

AIR QUALITY

MANAGEMENT DISTRICT

AUTHORITY TO CONSTRUCT EVALUATION

APPLICATION NO.:	A/C 25518
REVIEW STARTING DATE:	12/05/17
ISSUING ENGINEER:	Joe Carle

I. PROJECT DESCRIPTION:

FACILITY NAME: EVERGREEN PHARMACEUTICAL OF CALIFORNIA, INC.

LOCATION: 3630 Business Dr., Sacramento, CA 95820

PROPOSAL: Authority to Construct and Permit to Operate a diesel-fired emergency standby generator.

INTRODUCTION: EVERGREEN PHARMACEUTICAL OF CALIFORNIA, INC. is a private subsidiary of CVS Health that is a supplier of medical and pharmaceutical products. EVERGREEN PHARMACEUTICAL OF CALIFORNIA, INC. is seeking an Authority to Construct and a Permit to Operate a diesel fired emergency standby generator which will be installed at their business located at 3630 Business Dr., Sacramento.

EQUIPMENT DESCRIPTION: Emergency standby engine.

Make:	Iveco/FPT
Model:	F3AE9685A-E
Serial No.:	TBD
Engine Hp:	449 bhp
Fuel Type:	Diesel
Displacement:	629 in ³
Engine Family:	FFPXL10.3TR3
Model Year:	2017

PROCESS RATE/FUEL USAGE:

Equipment	Diesel Fuel Usage		
	Gallons/Hour (A)	Gallons/Day	Gallons/Quarter
Engine – F3AE9685A-E – 449 HP	22.1	530.4	4,420

(A) Based on full standby load operation and using submitted Manufacturer Data.

OPERATING SCHEDULE: This application is for a stand-by emergency engine. For purposes of establishing the applicable BACT determination and for ensuring compliance with the ATCM for Stationary Compression Ignition Engines (Title 17, CCR, §93115), engine operation will be limited to 50 hours per year for maintenance and 24 hours per day, 200 hours per quarter and 200 hours per year for total use (maintenance and actual emergency operation). Twenty four

hours a day is reasonable because it is an emergency engine and may in fact operate 24 hours per day.

CONTROL EQUIPMENT EVALUATION: The engine is certified to Tier 3 non-road emission standards.

II. EMISSIONS CALCULATIONS:

1. HISTORIC POTENTIAL EMISSIONS: The equipment is being evaluated as a new emission unit; therefore its Historic Potential Emissions are as follows (Rule 202, §225):

HISTORIC POTENTIAL EMISSIONS		
Pollutant	Daily Historic Potential Emissions	Quarterly Historic Potential Emissions
VOC	0 lb/day	0 lb/qtr
NOx	0 lb/day	0 lb/qtr
SOx	0 lb/day	0 lb/qtr
PM10	0 lb/day	0 lb/qtr
PM2.5	0 lb/day	0 lb/qtr
CO	0 lb/day	0 lb/qtr

2. PROPOSED POTENTIAL TO EMIT: This application is for a stand-by emergency engine. During emergency episodes it can operate for up to 24 hr/day and for a maximum of 200 hours in a quarter or year, including both maintenance and emergency. Therefore, its Potential to Emit will be calculated assuming the engine operates (i) 24 hours per day, (ii) 200 hours per calendar quarter, and (iii) 200 hours per year.

Emissions are calculated using the following equation:

$$PTE = \frac{EF * HP * Hrs}{U_{CF}}$$

Where

PTE = Potential to Emit (lb/day, lb/qtr, lb/yr)

EF = Emission Factor (g/hp-hr)

HP = Horse Power of engine

Hrs = Maximum hours of operation (hrs/day, hrs/qtr, hrs/yr)

U_{CF} = Unit conversion factor (453.6 g/lb)

Pollutant	Emission Factors (A) (g/hp-hr)	Potential to Emit (B)		
		lb/day	lb/quarter	lb/year
VOC (C)	1.14	27.1	226	226
NOx (C)	3.0	71.3	594	594
SOx	0.005	0.1	1	1
PM10	0.17	4.0	34	34
PM2.5	0.17	4.0	34	34
CO	2.6	61.8	515	515
GHG	519	6.2 tons/day	51 tons/qtr	51 tons/year
Lead	N/A	N/A	N/A	N/A

- (A) Emission factors for VOC, NOx, and PM are based on the District's BACT standards (Tier 3 standard). CO emission factor is based on the certified level for a Tier 3 engine. PM10 and PM2.5 emission factors include both the condensable portion and the filterable portion of the particulates. The filterable portion is based on the PM certification standard and the condensable portion is derived using the condensable to filterable fraction, taken from AP-42, Table 3.4-2 (10/96), multiplied by the certification standard $((0.15 \text{ g/hp-hr} + 0.15 \text{ g/hp-hr} * 0.0077/0.0496)=0.17 \text{ g/hp-hr})$. SOx emission factor is based on AP-42, Table 3.4-1 (10/96) using a fuel sulfur content of 15 ppm. GHG emission factor is expressed as CO2e and is from EPA's Mandatory Reporting of Greenhouse Gases Rule (78 FR 71948, Nov. 29, 2013), Tables C-1 & C-2.
- (B) Emissions are based on 449 bhp, 24 hours/day, 200 hours/quarter and 200 hours/year of operation. All emission limits are in English units.
- (C) The engine is required to comply with the combined NOx + VOC emission standard. For the purpose of calculating NOx and VOC individually, VOC emissions are assessed at the worst case scenario of the uncontrolled AP-42 emission factor of 1.14 g/bhp-hr and NOx emissions are assessed at the worst case limit of 3.0 g/bhp-hr.

