



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105

July 19, 2012

Ms. Charlene Albee
Chief, Permitting and Enforcement Branch
Air Quality Management Division
Washoe County Health District
1001 East Ninth Street, Suite #115A
Reno, NV 89512

**Re: Draft Prevention of Significant Deterioration (PSD)/Title V Operating Permit # D81TV
Unique Infrastructure Group (UIG) –Sparks Energy Park (SEP)**

Dear Ms. Albee,

This letter is in response to Washoe County Air Quality Management Division (WCAQMD) Draft PSD/Title V Operating Permit # D81TV issued to UIG for SEP in Patrick, Nevada. The draft permit is a combined PSD and Title V permit for the construction and operation of a new 360 megawatt, combined cycle natural gas combustion turbine power plant located near the Interstate-80 corridor at the Patrick exit. It is our understanding that the public comment period for this draft permit concluded on July 2, 2012.

As discussed in more detail in the enclosed comments, we believe that the draft PSD/Title V Operating Permit does not properly address all federally applicable requirements in 40 Code of Federal Regulations Section 52.21, including those concerning Best Available Control Technology and air quality modeling analyses. These concerns and additional items are discussed in more detail in the enclosure. Because of the nature of these concerns, we recommend that WCAQMD address the deficiencies noted in the enclosure and submit an updated draft permit for EPA and public review.

We look forward to working with you to address our comments. Please contact me at (415) 972-3974 or rios.gerardo@epa.gov, Omer Shalev of my office at (415) 972-3538 or shalev.omer@epa.gov, or Geoffrey Glass of my office at (415) 972-3498 or glass.geoffrey@epa.gov, if you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read "Gerardo C. Rios".

Gerardo C. Rios
Chief, Permits Office

Enclosure

cc: Kevin Dick, WCAQMD (via email)

**EPA Comments on Draft PSD/Title V Operating Permit # D81TV
Unique Infrastructure Group (UIG) –Sparks Energy Park (SEP)**

Note

EPA Region 9 has recently released a draft PSD permit for public review (Pio Pico Energy Center). You may find it useful to review these documents as they represent the Region's most recent permitting process: <http://www.epa.gov/region9/air/permit/r9-permits-issued.html>

Permit Term

Condition VII.-Permit Term states that the "permit shall be valid for a period of five (5) years from the date of issuance." PSD permits are valid for the duration of the facility's existence, from commencement of construction through deactivation. Because WCAQMD is issuing a combined PSD and Title V permit, the permit must state that the PSD permit requirements and conditions such as Best Available Control Technology (BACT) and other preconstruction criteria are valid, regardless of the actions, duration or terms associated with the Title V permitting regulations.

BACT

We have identified several issues with the permit's implementation of BACT at SEP:

1. A BACT analysis must be performed for each proposed emission unit for each PSD-major pollutant. This includes the emergency generator and fire pump as well as the combustion turbines and cooling tower.
2. BACT applies at all times, including startup and shutdown. If necessary, separate BACT limits may be determined for startup and shutdown and documented in the Ambient Air Quality Impact Analysis/Statement of Basis (AAQIA/SB).
3. All emission limits in the permit must have averaging periods in order to be enforceable.
4. A 24-hour averaging period is too long to be protective of shorter term NAAQS, such as those for NO₂ and CO.
5. Mass emission limits (in lb/hr) are less stringent than efficiency standards or concentration limits (in lb/MMBtu or ppm) when equipment operates below 100 percent of rated capacity. A BACT limit should include both mass emission rates and efficiency standards when this is feasible.
6. An emission limit averaged over 24 hours is less stringent than a numerically identical limit averaged over a shorter period and, therefore, may not represent BACT.
7. For pollutants with no short term standard (e.g. GHG), a 24-hour averaging period may be unnecessary and burdensome.
8. The discussion of GHG BACT must address thermal efficiency and detail why monitoring CO₂ is sufficient to verify compliance with a CO_{2e} limit.

In addition, the BACT analysis for either NO_x or CO contains an error. A 2.0 ppm emissions limit for NO_x and CO cannot result in the same emission rates for lb/hr or lb/MMBtu for CO and NO_x because these two compounds have different molecular weights.

Inapplicability or Exemption of a New Source Performance Standard

Condition V.B.1.c. states that the combined cycle combustion turbines are "exempt from the requirements of 40 CFR § 60, Subpart GG." WCAQMD should remove this portion of the condition from the PSD/Title V Operating Permit.

An applicability determination should be included in the AAQIA/SB, which should be adequate to document whether or not the standard applies to the facility. If the applicant requests a statement of the inapplicability of a standard in the permit, the correct way to do this is as part of a permit shield that complies with 40 CFR § 70.6(f).

Section 8- Air Quality Impacts

The AAQIA/SB does not contain a modeling analysis or discussion for PM_{2.5}, a regulated NSR pollutant. According to *Section 5.Emissions* in the AAQIA/SB, SEP is a new PSD major stationary source that has the potential to emit PM_{2.5} in excess of the significance threshold. As a result, the AAQIA/SB must address the requirements of 40 CFR § 52.21(h) and (k)-(p) for PM_{2.5}.

Additional Impacts Analysis

According to 40 CFR § 52.21(o), the owner or operator shall provide “an analysis of the impairment to visibility, soils and vegetation that would occur as a result of the source or modification and general commercial, residential, industrial and other growth associated with the source or modification.” This analysis must be included in the Additional Impacts Analysis of the AAQIA/SB.

Compliance Assurance Monitoring (CAM)

CAM applies to specific units depending on the emissions of an applicable regulated pollutant by an applicable unit and the permitted emissions limits for the unit. Therefore, additional emissions limitations based on specific case-by-case permitting decisions may result in additional monitoring requirements for some emissions units. The 40 CFR § 64.2(b)(1)(i) rule exemption applies only to those emission limitations or standards proposed by the Administrator after November 15, 1990 pursuant to section 111 or 112 of the Act. If the permitting authority establishes additional emissions limitations in order to comply with other requirements, such as BACT or another stringent emission limit requirements, the unit and the emission limitation may still be subject to CAM. The AAQIA/SB should discuss if CAM applies to any of the emission units at SEP, based on the specific emissions limitations in the PSD/Title V Operating Permit and the applicability criteria described in 40 CFR Part 64.

Regulatory Applicability

The first paragraph in the regulatory applicability section of the AAQIA/SB states that the facility is subject to PSD/Title V for GHG. This section should also clarify that additional criteria pollutants are also subject to PSD review because the facility is a major stationary source of GHG and has the potential to emit NO_x, PM, PM₁₀, and PM_{2.5} above the significance thresholds.

Table 5-1

Please revise *Table 5-1* in *Section 5.Emissions* of the AAQIA/SB to include CO emissions. This appears to be a typographical error. Emission limits related to CO are included in the PSD/Title V Operating Permit; however, reference to the SEP's potential to emit for CO is absent in the AAQIA/SB.