

ENGINEERING EVALUATION

Space Systems Loral, LLC

Application: 25789

Plant: 6061

3825 Fabian Way, Palo Alto, CA 94303

BACKGROUND

Space Systems Loral, LLC has applied to obtain an Authority to Construct (AC) for the following equipment:

**S-5102 Emergency Standby Diesel Generator Set,
Cummins, Model QST30-G5 NR2
1490 BHP, 7.22 MMBTU/hr**

The Emergency Diesel Engine Generator Set (S-5102) is equipped with the best available control technology (BACT) for minimizing the release of air borne criteria pollutants and harmful air toxins due to fuel combustion. The criteria pollutants are nitrogen oxides (NO_x), carbon monoxide (CO), precursor organic compounds (POC) from unburned diesel fuel, sulfur dioxide (SO₂) and particulate matter (PM₁₀). POC is also denoted as NMHC (non-methane hydrocarbon). All of these pollutants are briefly discussed on the District's web site at www.baaqmd.gov.

The engine meets the Environmental Protection Agency and California Air Resources Board (EPA/CARB) Tier 2 Off-road standard. The engine will burn commercially available California low sulfur diesel fuel. The sulfur content of the diesel fuel will not exceed 0.0015% by weight. The operation of the engine should not pose any health threat to the surrounding community or the public at-large.

EMISSIONS

S-5102 has been certified by EPA to be a cleaner burning engine. Except for SO₂, the emission factors for these engines are the EPA-certified emission levels for the EPA engine family name of CCEXL030.AAD-018. The SO₂ emissions were calculated based on the maximum allowable sulfur content (0.0015 wt% S) of the diesel fuel with assumption that all of the sulfur present will be converted to SO₂ during the combustion process.

Basis:

1490 hp output rating

50 hr/yr operation for testing and maintenance

52.7 gallons/hr max fuel use rate

NMHC, NO_x, CO and PM₁₀ emission factors provided by the manufacturer's specification

SO₂ emissions are quantified based on the full conversion of 0.0015 wt% (~ 15 ppm) sulfur in the ULS diesel fuel.

The SO₂ emission factor was derived from EPA AP-42, Table 3.4-1.

Annual Emissions:

Annual emissions are calculated based on the number of hours per year of operation for testing and maintenance.

Daily Emissions:

Daily emissions are calculated to establish whether a source triggers the requirement for BACT (10 lb/highest day total source emissions for any class of pollutants). 24-hr/day of operation will be assumed since no daily limits are imposed on intermittent and unexpected operations.

Annual and Daily Emissions from CARB/EPA Certified Data

Source	Emission Factors taken from...	Operating Hours (hr/yr)	Max Rated Output (bhp)	Fuel Use Rate (gal/hr)	Calculated MMBtu/hr	Pollutant	E.F. (g/bhp-hr) ¹	Max Daily Emissions (lb/day)	Annual Emissions (lb/yr)	Annual Emissions (TPY)
S-5102	Manufacturer's performance data sheet	50	1490	52.7	7.22	NOx	3.83	301.4	628.0	0.314
						POC	0.20	15.87	33.05	0.0165
						CO	0.50	41.13	85.69	0.0428
						PM ₁₀	0.08	6.46	13.47	0.0067
						SO ₂	0.0015	0.26	0.55	0.00027

¹Note: To convert from g/kw-hr to g/bhp-hr, multiply by 0.746. SO₂ emission factor from AP-42 Table 3.4-1, SO₂ (15 ppm) E.F. is 0.001515 lb SO₂/MMBtu.

PLANT CUMULATIVE INCREASE AND OFFSETS

The table below summarizes the cumulative increase in criteria pollutant emissions that will result at Plant 6061 from the operation of S-5102. The emission increases from Applications 25539 and 25574 (the other two pending applications for this facility) are also shown below.