III. COMPLIANCE WITH RULES AND REGULATIONS:

1. H&S § 42301.6 (AB 3205) COMPLIANCE: The engine will be located within 1,000 feet of Hiram W. Johnson High School a public 9-12 school. There are no other K-12 schools within ¼ mile radius of the source. Hiram W. Johnson High School is located at 6879 14th Ave. A public notice will be distributed to the parents or guardians of the children that attend the school and all addresses within 1000 feet of the engine pursuant to the provisions of Health & Safety Code § 42301.6.

2. NSR COMPLIANCE:

Rule 202 - New Source Review

Section 301 - Best Available Control Technology

BACT is triggered for any pollutant for which the emission increase (BACT_{EI}) calculated pursuant to Rule 202, Section 411.1 exceeds the levels specified below. For purposes of this calculation, the difference is done using tenths, then the difference is rounded to an integer using standard rounding convention (round up if greater than or equal to 0.5):

BACT is triggered if:

$$BACT_{EI} > BACT_{TL}$$

Where:

- BACT_{EI} = Emissions Increase = (DPE – DHPE)
- DPE = Daily Potential Emissions (from Section II.2)
- DHPE = Daily Historic Potential Emissions (from Section II.1)

BACT _{TL} =	Pollutant	BACT _{TL}
	VOC	0 lb/day
	NOx	0 lb/day
	SOx	0 lb/day
	CO	550 lb/day
	PM ₁₀	0 lb/day
	PM _{2.5}	0 lb/day
	Lead	3.3 lb/day

Determination of BACT Applicability:

Pollutant	DPE (lb/day)	DHPE	BACT _{EI} (lb/day)	BACT _{TL} (lb/day)	Is BACT Required?
VOC	27.1	0	27	>0	Yes
NOx	71.3	0	71	>0	Yes
SOx	0.1	0	0	>0	No
PM10	4.0	0	4	>0	Yes
PM2.5	4.0	0	4	>0	Yes
CO	61.8	0	62	>550	No
Lead	0	0	0	>3.3	No

The proposed NOx, VOC, PM10, and PM2.5 emissions exceed the BACT trigger levels specified in this section and are therefore subject to BACT.

SMAQMD’s BACT Determination for standby IC engines with a rating of greater or equal to 50 BHP (BACT No. **116**) was last reviewed on **02/11/16**. Since less than two years have passed since the time the of the last BACT review and the time the application was deemed complete, and the SMAQMD is not aware of any significant changes to BACT requirements for engines in this size category, this BACT determination will be considered current and valid for this permit application.

Determination of Compliance with BACT Requirements:

BACT Compliance		
Pollutant	District BACT Standard BACT No. 116 (g/hp-hr)	Manufacturer's Emissions Data (A) (g/hp-hr)
VOC + NOx(C)	3.0	2.8
SOx	0.005 Fuel with < 0.0015% sulfur content by weight	Not applicable, This engine does not trigger BACT
PM10 (B)	0.15	0.11
PM2.5 (B)	0.15	0.11
CO	2.6	Not applicable, This engine does not trigger BACT

- (A) Based on Generac's Statement of Exhaust Emissions: 2015 FPT Diesel Fueled Generator (Part No. 0L2026A). The District does not use manufacturer's data as BACT because the data is for an engine family and it is not engine specific and does not account for degradation, variability and other factors.
- (B) Based on filterable PM only.
- (C) For purposes of VOC and NOx compliance the District uses the VOC+NOx certification standard for standby engines.

The manufacturer's emissions data for the Iveco/FPT F3AE9685A-E diesel engine for VOC, NOx, PM10, and PM2.5 demonstrate compliance with the BACT standards (Attachment B). The permit will require that the owner/operator only use fuel that contains less than 0.0015% sulfur by weight (CARB Diesel Fuel), which meets the BACT standard for SOx.

Section 302 - Offsets Emergency electrical generating, flood control, and firefighting equipment are exempt from the requirement to provide emission offsets by Section 110 provided the following conditions are met:

1. The installation of the equipment will not result in a major modification or be a major stationary source, in and of itself, and
2. Operation for maintenance purposes is limited to 100 hours per year (engine will be limited to 50 hours per year for T-BACT compliance), and such maintenance must be scheduled in cooperation with the District so as to limit air quality impact, and
3. Operation of the equipment must be limited to a total of 200 hours per year, and
4. The equipment is not used to supply power to a serving utility for distribution on the grid, and
5. Operation is limited to maintenance operation, emergency operation to supply power when there is an actual interruption of electrical power from the serving utility or emergency water pumping for flood control, firefighting, potable water pumping, or sewage pumping.

Conditions will be placed on the Authority to Construct and Permit to Operate indicating these limitations.

The following are the permitted emission units at the Stationary Source and the criteria pollutant quarterly permitted emissions:

All units at this facility/stationary source were installed after January 1, 1977.

