the ABB, Inc. Flow Controller and data acquisition system (DAS) and a permit example from the Riverbend Landfill in Oregon where this system is in place and the Oregon Department of Environmental Quality (ODEQ) allowed our proposed flow measuring/recording technique (one meter for total plant flow and calculated flows per engine). We have also provided some actual flow data output from the same site, showing engine-specific flows. As a side note, ODEQ permitted Riverbend with a carbon monoxide (CO) cap (called a Plant Site Emission Limit or PSEL) of 249 tons per year to be a synthetic minor under federal Prevention of Significant Deterioration (PSD), as shown in the attached.

Attached (as Attachment 4) please find a brochure on the ABB, Inc. gas chromatograph (GC), which will measure and record methane content and is integrated into the DAS noted above. These data will be combined with the BTU content of methane to calculate and record LHV. Whenever the GC is off-line for maintenance or malfunction, site operational personnel will record methane content using the Landtec GEM-2000 unit and use that data to calculate LHV. The manual for the GEM unit is also provided in Attachment 4.

Also, as requested, Attachment 5 is a P&ID of the gas treatment system showing the location where the main flow meter will be located.

Finally, we have also produced a greenhouse gas (GHG) emission inventory (Attachment 6) to respond to one of the comments NDEP received from the EPA. The inventory also contains a summary on our position on the applicability of the GHG Tailoring Rule to the project.

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## **CLOSING**

Should you have any questions regarding this additional information, please do not hesitate to contact Patrick Sullivan of SCS at (916) 361-1297. We will provide the other items requested at the meeting shortly.

Sincerely,

Patrick S. Sullivan, R.E.A., C.P.P.

Pater & Sulleum

Senior Vice President SCS ENGINEERS

## **Attachments**

cc: Bill Car; Refuse, Inc.

Christian Colline; Waste Management Mark Franc; Waste Management Allen Hunt; Waste Management Vic Saufley; Waste Management

Gabrielle Fourie, SCS