Plant Cumulative Emissions Increase

Pollutant	Existing Emissions, Post 4/5/91 (TPY)	New Increase with Application 25539 (TPY)	New Increase with Application 25574 (TPY)	New Increase with this Application 25789 (TPY)	Cumulative Emissions (TPY)
NOx	0	0.119	0.000	0.314	0.433
POC	0	0.006	0.235	0.017	0.258
CO	0.072	0.010	0.000	0.043	0.125
PM ₁₀	0.018	0.002	0.000	0.007	0.027
SO ₂	0.002	0.000	0.000	0.000	0.002
NPOC	5.56	0.000	0.000	0	5.56

The table below shows the grandfathered sources at Plant 6061 and the corresponding Potential to Emit for each source. S-221 and S-250 are the only grandfathered sources with existing permit condition limits. For S-3, S-308, S-314, and S-315, maximum annual usages and POC contents are provided by the applicant. The applicant has agreed to accept enforceable permit condition limits (see Condition 25698 under Application 25539) based on the maximum usages in the table below in order to remain eligible for offsets from the Small Facilities Bank.

Potential to Emit (PTE) from Grandfathered Sources

Source	Description	Maximum Annual Usage (gal/yr)	POC Content (lb/gal)	Maximum Annual POC Emissions (lb/yr)	Maximum Annual POC Emissions (TPY)
S-3	Paint Spray Booth/Electric Ovens	243	6.7	1628.1	0.814
S-221	Urethane Foam Encapsulation/Electric Ovens	5125 lb/yr of Stathane 817-2C Component 1 and 5125 lb/yr of Stathane 817-2C Component 2*		46.3	0.023

Source	Description	Maximum Annual Usage (gal/yr)	POC Content (lb/gal)	Maximum Annual POC Emissions (lb/yr)	Maximum Annual POC Emissions (TPY)
S-250	Wipe Cleaning Operation Bldg #2	300**	6.6	1980	0.99
S-308	Multiple Silk Screen Tables/Electric Ovens	89.7	6.5	583.050	0.292
S-314	Strip Station	36	6.5	234	0.117
S-315	Photoresist Station/Electric Ovens	15.03	6.5	97.695	0.049
TOTAL				4569.145	2.285

* Usage limit in Permit Condition 12325 Parts 1 and 2 for "Stathane 817-2C Component 1" (0.5% wt. POC) and "Stathane 817-2C Component 2" (0.405% wt. POC)

** Solvent usage limit in Permit Condition 4216 Part 1

The table below summarizes the total PTE for this facility.

Facility PTE for POC

	Emissions (TPY)
Pre-4/5/91 Cumulative Increase (as Plant 722)	7.483
Pre-4/5/91 Cumulative Increase (as Plant 6061)	0.474
Post-4/5/91 Permitted Emissions	8.886
PTE of Grandfathered Sources	2.285
New Increase with Application 25539	0.006
New Increase with Application 25574	0.235
New Increase with Application 25789	0.017
Total Facility PTE	19.386

BAAQMD Regulation 2-2-302 was amended on December 21, 2004, so that facilities with a potential to emit of 35 tons or more of POC or NOx could not use offsets from the Small Facilities Bank. Facilities with a potential to emit between 10 and 35 tons of POC or NOx can use offsets from the Small Facilities Bank. Therefore, 0.017 tons POC per year will be charged to the Small Facilities Bank for this application. Offsets are not required for NOx because the PTE of NOx for this facility is well below 10 TPY.

HEALTH RISK SCREENING ANALYSIS

This application required a Health Risk Screening Analysis because the diesel particulate emissions are greater than the toxic trigger level.

<u>Toxic Pollutant Emitted</u>	<u>Emission Rate (lb/yr)</u>	<u>Risk Screening Trigger (lb/yr)</u>
PM10 (Diesel Particulate)	13.47	0.34

S-5102 meets Best Available Control Technology for toxics (TBACT) since the diesel particulate emissions are less than 0.15 g/bhp-hr. For an engine that meets the TBACT requirement, it must also pass the toxic risk screening level of less than ten in a million. Estimates of residential risk assume exposure to annual average toxic air contaminant concentrations occur 24 hours per day, 350 days per year, for a 70-year lifetime. Risk estimates for offsite workers assume exposure occurs 8 hours per day, 245 days per year, for 40 years. Risk estimates for students assume a higher breathing rate, and exposure is assumed to occur 10 hours per day, 36 weeks per year, for 9 years.