STATIONARY SOURCE POTENTIAL TO EMIT FOR VOC AND NO_x (SAME FOR ALL 4 QUARTERS)

Permit No.	Emissions Unit	Stationary Source Potential to Emit lb/quarter	
		VOC	NO _x
A/C 25518	IC Engine Standby (449 BHP)	226	594
Total		226	594
Offset Trigger Level		≥5,000	≥5,000

STATIONARY SOURCE POTENTIAL TO EMIT FOR SO_x, PM₁₀, PM_{2.5}, AND CO (SAME FOR ALL 4 QUARTERS)

Permit No.	Emissions Unit	Stationary Source Cumulative Emission Increase Since 01-01-77			
		ton/year	lb/quarter		
		PM _{2.5}	SO _x	PM ₁₀	CO
A/C 25518	IC Engine Standby (449 BHP)	0.017	1	34	515
Total		0.017	1	34	515
Offset Trigger Level		≥ 15	≥ 13,650	≥ 7,300	≥ 49,500

Section 308 –CEQA The California Environmental Quality Act (CEQA) is a statute that requires state and local agencies to identify the significant adverse environmental impacts of their actions and to avoid or mitigate those impacts to the extent feasible. The first step in the review of projects subject to CEQA is to determine if the project is exempt from CEQA.

The State CEQA Guidelines (SCG) provides that, “Where it can be seen with certainty that there is no possibility that the activity in question may have a significant effect on the environment, the activity is not subject to CEQA.” (SCG §15061(b)(3)) Based on the environmental analysis below staff have concluded that the project is exempt from CEQA because there is no possibility that the project will have a significant adverse effect on the environment.

As shown in the table below, the project’s operational phase emissions, or permitted emission limits are well below the SMAQMD Thresholds of Significance.

Pollutant/Hazard	Threshold	Project Total (D)	Rounded Project Total (B)	Less than Standard?
NO _x (ozone precursor)	65 lb/day	3.0 lb/day	3 lb/day	Yes
VOC (ozone precursor)	65 lb/day	1.1 lb/day	1 lb/day	Yes

Pollutant/Hazard		Threshold	Project Total (D)	Rounded Project Total (B)	Less than Standard?
PM10 (A)	Daily	80 lb/day	0.2 lb/day	0 lb/day	Yes
	Annual	14.6 tons/year	0.004 tons/year	0 tons/year	Yes
PM2.5 (A)	Daily	82 lb/day	0.2 lb/day	0 lb/day	Yes
	Annual	15 tons/year	0.004 tons/year	0 tons/year	Yes
Cancer Risk (per million)		10	4.3 (C)	4 (C)	Yes
Acute Non-Cancer Health Hazard		1.0	N/A (C)	N/A (C)	N/A
Chronic Non-Cancer Health Hazard		1.0	3.3E-03 (C)	0 (C)	Yes
GHG as CO2e	Operational Phase	10,000 metric tons/year	11.7 metric tons/year	12 metric tons/year	Yes

- (A) Operational phase CEQA significance threshold for PM10 and PM2.5 is zero (0) for projects that fail to apply all feasible BACT. The thresholds for projects that apply all feasible BACT is 82 lb/day and 15 ton/year for PM10 and 80 lb/day and 14.6 ton/year for PM2.5.
- (B) The District uses conventional rounding methods to determine what numbers round to zero. For BACT purposes the District has determined that an emissions level of 0.49 lb/day rounds to 0. Using this same methodology, the emissions from this operation are rounded to 0 lb PM10, PM2.5/day and 0 ton PM10, PM2.5/year.
- (C) See Health Risk Assessment analysis under Rule 402 in Sec. 3. Prohibitory Rule Compliance.
- (D) For emergency equipment, operational phase emissions are based on predictable maintenance operation and do not include unforeseen emergency episodes. Typical daily maintenance hours on emergency engines are one hour/day.

In addition to the exemption from CEQA for a project that demonstrates no possibility of a significant effect on the environment, CEQA review is also exempt for permitting actions that are considered ministerial. Under the District “Guidance Document, Permit Actions and CEQA Applicability,” section 5.1.1(f), issuance of an ATC is considered ministerial unless it requires the establishment of a new BACT standard. This project does not require a new BACT standard but rather relied on an existing BACT standard published in the District’s BACT Clearinghouse (No. 116), thus making the permitting action ministerial and exempt from CEQA.

Therefore, upon approval of the project, the SMAQMD will issue the Authority to Construct and file a Notice of Exemption with the Sacramento County Clerk. The notice will be posted for 35 days and the evaluation and Authority to Construct will be made available for public inspection.

Section 406 – Submittal of BACT Determinations: This permit action relied on an existing BACT determination already published on SMAQMD’s BACT Clearinghouse. Therefore, this section does not apply.

Rule 203 – Prevention of Significant Deterioration
A source or modification triggers PSD if:

- Its potential to emit any one pollutant is greater than or equal to 100 tons/year if it is one of the 28 selected industrial categories in 42 U.S.C. Section 7479 (1), or greater than or equal to 250 tons/year for all other categories; or
- It is part of a major stationary source and the project's net emissions increase for any pollutant will be greater than the significance levels listed below:

Pollutant	Level of Significance (Tons/Yr)
CO	100
NOx	40
SOx	40
PM	25
PM10	15
PM2.5	10 (PM2.5) or 40 (SO2) or 40(NO)
Ozone	40 of NOx or VOCs
Lead	0.6
Fluorides	3
Sulfuric acid mist	7
H ₂ S	10
Total reduced sulfur (including H ₂ S)	10
Reduced sulfur compounds (including H ₂ S)	10
Greenhouse Gases (CO ₂ e)	75,000

There are no emissions sources at the facility that appear to have the potential to emit over 100 or 250 tons per year, and as demonstrated in Section II.2, the emissions from this engine are so low they would not cause the facility to exceed the threshold when analyzed cumulatively. Since this is not a major source, it is not necessary to consider the major modification significance levels, but nonetheless, Section II.2 indicates that annual emissions are well below the levels of significance.

