

TECHNICAL BRIEFING SHEET
Las Brisas Energy Center LLC
Permit Nos. 85013, HAP48, PAL41 and PSD-TX-1138

PROJECT DESCRIPTION: Las Brisas Energy Center LLC (LBEC) has requested a permit to construct new electric utility generating facilities to be called Las Brisas Energy Center, using four circulating fluid-bed boilers and ancillary equipment capable of producing approximately 1,200 net megawatts of electricity, with a combined CFB heat input of approximately 12,320 MMBtu/hour. The fuel will be high-sulfur petroleum coke from the nearby refineries, with natural gas or propane for startups. Emissions from the boilers will be controlled with combustion controls, a selective non-catalytic reduction system, a dry flue gas desulfurization system, an activated carbon injection system, and fabric filter dust collection system.

TYPE OF REVIEW: A PSD review was triggered for the following pollutants: CO, NO_x, SO₂, PM/PM₁₀, VOC, H₂SO₄, and fluorides. In addition, the facility will emit: lead, mercury, ammonia, hydrogen chloride, and other products of petroleum coke combustion and emission control. A case-by-case MACT review was not required for the CFBs because they are not coal or oil-fired utility units. A case-by-case HAP review was conducted for the auxiliary boilers and propane vaporizers because of the vacatur of the Boiler MACT. The applicant proposes to obtain a plant-wide applicability limit permit.

BEST AVAILABLE CONTROL TECHNOLOGY (BACT): The coal-fired boiler and ancillary equipment were evaluated for BACT. LBEC proposes the emission limits listed below as BACT for the coal-fired boiler.

Pollutant	Emission Rate (lb/MMBtu)	Averaging Time
NO _x	0.07	30-day rolling
SO ₂	0.178	30-day rolling
SO ₂	0.15	12-month rolling
CO	0.11	12-month rolling
PM/PM ₁₀ total	0.033	annual
PM/PM ₁₀ filter	0.011	annual
Pb	0.00000095	annual
VOC	0.0050	annual
Fluorides (as HF)	0.000082	annual
H ₂ SO ₄	0.019	annual
Hg	0.0000020	12-month rolling

NAAQS & INCREMENT: Predicted impacts from the project are as follows:

Pollutant	Averaging Period	Maximum Impact (μg/m ³)	De Minimis Level (μg/m ³)	Increment Consumed (μg/m ³)	Allowable Increment (μg/m ³)	NAAQS Level (μg/m ³)
NO ₂	Annual	5	1	7	25	100
CO	1-hour	780	2,000	none	n/a	40,000
"	8-hour	120	500	none	n/a	10,000
SO ₂	3-hour	120	25	236	512	1300
"	24-hour	21	5	78	91	365
"	Annual	3.9	1	9	20	80
Pb	3-month	0.00008	0.2	n/a	n/a	1.5
PM ₁₀	24-hour	21	5	29.7	30	150
"	Annual	3.9	1	4	17	50

ADDITIONAL IMPACTS: Project is not expected to affect the visibility, soils, nor vegetation in the area. There are no Class I areas within 480 km of the proposed facility.

PROCESSING TIME: Application received May 19, 2008
Application technically complete January 5, 2009