Per the attached 2/4/2014 memo from Judith Cutino, results from the health risk screening analysis indicate that the project cancer risk to the maximally exposed receptor is 9.7 in a million and the chronic hazard index is 0.0034

(Note: The 2/4/2014 HRSA also includes S-319 Photoresist Coater with Electric Oven and S-5101 Emergency Standby Diesel Generator Set, under pending Applications 25574 and 25539, respectively).

In accordance with Regulation 2-5, these risk levels are acceptable.

BACT

In accordance with Regulation 2, Rule 2, Section 301, BACT is triggered for any new or modified source with the potential to emit 10 pounds or more per highest day of POC, NPOC, NOx, CO, SO₂ or PM₁₀.

BACT is triggered for NOx, POC and CO since the maximum daily emissions of NOx, POC and CO exceed 10 lb/day. Please refer to the discussion on “Daily Emissions” in page 2 of this evaluation. BACT for this source is presented in the current BAAQMD BACT/TBACT Workbook for IC Engine – Compression Ignition: Stationary Emergency, non-Agricultural, non-direct drive fire pump, Document # 96.1.3, Revision 7 dated 12/22/2010.

Source:	<i>IC Engine – Compression Ignition: Stationary Emergency, non-Agricultural, non-direct drive fire pump</i>	Revision:	7
		Document #:	96.1.3
Class:	> 50 BHP Output	Date:	12/22/2010
POLLUTANT	BACT 1. Technologically Feasible/ Cost Effective 2. Achieved in Practice 3. TBACT	TYPICAL TECHNOLOGY	
POC	1. n/s ^c 2. CARB ATCM standard ^a for POC at applicable horsepower rating (see attached Table).	1. n/s ^c 2. Any engine certified or verified to achieve the applicable standard. ^a	
NOx	1. n/s ^c 2. CARB ATCM standard ^a for NOx at applicable horsepower rating (see attached Table).	1. n/s ^c 2. Any engine certified or verified to achieve the applicable standard. ^a	
SO₂	1. n/s ^c 2. Fuel sulfur content not to exceed 0.0015% (wt) or 15 ppm (wt).	1. n/s ^c 2. CARB Diesel Fuel (Ultra Low Sulfur Diesel)	
CO	1. n/s ^c 2. CARB ATCM standard ^a for CO at applicable horsepower rating (see attached Table).	1. n/s ^c 2. Any engine certified or verified to achieve the applicable standard. ^a	
PM₁₀	1. n/s ^c 2. 0.15 g/bhp-hr 3. 0.15 g/bhp-hr	1. n/s ^c 2. Any engine or technology demonstrated, certified or verified to achieve the applicable standard. 3. Any engine or technology demonstrated, certified or verified to achieve the applicable standard.	
NPOC	1. n/s ^c 2. n/s ^c	1. n/s ^c 2. n/s ^c	

Reference:

a. ATCM standard (listed below): Where NMHC + NOx is listed (with no individual standards for NOx or NMHC) as the standard, the portions may be considered 95% NOx and 5% NMHC. For the purposes of determining BACT NMHC = POC. Any engine which has been certified or demonstrated to meet the current year tier standard may be considered compliant with the certified emission standard for that pollutant.

b. Deleted (no longer applies).

c. Cost effectiveness analysis must be based on lesser of 50 hr/yr or non-emergency operation as limited by District health risk screen analysis.