Rule 214 – Federal New Source Review

This rule does not apply because this permit action is not for a new major stationary source or a modification at an existing major stationary source.

Rule 217 – Public Notice Requirements for Permits

Sections 401-402 – CARB, EPA, and Public Notification: The public noticing requirements of Rule 217 do not apply if:

- Offsets are not required under Rule 202, Section 302.
- A visibility analysis is not required under Rule 214, Section 413.
- The increase in potential to emit for the project, calculated under Section 403 of Rule 217, is below the following limits:

Pollutant	lb/qtr
VOC	5,000
NOx	5,000
SOx	9,200
PM10	7,300
PM2.5	10 TPY
CO	49,500

Analysis:

- As determined in Section III.2, offsets are not required.
- This permit action is not subject to Rule 214, so the visibility analysis required by Section 413 of Rule 214 is inapplicable.
- As shown below, the increase in potential to emit does not exceed the notification exemption thresholds.

Increase in Potential to Emit					
Pollutant	Potential to Emit for the Project		Increase in PTE	Notification Threshold	Notification Required?
	Pre-Application	Post-Application			
VOC	0	226 lb/qtr	226 lb/qtr	≥ 5,000	No
NOx	0	594 lb/qtr	594 lb/qtr	≥ 5,000	No
SOx	0	1 lb/qtr	1 lb/qtr	≥ 9,200	No
PM10	0	34 lb/qtr	34 lb/qtr	≥ 7,300	No
PM2.5	0	0.017 TPY	0 TPY	≥ 10 TPY	No
CO	0	515 lb/qtr	515 lb/qtr	≥ 49,500	No

3. PROHIBITORY RULE COMPLIANCE:

Rule 401 - Ringelmann Chart

The permit will include conditions requiring that the IC engine comply with the Ringelmann No. 1 or 20% opacity standard and in the District's experience, properly maintained engines are able to meet the requirement. The equipment will be inspected prior to the issuance of the permit to operate and on a regular basis thereafter to ensure continuous compliance.

Rule 402 – Nuisance

The District regulates emissions of toxics substances for engines under Rule 402, SMAQMD's guidance document, Health Risk Management Programs For Existing, Modified and New Stationary Sources (March 24, 2016) and ATCM's adopted by CARB.

The health risk action levels and results are summarized below.

Health Risk Action Levels and Assessment Summary					
Type of Health Risk	Permitting Thresholds ^(A)		Project HRA Results ^(B)		
	T-BACT	Maximum	Residential	Worker	School
Cancer Risk (Chances per Million)	≥ 1.0	10.0	1.2	4.3	0.0

Health Risk Action Levels and Assessment Summary					
Type of Health Risk	Permitting Thresholds ^(A)		Project HRA Results ^(B)		
	T-BACT	Maximum	Residential	Worker	School
Acute Non-Cancer (Hazard Index)	≥ 1.0	1.0	NA	NA	NA
Chronic Non-Cancer (Hazard Index)	≥ 1.0	1.0	3.2E-04	3.3E-03	2.7E-05

(A) In certain circumstances, the District may allow a health risk in excess of the levels specified here. For more information, see SMAQMD's guidance document, Health Risk Management Programs for Existing, Modified and New Stationary Sources (2016).

(B) Results have been rounded to one decimal place.

Diesel particulate matter (PM) has been identified as a carcinogen by the Office of Environmental Health Hazard Assessment (OEHHA).

The following factors, formulas, and assumptions were taken into consideration in order to estimate the worst case excess cancer risk and the non-cancer health risks for the toxic pollutants emitted.

The project's emissions are modeled with the use of an EPA approved air dispersion model to determine the concentrations of toxic pollutants at residential and non-residential receptors surrounding the project. The model used for this analysis is Lakes Environmental's AERMOD View, Version 8.8.9. The following parameters were used as inputs to the model for each engine:

Release Height:	12 feet
Gas Exit Temperature:	950 °F
Stack Diameter:	4 in.
Gas Exit Flow Rate:	2050 acfm
Nominal Emission Rate:	1.0 g/s

SMAQMD utilizes the California Air Resources Board's Hotspots Analysis and Reporting Program (HARP2), Version 16088 model which incorporates the health risk assessment methodologies from the "Risk Assessment Guidelines - Guidance Manual for Preparation of Health Risk Assessments" (February 2015). See Attachment C for the full health risk assessment.

