

**BEFORE THE ENVIRONMENTAL APPEALS BOARD and
ADMINISTRATOR of
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C.**

IN THE MATTER OF _____)
Humboldt Bay Repower Project)

Appeal No. 08-08

RESPONSE TO REQUEST FOR SUMMARY DISMISSAL

Petitioner appreciates the EAB patience for his ignorance of the process and Just orders of the past. It is not petitioners intent to exceed the rules of the Board. It is petitioners intent to demonstrate a systemic failure to provide opportunity for public participation in the region in these and other cases including the Colusa Generating Station, resulting in permitting of projects in conflict with the Clean Air Act and to seek a cure that has been unavailable in the Region.

The EAB has jurisdiction to hear this matter

This project is a modification of "PG&E Buhne Point (NC 77-05)" for which the "EPA is retaining authority to apply § 52.21" 40CFR52.270(B)(2) The responses from the North Coast Unified Air Quality Management District ("North Coast AQMD") PG&E and EPA (Region) 9 all acknowledge this authority in their filings yet fail to identify the source as the PG&E Buhne Point Facility. They are incorrect to reject the EAB's authority.

This is the same source, in the same location, with the same owner, modifying the existing facility that was permitted by the EPA in 1977. Title V Permit to Operate No. NCU-059-12. identifies the 1977 permit. (Exhibit A)

"The following conditions are from EPA PSD permit issued on 4/28/77 and revised on 2/23/79 and 12/11/81."

Page 10

The FDOC identifies the modification:

“The proposed project will replace the existing power plant, including 2 steam boilers (Units 1 and 2) and two Mobile Emergency Power Plants (MEPPs Units 2 and 3), The 52 MW boiler began operating in 1956 and the 53 MW boiler began operating in 1953. (AFC Section 1.0, pg. 1-1) PG&E proposes to decommission the existing power plant and replace it with the ten 16.3 MW Wärtsilä reciprocating engines described above.
FDOC Page 4 of 60

permitted under NCUAQMD Permit numbers NS-020 (Boiler #1), NS-021 (Boiler #2), and NS-057 (Gas Turbines). The units are also permitted under Title V Permit to Operate No. NCU-059-12.”
FDOC Page 8 of 60

Petitioner seeks EAB guidance to understand which rules apply. It appears the either the North Coast AQMD did not have authority to issue the permit at all or the EPA retained authority to review the permit issued, in either case the Public Notice requirements were not met and the EAB has the authority to correct the defect.

To the extent that the above does not clarify jurisdiction the following responses to the North Coast AQMD response and briefs submitted by PG&E and the Region are offered.

The EAB has authority based upon the facilities “Dispersion Techniques”
40CFR52.270(B)(2)

Dispersion techniques are defined in 40 cfr 51.100 (hh)(1)

The declaration of Gary Rubenstein indicates that GEP stack height is 112 feet. Mr. Rubenstein fails to disclose that GEP stack height determinations require the opportunity for public comment and participation as identified in SIP rule 220 Because this notice did not occur correctly, any stack does not meet the definition of GEP stack height therefore the entire stack exceeds GEP stack height until such time as the public has had the opportunity to participate.

Permit limits regarding hours of operation inherently Vary the “rate of emission of pollutants” and these operational limits are based upon “ambient concentrations”

The applicant has manipulated exhaust gas parameters, temperature and related plume characteristics through the use of “selective handling of exhaust streams“ Selective catalytic reduction, Oxidation Catalyst and changed stack parameters all contribute to this as follows:

CONTROL EQUIPMENT EVALUATION

WÄRTSILÄ ENGINES The engines will use selective catalytic reduction (SCR) to control nitrogen oxide emissions to a level of 6.0 ppmvd when operating on natural gas, and 35.0 ppmvd when operating in diesel mode, both @ 15% O₂ for a three-

hour average. Carbon monoxide emissions are proposed to be controlled with oxidation catalysts to a level of 13.0 ppmvd when operating on natural gas, and 20.0 ppmvd when operating on diesel, both @ 15% O₂ for a three-hour average. Particulate matter created as a result of diesel fuel combustion is proposed to be controlled with oxidation catalysts to 7.56 lbs per hour which equates to approximately 30% reduction efficiency.