BACT 2 Emission Limits based on CARB ATCM

Emissions Standards for Stationary Emergency Standby Diesel-Fueled CI Engines >50 BHP g/Kw-hr (g/bhp-hr)			
Maximum Engine Power	PM	NMHC+NOx	CO
37 < KW < 56 (50 < HP < 75)	0.20 (0.15)	4.7 (3.5)	5.0 (3.7)
56 < KW < 75 (75 < HP < 100)	0.20 (0.15)	4.7 (3.5)	5.0 (3.7)
75 < KW < 130 (100 < HP < 175)	0.20 (0.15)	4.0 (3.0)	5.0 (3.7)
130 < KW < 225 (175 < HP < 300)	0.20 (0.15)	4.0 (3.0)	3.5 (2.6)
225 < KW < 450 (300 < HP < 600)	0.20 (0.15)	4.0 (3.0)	3.5 (2.6)
450 < KW < 560 (600 < HP < 750)	0.20 (0.15)	4.0 (3.0)	3.5 (2.6)
KW > 560 (HP > 750)	0.20 (0.15)	6.4 (4.8)	3.5 (2.6)

For NOx, BACT(2) standard is 4.56 g/hp-hr. For POC, BACT(2) standard is 0.24 g/hp-hr. For CO, BACT(2) standard is 2.6 g/hp-hr. BACT(1) has not been determined. S-5102 meets the current emissions standard based on the emissions factors from the manufacturer’s specification

NSPS

The engine is subject to 40 CFR 60, Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines because it was manufactured after April 1, 2006, as required by Section 60.4200(a)(2)(i).

The engine has a total displacement of 30.5 liters and has 12 cylinders, so each cylinder has a volume of less than 10 liters. The engine is a 2013 model year engine and is not a fire pump. Section 60.4205(b) requires these engines to comply with the emission standards in Section 60.4202, which refers to 40CFR89.112 and 40CFR89.113 for all pollutants. For engines greater than 750 bhp, these standards are:

- NMHC+NOx: 4.8 g/hp-hr
- CO: 2.60 g/hp-hr
- PM: 0.15 g/hp-hr
- 20% opacity during acceleration mode
- 15% opacity during lugging mode
- 50% opacity during peaks in acceleration or lugging mode

According to the manufacturer’s specification, the engine will comply with the standards.

Sections 60.4206 and 60.4211(a) require that the owner/operator operate and maintain the engine according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer, over the entire life of the engine. The owner/operator is expected to comply with this requirement.

Section 60.4207(a) requires that by October 1, 2007, the owner/operator must use fuel that complies with 40 CFR 80.510(a). This means that the fuel must have a sulfur content of 500 parts per million (ppm) maximum, a cetane index of 40 or a maximum aromatic content of 35 volume percent. The owner/operator is expected to comply with this requirement because CARB diesel is required to be used in California.

Section 60.4207(b) requires that by October 1, 2010, the owner/operator must use fuel that complies with 40 CFR 80.510(b). This means that the fuel must have a sulfur content of 15 parts per million (ppm) maximum, and the same cetane index or aromatic content as above. The owner/operator is expected to comply with this requirement because CARB diesel is required to be used in California.

Section 60.4209(a) requires a non-resettable hour meter. This requirement is already in the standard permit conditions.

The engine will comply with the requirements of Section 60.4211(c) because it has been certified in accordance with 40 CFR Part 89.

The engine will comply with the requirement in Section 60.4211(e) to run for less than 100 hours per year for maintenance checks and readiness testing, and the prohibition of running for any reason other than emergency operation, maintenance, and testing because they are limited by permit condition to 50 hours per year for reliability testing and otherwise may only operate for emergencies.

The owner/operator is not required to perform tests in accordance with Section 60.4212 or 60.4213.

Section 60.4214 states that owner/operators do not have to submit an initial notification to EPA for emergency engines.

Because the engine does not have a diesel particulate filter, the owner/operator is not subject to Section 60.4214(c).

The owner/operator is required to comply with certain sections of 40 CFR 60, Subpart A, General Provisions. The owner/operator is expected to comply with this requirement.