CANCER RISK ASSESSMENT:

From equation 5.4.1.1 and 8.2.4 A:

$$\text{Risk}_{\text{air}} = C_{\text{air}} * (\text{BR}/\text{BW}) * A * \text{EF} * \text{CPF} * \text{ED}/\text{AT} * (1\text{E}-06) * (\text{GLC}) * \text{ASF} * \text{FAH}$$

Where:

Risk _{air}	= Cancer risk from inhalation exposure
C _{air}	= Concentration (µg/m ³)
(BR/BW)	= Breathing Rate/Body Weight
	= 361 (l/kg-day) 95%, 3 rd Trimester
	= 1090 (l/kg-day) 95%, 0<2 yrs
	= 631 (l/kg-day) 80%, 2<9 yrs

- = 572 (l/kg-day) 80%, 2<16 yrs
- = 261 (l/kg-day) 80%, 16<30 yrs
- = 233 (l/kg-day) 80%, 16<70 yrs
- = 230 (l/kg-day) 8 hr worker rate
- A = Inhalation Absorption Factor (default = 1)
- EF = Exposure Frequency
 - = 350 days for Res
 - = 245 days for Non-Res
- CPF = Cancer Potency Factor (kg-day/mg)
- ED = Exposure Duration, 30 years Res, 25 years Non-Res
- AT = Averaging Time, 25,550 days
- ASF = Age sensitivity factor for a specified age group
- FAH = Fraction of time spent at home (use 1 for children under 16 when a school is within a 1 in a million cancer risk isopleth)
 - = 0.85, 3rd Trimester
 - = 0.85, 0<2 yrs
 - = 0.72, 2<9 yrs
 - = 0.72, 2<16 yrs
 - = 0.73, 16<30 yrs
 - = 0.73, 16<70 yrs
- (1E-06) = (mg/1000 ug)*(m³/1000 l)
- GLC = Ground Level Adjustment Factor
 - = 1.0 for resident
 - = 4.2 (7/5 x 24/8) for worker for equipment that, although limited, operates during normal work hours

CANCER RISK SUMMARY:

Permit No.	Receptor (Worst Case)	TAC	Excess Cancer Risk (risk in a million)
A/C 25518	Residential (Located at Receptor #1116, UTM: 637656, 4267198)	Diesel Exhaust	1.2
	Non-Residential (Located at Receptor #2494, UTM: 637691, 4267185)	Diesel Exhaust	4.3
	School (Located at Receptor #3020, UTM: 637409, 4267272)	Diesel Exhaust	0.0

NON-CANCER RISK ASSESSMENT: The chronic non-cancer health risk is determined for a given pollutant by dividing the pollutant’s annual average ambient air concentration (ug/m³) by the chronic reference exposure level of that pollutant in order to obtain the chronic hazard index (HI). The acute non-cancer health risk is determined by dividing the pollutant’s maximum hourly ambient air concentration (ug/m³) by the acute reference exposure level in order to obtain the acute hazard index (HI). In addition, each contaminant can affect different organs of the body and several compounds may affect common organs. Therefore, when there are multiple toxic compounds involved, the effects are additive for the common organs.

A list of chronic or acutely hazardous air contaminants may be found at the OEHHA website

www.oehha.ca.gov. The method of calculating the HI numbers (Risk Assessment Guidelines) is also found at this website.

The hazard index for the organs affected are shown below:

Toxic Air Pollutant	Target Organ Affects – Acute HI (Residential)									
	Alimentary Tract	Cardiovascular	Developmental	Eye	Hematologic	Immune	Nervous	Reproductive	Respiratory	Skin
Diesel Exhaust	X	X	X	X	X	X	X	X	X	X

Toxic Air Pollutant	Target Organ Affects – Chronic HI (Residential)												
	Alimentary	Bone	Cardiovascular	Developmental	Endocrine	Eye	Hematologic	Immune	Kidney	Nervous	Reproductive	Respiratory	Skin
Diesel Exhaust	X	X	X	X	X	X	X	X	X	X	X	3.15E-04	X

Toxic Air Pollutant	Target Organ Affects – Acute HI (Non-Residential)									
	Alimentary Tract	Cardiovascular	Developmental	Eye	Hematologic	Immune	Nervous	Reproductive	Respiratory	Skin
Diesel Exhaust	X	X	X	X	X	X	X	X	X	X

Toxic Air Pollutant	Target Organ Affects – Chronic HI (Non-Residential)												
	Alimentary	Bone	Cardiovascular	Developmental	Endocrine	Eye	Hematologic	Immune	Kidney	Nervous	Reproductive	Respiratory	Skin
Diesel Exhaust	X	X	X	X	X	X	X	X	X	X	X	3.33E-03	X

Toxic Air Pollutant	Target Organ Affects – Acute HI (School)									
	Alimentary Tract	Cardiovascular	Developmental	Eye	Hematologic	Immune	Nervous	Reproductive	Respiratory	Skin
Diesel Exhaust	X	X	X	X	X	X	X	X	X	X

Toxic Air Pollutant	Target Organ Affects – Chronic HI (School)												
	Alimentary	Bone	Cardiovascular	Developmental	Endocrine	Eye	Hematologic	Immune	Kidney	Nervous	Reproductive	Respiratory	Skin
Diesel Exhaust	X	X	X	X	X	X	X	X	X	X	X	2.70E-05	X

NON-CANCER RISK SUMMARY:

Permit No.	Receptor (Worst Case)	TAC	Hazard Index
A/C 25495	Residential (Located at Receptor #1116, UTM: 637656, 4267198)	Diesel Exhaust	3.15E-04
	Non-Residential (Located at Receptor #2494, UTM: 637691, 4267185)	Diesel Exhaust	3.33E-03
	School (Located at Receptor #3020, UTM: 637409, 4267272)	Diesel Exhaust	2.70E-05