The nominal exhaust gas temperature is 728 degrees F (AFC Table 8.1-10 Design Specs). AFC Appendix Table 8.1B-3 identifies the max exhaust gas temp at approximately 795 F (697.4 K). The highest exhaust gas temperature at the catalyst is 840 degrees F.
 FDOC Page 8 of 60

B) Exhaust Gas Treatment

Oxidation Catalyst: CO emissions can also be controlled by exhaust gas treatment. According to MECA, oxidation catalysts have been used on off-road mobile source lean-burn engines for almost 30 years. In the U.S., over 500 stationary lean-burn IC engines have been outfitted with oxidation catalysts. Oxidation catalysts contain precious metals impregnated onto a high geometric surface area carrier and are placed in the exhaust stream. With the use of oxidation catalyst, CO emissions can be reduced by up to 90%. The applicant proposes to install oxidation catalysts on all the Wärtsilä engines
 FDOC 40 of 60

The project was originally planned to have 75 foot smoke stacks. As a result of excessive public health risk as identified in the letter from The California Energy Commission (Exhibit B) Stack Parameters were raised to “increase the exhaust gas plume rise” (Exhibit C)

**HEAT INPUT & FUEL LIMITATIONS
 Engines S-1 Through S-10**

- 95. The Permittee shall not operate reciprocating internal combustion engines S-1 through S-10 in such a manner so as to exceed the heat input capacities listed in Table 4.0 on a per engine basis. *[NCAQMD Rule 102 §5.0]*

Table 4.1 Heat Input Limitations S-1 Through S-10 Engines Combined

Sum of All 10 Units		Heat Input, MMBtu (HHV)		
		Hourly	Daily	Annual
Natural Gas Mode ¹	Natural Gas	1,439	34,536	9,277,233 ²
	Diesel Pilot	7.9	190	51,576
Diesel Mode	Diesel	1,489	30,376 ^{2,3}	148,900 ²

- 1) Total Heat Input in Natural Gas Mode is the sum of natural gas and diesel pilot.
- 2) This limit applies to operation for maintenance and testing, and during periods of Natural Gas Curtailments as defined in this permit. The limit shall not apply to fuel consumed during the Commissioning Period.
- 3) This limit was established to ensure compliance with the PM_{2.5} standard ATC permit No. 443-1 page 30 of 52

98. The Permittee shall not exceed the diesel fuel firing limits listed in Table 4.3 below while operating reciprocating engines S-1 through S-10 in Diesel Mode. *[NCUAQMD Rule 102 §5.0]*

Table 4.3 Diesel Fuel Firing Limitations

Engines S-1 Through S-10	Gallons of Diesel Fuel		
	Hourly 3 hr rolling average	Daily 24 hour rolling average	Annual 365 day rolling average
Per Engine	1,088	26,106	-
All Combined	10,876	221,877 ^{1,2}	1,087,630 ¹

- 1) This limit applies to operation for maintenance and testing, and during periods of Natural Gas Curtailments as defined in this permit. The limit shall not apply to fuel consumed during the Commissioning Period.
- 2) This limit was established to ensure compliance with the PM_{2.5} standard (85% average load)

140. The Permittee shall not operate reciprocating engines S-1 through S-10 if the inlet temperature of the oxidation catalyst is outside of the acceptable operating range for any period of time. The acceptable operating range of the oxidation catalyst is greater than or equal to 450 °F and less than or equal to 1350 °F. Each reciprocating engine is paired with a single oxidation catalyst unit. For purposes of compliance with this condition, each engine and catalyst pair is evaluated separately. This Condition does not apply during Startup or Shutdown Periods or during malfunctions. *[40 CFR 63 Subpart ZZZZ]*

Federally Enforceable Rules & Regulations

Citation	Description	Rule Adoption Date
Rule 200	Permit Requirements	9-26-1997
Rule 220	New Source Review Standards	9-25-1998
Rule 230	Action on Applications	9-25-1998