NESHAP

This engine is subject to the emission or operating limitations in 40 CFR 63 National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines. Per NESHAP 40CFR63.6590(c)(1), a new or constructed reciprocating internal combustion engines is subject to Regulations under 40 CFR Part 60 (NSPS) and no further requirements apply for such engines under NESHAP. Therefore, S-5102 complies with NESHAP by meeting the requirements under 40CFR60 (NSPS).

CARB STATIONARY DIESEL ENGINE ATCM

The State Office of Administrative Law approved the Airborne Toxic Control Measure (ATCM) on November 8, 2004. State law requires the local Air Districts to implement and enforce the requirements of the ATCM. Effective January 1, 2005, there is a prohibition on the operation of new diesel emergency standby engines greater than 50 bhp unless the following operating requirements and emission standards are met:

“Stationary Diesel Engine ATCM” section 93115.6 (3)(A), title 17, CA Code of Regulations, Amended May 2011.

1. New stationary emergency standby diesel-fueled engines (>50 bhp) shall:
 - a. meet the applicable emission standards for all pollutants for the same model year and maximum horsepower rating as specified in the following Table Emission Standards for New Stationary Emergency Standby Diesel-Fueled CI Engines, in effect on the date of acquisition or submittal, and

- b. after December 31, 2008, be certified to the new nonroad compression-ignition (CI) engine emission standards for all pollutants for 2007 and later model year engines as specified in 40 CFR, PART 60, Subpart III-Standards of Performance for Stationary Compression Ignition Internal Combustion Engines(2006); and
- c. not operate more than 50 hours per year for maintenance and testing purposes.

2. The District may allow a new stationary emergency standby diesel-fueled CI engine (> 50 hp) to operate up to 100 hours per year for maintenance and testing purposes on a site-specific basis, provided the diesel PM emission rate is less than or equal to 0.01 g/bhp-hr.

Emission Standards for New Stationary Emergency Standby Diesel-Fueled CI Engine g/bhp-hr (g/kW-hr)				
Maximum Engine Power	Model Year	PM	NHMC+NOx	CO
50 ≤ HP < 75 (37 ≤ kW < 56)	2007	0.15 (0.20)	5.6 (7.5)	3.7 (5.0)
	2008+		3.5 (4.7)	
75 ≤ HP < 100 (56 ≤ kW < 75)	2007	0.15 (0.20)	5.6 (7.5)	3.7 (5.0)
	2008+		3.5 (4.7)	
100 ≤ HP < 175 (75 ≤ kW < 130)	2007	0.15 (0.20)	3.0 (4.0)	3.7 (5.0)
	2008+			
175 ≤ HP < 300 (130 ≤ kW < 225)	2007	0.15 (0.20)	3.0 (4.0)	2.6 (3.5)
	2008+			
300 ≤ HP < 600 (225 ≤ kW < 450)	2007	0.15 (0.20)	3.0 (4.0)	2.6 (3.5)
	2008+			
600 ≤ HP < 750 (450 ≤ kW < 560)	2007	0.15 (0.20)	3.0 (4.0)	2.6 (3.5)
	2008+			
HP > 750 (kW > 560)	2007	0.15 (0.20)	4.8 (6.4)	2.6 (3.5)
	2008+			

This emergency standby diesel engine (S-5102) is in compliance with the above ATCM requirements. The diesel engine will operate for no more than 50 hours per year for maintenance and reliability testing. This engine is subject to the Current off-road CI engine standards for HC, NOx, NMHC+NOx and CO. As shown in the table below, the engine meets these requirements.