HRA CONCLUSION: The health risk for this project is considered acceptable to the SMAQMD because:

- The evaluated cancer risk for a maximum exposed individual resident (MEIR) is 1.2 in one million, which is below the significant risk threshold. However, since the cancer risk exceeds 1 in one million, T-BACT will be required. SMAQMD has determined that the installation of a Tier 3 engine with a Diesel PM emission factor below 0.15 g/bhp-hr meets T-BACT for PM.
- The evaluated cancer risk for a maximum exposed individual worker (MEIW) is 4.3 in one million, which is below the significant risk threshold. However, since the cancer risk exceeds 1 in one million, T-BACT will be required. SMAQMD has determined that the

installation of a Tier 3 engine with a Diesel PM emission factor below 0.15 g/bhp-hr meets T-BACT for PM.

- The evaluated noncancer Acute Hazard Index is less than one for the maximum exposed individual resident (MEIR) and the maximum exposed individual worker (MEIW).
- The evaluated noncancer Chronic Hazard Index is less than one for the maximum exposed individual resident (MEIR) and the maximum exposed individual worker (MEIW).

Rule 406 - Specific Contaminants

The proposed equipment is not expected to exceed the emissions limit of 0.2% by volume sulfur compound as SO₂ and 0.1 gr/dscf for combustion contaminants calculated to 12% CO₂.

Diesel Fuel F-Factor	=	9190 dscf/mmBTU
Molar Volume	=	385.3 ft ³ /mol
Diesel HHV	=	19,300 BTU/lb
Conversion Factor	=	15.432 gr/g
PM10 Emission Factor	=	0.17 g/hp-hr
SO ₂ Emission Factor	=	0.005 g/hp-hr
BSFC	=	7000 BTU/hp-hr
Weight % C in Diesel	=	87 % or 0.87 lb C/lb fuel
C to CO ₂ Conversion Efficiency	=	0.99

PM10 Concentration (combustion contaminants):

- Calculate uncorrected grain loading

$$= (0.17 \text{ g/hp-hr}) \times (15.432 \text{ gr/g}) \times (\text{hp-hr}/7000 \text{ BTU}) \times (1\text{E}6 \text{ BTU/mmBTU}) \times (\text{mmBTU}/9190 \text{ dscf})$$

$$= 0.04078097 \text{ gr/dscf}$$
- Calculate CO₂ emission factor (lb CO₂/mmbtu) assuming 100% C to CO₂ conversion

$$= (0.87 \text{ lb C/lb fuel}) \times (\text{mol C}/12 \text{ lb C}) \times (\text{mol CO}_2/\text{mol C}) \times (44 \text{ lb CO}_2/\text{mol CO}_2) \times (\text{lb fuel}/19300 \text{ BTU}) \times (1\text{E}6 \text{ BTU/mmBTU})$$

$$= 165.2849741 \text{ lb CO}_2/\text{mmBTU}$$
- Calculate lb CO₂/mmBTU at 99% Conversion

$$= 165.2849741 \text{ lb CO}_2/\text{mmBTU} \times 99\%$$

$$= 163.6321244 \text{ lb CO}_2/\text{mmBTU}$$
- Calculate volume % of CO₂ in Exhaust Gas

$$= \% \text{ CO}_2$$

$$= \text{mol CO}_2/\text{mol exhaust}$$

$$= (163.6321244 \text{ lb CO}_2/\text{mmBTU}) \times (\text{mol CO}_2/44 \text{ lb CO}_2) \times (\text{mmBTU}/9190 \text{ dscf}) \times (385.3 \text{ dscf/mol exhaust})$$

$$= 0.155919125 \text{ mol CO}_2/\text{mol exhaust or } 15.5919125 \% \text{ CO}_2$$
- Calculate corrected grain loading

$$= (0.04078097 \text{ gr/dscf}) \times (12\% \text{ CO}_2/15.5919125\% \text{ CO}_2)$$

$$= 0.031 \text{ gr/dscf corrected to } 12\% \text{ CO}_2$$

OR

Simplified Equation

$$= (0.17 \text{ g/hp-hr}) \times (15.432 \text{ gr/g}) \times (\text{hp-hr}/7000 \text{ BTU}) \times (0.12 \text{ mol CO}_2/\text{mol exhaust}) \times (\text{lb fuel}/0.87 \text{ lb C})$$

$$\times (12 \text{ lb C/mol C}) \times (\text{mol C/mol CO}_2) \times (19300 \text{ BTU/lb fuel}) / (0.99) \times (\text{mol exhaust}/385.3 \text{ dscf})$$

$$= 0.031 \text{ gr/dscf corrected to } 12\% \text{ CO}_2$$

SO₂ Concentration (% SO₂ by volume):

The following calculation is at 0% excess air which represents worst case.

$$\begin{aligned} &= (0.005 \text{ g/hp-hr}) \times (\text{lb SO}_2/453.6 \text{ g}) \times (\text{hp-hr}/7000 \text{ BTU}) \times (1\text{E}6 \text{ BTU/mmBTU}) \times (\text{mmBTU}/9190 \text{ dscf}) \\ &\quad \times (\text{mol SO}_2/64 \text{ lb SO}_2) \times (385.3 \text{ dscf/mol exhaust}) \\ &= 0.000001032 \text{ mol SO}_2/\text{mol exhaust or } 0.0001032 \% \text{ SO}_2 \end{aligned}$$

The rule emission limits for SO₂ and PM are 0.2% SO₂ by volume and 0.1 grains/cf at 12% CO₂, respectively. Therefore, the emissions from the engine comply with Rule 406.

