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The applicant, in conjunction with Energy Commission and BAAQMD staff, identified the following potential new sources (with BAAQMD Facility Numbers) within six miles of the project:

- #15847-Russell City Energy Center (01-AFC-7C), combustion turbines and heat recovery steam generators, cooling tower, and fire pump diesel engine;
- #00698-Georgia Pacific Gypsum emergency generator;
- #16440-Hayward Public Works emergency generator;
- #16451-Hayward Public Works emergency generator;
- #17037-Elder Care Alliance emergency generator;
- #17548-Alameda County natural gas boiler;
- #17553-Rohm & Haas pyrolysis furnace;
- #17553-Rohm & Haas reg. thermal oxidizer;
- #17621-Skywest emergency generator; and
- #18189-Astra Zeneca emergency generator.

The maximum modeled cumulative impacts are presented below in **Air Quality Table 20**. The total impact is conservatively estimated by the maximum modeled impact plus existing maximum background pollutant levels.

As with impacts from Eastshore alone, maximum cumulative impacts are predicted to occur directly across Clawiter Road (Life Chiropractic College). Cumulative impacts at the closest residences, Ochoa Middle School, and Eden Gardens Elementary School would also be similar to those from Eastshore alone, meaning that impacts from Eastshore dominate the localized cumulative impacts.

AIR QUALITY Table 20
Eastshore, Estimated Localized Cumulative Impacts ($\mu\text{g}/\text{m}^3$)

Pollutant	Averaging Time	Modeled Impact	Background	Total Impact	Limiting Standard	Percent of Standard
PM10	24 hour	27.7	56.6	84.3	50	169
	Annual	3.2	20.0	23.2	20	116
PM2.5	24 hour	17.3	43.9	61.2	35	175
	Annual	3.2	9.4	12.6	12	105
CO	1 hour	1,254	3,680	4,934	23,000	21
	8 hour	394	2,178	2,572	10,000	26
NO ₂	1 hour	316	143	459	470	98
	Annual	3.4	28	31.4	100	31
SO ₂	1 hour	9.2	102	111.2	655	17
	24 hour	4.9	24	28.9	105	27
	Annual	0.5	8	8.5	80	11

Source: AFC Table WKS 4-5 (May 4, 2007; with PM10/PM2.5 revised by staff). PM2.5 is 3-year average of maximum 8th highest (for 98th percentile) 24-hour impact. Includes routine start-up and shutdown events per AFC Table 8.1B-2.

**AIR QUALITY Table 3
Project Operation Emission Impacts**

Pollutants	Avg. Period	Impacts ($\mu\text{g}/\text{m}^3$)	Background ($\mu\text{g}/\text{m}^3$)	Total Impacts ($\mu\text{g}/\text{m}^3$)	Standard ($\mu\text{g}/\text{m}^3$)	Percent of Standard
NO ₂	1-hour (start-up)	77.08	143	220.08	470 ¹	47%
	1-hour (steady state) ³	226.8	143	369.8	470 ¹	79%
	Annual	0.14	32	32.1	100 ²	32%
SO ₂	1-hour	4.92	102.2	107.12	655 ¹	16%
	24-hour	1.1	23.5	24.6	105 ¹	23%
CO	1-hour	1,069.71	3,680	4,749.71	23,000 ¹	21%
	8-hour	178.23	2,178	2,356.23	10,000 ¹	23%
PM10	24-hour	2.94	51.7	54.64	50 ¹	109%
	Annual	0.15	18.1	18.25	20 ¹	91%
PM2.5	24-hour	2.94	39.9	42.48	65 ²	65%
	Annual	0.15	9.4	9.55	12 ¹	80%

Notes

1. State standards
 2. Federal standards
 3. Including impacts from fire pump engine.
- Source: RC 2006a.

specified in any condition of certification for the project (CH2MHILL 2007a). For example, as long as the project's total annual NOx emissions, verified once per year, stay at or below the 134.5 tons, then the facility would be considered to be in compliance. The project owner proposed to accept a condition of certification to limit the project's NOx emissions to 134.5 tons a year and agreed to mitigate the project's emission impacts with 102.97 tons of NOx and 51.825 tons of POC ERCs interpollutant traded for NOx, for a total of 154.8 tons NOx and NOx equivalent ERCs (certificates # 815 and 855²). This amount of equivalent NOx credits would satisfy the District's New Sources Review Rule offset requirement, which specifies an offset ratio of 1.15 lbs of ERCs for every new pound of NOx emissions from the facility.

Do the proposed ERCs adequately mitigate the project potential emissions?

As mentioned earlier, the project, as revised, could potentially emit approximately 227.4 tons of NOx per year (see AIR QUALITY Table 2), which is much greater than the project owner's proposed annual limit. Additionally, for this particular project, staff believes the facility's contribution to area 1-hour and 8-hour ozone violations may not be properly identified and mitigated because the facility's daily potential NOx emissions are much higher than the calculated equivalent daily ERCs. Note that the number of violations in 2006 of the 8-hour national ozone standard was the highest since 1998, and the number of violations of the 1-hour state ozone standard has been relatively flat since 1998. Both suggest that ozone violations in the Bay Area are real and ongoing.

On any given day, including days that experience ozone violations, staff estimated that the project could potentially emit 2,213 lbs of NOx (see AIR QUALITY Table 2) while

² These credits originated from shutting down of equipment at the Potrero power plant in San Francisco and the Pacific Refining Refinery in Hercules (CH2MHILL 2007a).