ATCM Emission Standard Compliance

	Emissions from S-5102 g/bhp-hr	ATCM Standard g/bhp-hr
NMHC+NOx	4.03	4.8
NOx	3.83	N/A
NMHC (POC)	0.20	N/A
CO	0.50	2.6
PM	0.08	0.15

STATEMENT OF COMPLIANCE

Source S-5102 is subject to and expected to be in compliance with the requirements of District Regulation 1-301 (*Public Nuisance*), Regulation 6-1-303 (*Particulate Matter and Visible Emissions*), Regulation 9-1 (*Sulfur Dioxide*) and Regulation 9-8 (*NOx and CO from Stationary Internal Combustion Engines*). In order to ensure compliance with the requirements of these regulations, the facility will be conditionally permitted to meet the requirements.

From Regulation 1-301, no person shall discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance or annoyance to any considerable number of persons or the

public; or which endangers the comfort, repose, health or safety of any such persons or the public, or which causes, or has a natural tendency to cause, injury or damage to business or property. For purposes of this section, three or more violation notices validly issued in a 30 day period to a facility for public nuisance shall give rise to a rebuttable presumption that the violations resulted from negligent conduct.

S-5102 is subject to the limitations of Regulation 6-1-303 (*Particulate Matter*). Regulation 6-1-303 states that a person shall not emit for a period or periods aggregating more than three minutes in any hour, a visible emission that is as dark or darker than No. 2 on the Ringelmann Chart, or of such opacity as to obscure an observer's view to an equivalent or greater degree, nor shall said emission, as perceived by an opacity sensing device in good working order, where such device is required by District Regulations, be equal to or greater than 40% opacity. This low PM₁₀ emitting engine is not expected to produce visible emissions or fallout in violation of this regulation, and it will be assumed to be in compliance with Regulation 6, Rule 1 pending a regular inspection.

S-5102 is also subject to the SO₂ limitations of Regulation 9-1-301 (*Limitations on Ground Level Concentrations of Sulfur Dioxide*), Regulation 9-1-302 (*Limitations Sulfur Dioxide Emissions*) and 9-1-304 (*Burning of Solid and Liquid Sulfur Dioxide Fuel*). From Regulation 9-1-301, the ground level concentrations of SO₂ will not exceed 0.5 ppm continuously for 3 consecutive minutes or 0.25 ppm averaged over 60 consecutive minutes, or 0.05 ppm averaged over 24 hours. Per Regulation 9-1-302, a person shall not emit from any source a gas stream containing sulfur dioxide in excess of 300 ppm (dry). And Regulation 9-1-304, states that a person shall not burn any liquid fuel having sulfur content in excess of 0.5% by weight. Compliance with Regulation 9, Rule 1 is very likely since diesel fuel with a 0.0015% by weight sulfur is mandated for use in California.

From Regulation 9-8 (*NOx and CO from Stationary Internal Combustion Engines*), Section 110.5 (*Emergency Standby Engines*), S-5101 is exempt from the requirements of Regulations 9-8-301 (*Emission Limits on Fossil Derived Fuel Gas*), 9-8-302 (*Emission Limits on Waste Derived Fuel Gas*), 9-8-303 (*Emissions Limits – Delayed Compliance, Existing Spark-Ignited Engines, 51 to 250 bhp or Model Year 1996 or Later*), 9-8-304 (*Emission Limits – Compression-Ignited Engines*), 9-8-305 (*Emission Limits – Delayed Compliance, Existing Compression-Ignited Engines, Model Year 1996 or Later*), 9-8-501 (*Initial Demonstration of Compliance*) and 9-8-503 (*Quarterly Demonstration of Compliance*). However, it is subject to the monitoring and record keeping procedures described in Regulation 9-8-530 (*Emergency Standby Engines, Monitoring and Recordkeeping*). The requirements of this Regulation are included in the permit conditions below.

S-5102 is also subject to and expected to comply with Regulation 9-8-330 (*Emergency Standby Engines, Hours of Operation*) since non-emergency hours of operation will be limited in the permit conditions to 50 hours per year.

This application is considered to be ministerial under the District's Regulation 2-1-311 and therefore is not subject to CEQA review. The engineering review for this project requires only the application of standard permit conditions and standard emission factors in accordance with Permit Handbook Chapter 2.3.