Rule 420 - Sulfur Content of Fuels

This rule limits the sulfur content of fuel. It was last amended in 1981, and CARB has subsequently adopted more stringent standards, which limit the sulfur content of diesel no. 2 motor fuel @ <0.0015%S. The permit will include conditions limiting the use of fuel to CARB-approved fuels or alternative fuels that comply with the CARB regulations, which will ensure compliance with this Rule.

4. NSPS COMPLIANCE:

The list of all adopted New Source Performance Standards as listed in 40 CFR 60 (<http://yosemite.epa.gov/r9/r9nsps.nsf/ViewStandards?ReadForm&Part=60>) were reviewed to determine if the proposed project is subject to one or more of these regulations. One applicable provision was identified:

SUBPART IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines are applicable to any of the following:

- A. Engines with a displacement of less than 30 liters per cylinder where the model year is 2007 or later for non-fire pump engines and the model year listed in Table 3 of this subpart for fire pump engines.
- B. Owners or operators of engines that commence construction after July 11, 2005 where the engine is manufactured after April 1, 2006 for a non-fire pump engine or for engines manufactured as a certified National Fire Protection Association (NFPA) fire pump after July 1, 2006.
- C. Owners and operators of engines that modify or reconstruct their engine after July 11, 2005.

The engine was manufactured in 2017 and has a displacement of less than 30 liters per cylinder, therefore, the engine is subject to subpart IIII.

NSPS requirements and Analysis:

- A. The engine must meet the non-road standard in Table 1 of 40 CFR 60.89.112 that is applicable to the engine size and year of manufacture. The engine meets this requirement because it has been certified to the tier 2 standard.
- B. The fuel used must meet the requirements specified in 40 CFR 80.510(b). The engine meets this requirement because the permit will be conditioned to limit fuels used to CARB diesel and CARB diesel complies with the federal fuel specification.
- C. The engine must have an hour meter installed. The permit will include a condition requiring an hour meter.
- D. This NSPS limits engine operation for maintenance purposes to 100 hours per year. The permit will include a condition limiting engine operation to 50 hours per year for maintenance purposes.

5. NESHAP COMPLIANCE:

NESHAPs under 40 CFR, Part 61: The list of all adopted National Emission Standards for

Hazardous Air Pollutants (<http://yosemite.epa.gov/r9/r9nsps.nsf/ViewStandards?ReadForm&Part=61>) were reviewed to determine if the proposed project is subject to one or more of these regulations. There are currently no 40 CFR, Part 61 NESHAPs applicable to this source category.

NESHAPs under 40 CFR, Part 63: The District has not requested nor obtained delegation of Part 63 NESHAPs. However, these NESHAPs are being enforced as state Air Toxic Control Measures (ATCMs) pursuant to Health and Safety Code, Sections 39658(b) and 39666(d). The list of all adopted National Emission Standards for Hazardous Air Pollutants (<http://yosemite.epa.gov/r9/r9nsps.nsf/ViewStandards?ReadForm&Part=63>) were reviewed to determine if the proposed project is subject to one or more of these regulations. One applicable provision was identified:

Subpart ZZZZ – National Emission Standard for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines establishes national emission limitations and operating limitations for hazardous air pollutants (HAP) emitted from stationary reciprocating internal combustion engines (RICE) located at both major and area sources of HAP emissions.

The engine is subject to this part because it is considered a new RICE since construction will be commenced after June 12, 2006 at an area source.

The requirements of this NESHAP subpart require the engine to comply with the emission requirements specified in 40 CFR 60 Subpart IIII (Standards of Performance for Stationary Compression Ignition Internal Combustion Engines). As mentioned above this engine complies with these requirements because it is certified to the appropriate standard, will utilize CARB diesel, and will have an hour meter installed.

- 6. ATCM COMPLIANCE:** The list of all adopted Airborne Toxic Control Measures (<http://www.arb.ca.gov/toxics/atcm/atcm.htm>) was reviewed to determine if the proposed project is subject to one or more of these regulations.

Airborne Toxic Control Measure For Stationary Compression Ignition Engines (Title 17, CCR Sections 93115-93115.15: The engine is stationary, greater than 50 hp, utilizes a compression ignition power cycle, and is therefore subject to this rule. To comply with this rule, the permit will contain conditions requiring that the engine meet a PM emission rate of 0.15 g/hp-hr or less, limit other criteria pollutants to EPA Tier 3 levels, operate no more than 50 maintenance hours per year and 200 total hours per year, monitor usage with a non-resetting 4 digit totalizer, and operate with CARB verified diesel fuel. The operator will be required to maintain monthly records that document operating hours and fuel deliveries.

IV. RECOMMENDATION: This engine will comply with all applicable District rules and regulations. An authority to construct a diesel fired emergency standby engine generator should be issued to EVERGREEN PHARMACEUTICAL OF CALIFORNIA, INC. with the following conditions.

Refer to conditions in Authority to Construct No. 25518

REVIEWED BY: *Brian F. Lund* DATE: 12-12-17

APPROVED BY: *AL:DJH* DATE: 12-12-17

Attachment A

Potential to Emit Calculations

Standby IC Engine PTE Calculation

A/C # 25518

EVERGREEN PHARMACEUTICAL OF CALIFORNIA, INC.