Rule 240	Permit to Operate	9-26-1997
Rule 400	General Limitations	8-02-1978
Rule 410	Visible Emissions	3-5-1992
Rule 420	Particulate Matter	3-5-1992
Rule 430	Fugitive Dust	3-5-1992
Rule 440	Sulfur Oxide Emissions	3-5-1992
Rule 490	Federal New Source Performance Standards (NSPS)	9-27-1984
Reg 5 Rule 400	Procedures for Issuing Permits to Operate to Sources Subject to Title V of the Federal Clean Air Act Amendments of 1990	5-18-2001
NSPS	40 CFR 60 Subpart IIII	Promulgated 07-11-2006
NESHAP	40 CFR 63 Subpart ZZZZ	Promulgated 06-15-2004

ATC permit No. 443-1 page 4 of 52

PETITIONER HAS SOUGHT LOCAL RESOLUTION

Petitioner has sought to resolve his complaints in the state venues and has not found justice. He has submitted comments to the Air district including the EAB REMAND of the Russell City Energy Center and submitted and identical appeal to the North Coast AQMD hearing board and California Air Resources Board where he was refused hearings. (Exhibit D) Petitioner also sought regulatory control from Region 9 to no avail.

§ 52.01 Definitions.

All terms used in this part but not defined herein shall have the meaning given them in the Clean Air Act and in parts 51 and 60 of this chapter.

(a) The term *stationary source* means any building, structure, facility, or installation which emits or may emit an air pollutant for which a national standard is in effect.

(b) The term *commenced* means that an owner or operator has undertaken a continuous program of construction or

modification.

(c) The term *construction* means fabrication, erection, or installation.

(d) The phrases *modification* or *modified source* mean any physical change in, or change in the method of operation of, a stationary source which increases the emission rate of any pollutant for which a national standard has been promulgated under part 50 of this chapter or which results in the emission of any such pollutant not previously emitted, except that:

40CFR52.270(B)(2)

The PSD rules for North Coast Unified Air Quality Management District are approved under Part C, Subpart 1, of the Clean Air Act. However, EPA is retaining authority to apply § 52.21 in certain cases. The provisions of § 52.21 except paragraph (a)(1) are therefore incorporated and made a part of the State plan for California for the North Coast Unified Air Quality Management District for:

(i) Those cogeneration and resource recovery projects which are major stationary sources or major modifications under § 52.21 and which would cause violations of PSD increments.

(ii) Those projects which are major stationary sources of major modifications under § 52.21 and which would either have stacks taller than 65 meters or would use "dispersion techniques" as defined in § 51.1.

(iii) Sources for which EPA has

issued permits under § 52.21, including the following permits and any others for which applications are received by July 31, 1985;

(A) Arcata Lumber Co. (NC 78-01; November 8, 1979),

(B) Northcoast Paving (NC 79-03; July 5, 1979),

(C) PG&E Buhne Pt. (NC 77-05).

40 cfr 51.100 (hh)(1) *Dispersion technique* means any technique which attempts to affect the concentration of a pollutant in the ambient air by:

(i) Using that portion of a stack which exceeds good engineering practice stack height:

(ii) Varying the rate of emission of a pollutant according to atmospheric conditions or ambient concentrations of that pollutant; or

(iii) Increasing final exhaust gas plume rise by manipulating source process parameters, exhaust gas parameters, stack parameters, or combining exhaust gases from several existing stacks into one stack; or other selective handling of exhaust gas streams so as to increase the exhaust gas plume rise.

52.21(a)(2) *Applicability procedures.* (i) The requirements of this section apply to the construction of any new major stationary source (as defined in paragraph (b)(1) of this section) or any project at

an existing major stationary source in
an area designated as attainment or
unclassifiable under sections
107(d)(1)(A)(ii) or (iii) of the Act.

CONCLUSION

In the interest of justice and protecting the integrity of the Clean Air Act The EAB is requested to
hear this matter.

Respectfully submitted by

Rob Simpson
27126 Grandview Avenue
Hayward California 94542
510-909-1800
rob@redwoodrob.com