This facility is located within 1,000 feet of the nearest school and therefore is subject to the public notification requirements of Regulation 2-1-412.

PSD is not triggered.

PERMIT CONDITIONS

COND# 22850 -----

1. The owner/operator shall not exceed 50 hours per year per engine for reliability-related testing.
[Basis: "Stationary Diesel Engine ATCM" section 93115, title 17, CA Code of Regulations, subsection (e)(2)(A)(3) or (e)(2)(B)(3)]
2. The owner/operator shall operate each emergency standby engine only for the following purposes: to mitigate

emergency conditions, for emission testing to demonstrate compliance with a District, State or Federal emission limit, or for reliability-related activities (maintenance and other testing, but excluding emission testing). Operating while mitigating emergency conditions or while emission testing to show compliance with District, State or Federal emission limits is not limited.

[Basis: "Stationary Diesel Engine ATCM" section 93115, title 17, CA Code of Regulations, subsection (e)(2)(A)(3) or (e)(2)(B)(3)]

3. The owner/operator shall operate each emergency standby engine only when a non-resettable totalizing meter (with a minimum display capability of 9,999 hours) that measures the hours of operation for the engine is installed, operated and properly maintained.

[Basis: "Stationary Diesel Engine ATCM" section 93115, title 17, CA Code of Regulations, subsection(e)(4)(G)(1)]

4. Records: The owner/operator shall maintain the following monthly records in a District-approved log for at least 36 months from the date of entry (60 months if the facility has been issued a Title V Major Facility Review Permit or a Synthetic Minor Operating Permit). Log entries shall be retained on-site, either at a central location or at the engine's location, and made immediately available to the District staff upon request.

- a. Hours of operation for reliability-related activities (maintenance and testing).
- b. Hours of operation for emission testing to show compliance with emission limits.
- c. Hours of operation (emergency).
- d. For each emergency, the nature of the emergency condition.
- e. Fuel usage for each engine(s).

[Basis: "Stationary Diesel Engine ATCM" section 93115, title 17, CA Code of Regulations, subsection e)(4)(I), (or, Regulation 2-6-501)]

5. At School and Near-School Operation:

If the emergency standby engine is located on school grounds or within 500 feet of any school grounds, the following requirements shall apply: The owner/operator shall not operate each stationary emergency standby diesel-fueled engine for non-emergency use, including maintenance and testing, during the following periods:

- a. Whenever there is a school sponsored activity (if the engine is located on school grounds)
- b. Between 7:30 a.m. and 3:30 p.m. on days when school is in session. "School" or "School Grounds" means any public or private school used for the purposes of the education of more than 12 children in kindergarten or any of grades 1 to 12, inclusive, but does not include any private school in which education is primarily conducted in a private home(s). "School" or "School Grounds" includes any building or structure, playground, athletic field, or other areas of school property but does not include unimproved school property.

[Basis: "Stationary Diesel Engine ATCM" section 93115, title 17, CA Code of Regulations, subsection (e)(2)(A)(1) or (e)(2)(B)(2)]

End of Conditions

RECOMMENDATION

The District has reviewed the material contained in the permit application for the proposed project and has made a preliminary determination that the project is expected to comply with all applicable requirements of District, state, and federal air quality-related regulations. The preliminary recommendation is to issue an Authority to Construct for the equipment listed below. However, the proposed source will be located within 1000 feet of a school, which triggers the public notification requirements of District Regulation 2-1-412.6. After the comments are received and reviewed, the District will make a final determination on the permit.

I recommend that the District initiate a public notice and consider any comments received prior to taking any final action on issuance of an Authority to Construct for the following source:

RECOMMENDATION

Issue an Authority to Construct to **Space Systems Loral, LLC** for:

**S-5102 Emergency Standby Diesel Generator Set,
Cummins, Model QST30-G5 NR2
1490 BHP, 7.22 MMBTU/hr**

Jimmy Cheng
Air Quality Engineer
Engineering Division