3630 Business Dr., Sacramento, CA 95820

Fuel: Diesel

hours/day 24

hours/qtr 200

hours/year 200

HP: 449

	Emission Factor g/hp-hr	Basis	Potential to Emit		
			lb/day	lb/quarter	lb/year
VOC	1.14	AP-42	27.1	226	226
NOx	3.0	Tier 3 NOx + VOC Standard	71.3	594	594
SOx	0.005	15 ppm S content	0.1	1	1
PM10	0.17	AP-42 Filterable and Condensable	4.0	34	34
PM2.5	0.17	AP-42 Filterable and Condensable	4.0	34	34
CO	2.6	Tier 3 Standard	61.8	515	515
GHG	519	EPA GHG Rule	6.2 tons/day	51 tons/qtr	51 tons/yr

Attachment B
BACT Determination #116 and Generac's Statement of
Exhaust Emissions: 2015 FPT Diesel Fueled Generator
(Part No. 0L2026A)

CATEGORY:

IC ENGINE COMPRESSION-STANDBY

BACT Size: Minor Source BACT

IC ENGINE STANDBY

BACT Determination Number: 116		BACT Determination Date: 2/11/2016	
Equipment Information			
Permit Number: 24758		Equipment Description: IC ENGINE STANDBY	
Unit Size/Rating/Capacity: I.C. Engine, Standby, Diesel-fueled >=50 HP		Equipment Location: PHILLIPS 66 COMPANY 76 BROADWAY SACRAMENTO, CA	
BACT Determination Information			
ROCs	Standard:	Applicable NMHC + NOx Tier Standard	
	Technology Description:	Applicable NMHC + NOx emission standard for horsepower range based on the ATCM for Stationary CI Engines	
	Basis:	Achieved in Practice	
NOx	Standard:	Applicable NMHC + NOx Tier Standard	
	Technology Description:	Applicable NMHC + NOx emission standard for horsepower range based on the ATCM for Stationary CI Engines	
	Basis:	Achieved in Practice	
SOx	Standard:	CARB Diesel	
	Technology Description:	Diesel fuel with a sulfur content no greater than 0.0015% by weight	
	Basis:	Achieved in Practice	
PM10	Standard:	Applicable PM Tier Standard	
	Technology Description:	Applicable PM emission standard for horsepower range based on the ATCM for Stationary CI Engines	
	Basis:	Achieved in Practice	
PM2.5	Standard:	Applicable PM Tier Standard	
	Technology Description:	Applicable PM emission standard for horsepower range based on the ATCM for Stationary CI Engines	
	Basis:	Achieved in Practice	
CO	Standard:	Applicable CO Tier Standard	
	Technology Description:	Applicable CO emission standard for horsepower range based the ATCM for Stationary CI Engines	
	Basis:	Achieved in Practice	
LEAD	Standard:		
	Technology Description:		
	Basis:		

Comments: For emergency engines $50 \leq \text{bhp} < 75$, Tier 4 Interim certification is the requirement; for emergency engines $75 \leq \text{bhp} < 750$, Tier 3 certification is the requirement; for emergency engines ≥ 750 bhp, Tier 2 certification is the requirement.

District Contact: Isam Boulad Phone No.: (916) 874 - 4859 email: iboulad@airquality.org

STATEMENT OF EXHAUST EMISSIONS 2015 FPT DIESEL FUELED GENERATOR

The measured emissions values provided here are proprietary to Generac and its authorized dealers. This information may only be disseminated upon request, to regulatory governmental bodies for emissions permitting purposes or to specifying organizations as submittal data when expressly required by project specifications, and shall remain confidential and not open to public viewing. This information is not intended for compilation or sales purposes and may not be used as such, nor may it be reproduced without the expressed written permission of Generac Power Systems, Inc. The data provided shall not be meant to include information made public by Generac.

Generator Model:	SD275	EPA Certificate Number:	FFPXL10.3TR3-004
kW _e Rating:	275	CARB Certificate Number:	Not Applicable
Engine Family:	FFPXL10.3TR3	SCAQMD CEP Number:	511713
Engine Model:	F3AE9685A-E	Emission Standard Category:	Tier 3
Rated Engine Power (BHP) :*	449	Certification Type:	Stationary Emergency CI (40 CFR Part 60 Subpart IIII)
Fuel Consumption (gal/hr)*:	22.1		
Aspiration:	Turbo/Aftercooled		
Rated RPM:	1800		

*Engine Power and Fuel Consumption are declared by the Engine Manufacturer of Record and the U.S. EPA.

**Emissions based on engine power of specific Engine Model.
(These values are actual composite weighted exhaust emissions results over the EPA 5-mode test cycle.)**

CO	NO _x + NMHC	PM	
1.3	3.8	0.15	Grams/kW-hr
1.0	2.8	0.11	Grams/bhp-hr

- The stated values are actual exhaust emission test measurements obtained from an engine representative of the type described above.
- Values based on 5-mode testing are official data of record as submitted to regulatory agencies for certification purposes. Testing was conducted in accordance with prevailing EPA protocol, which is typically accepted by SCAQMD and other regional authorities.
- No emissions values provided above are to be construed as guarantees of emission levels for any given Generac generator unit.
- Generac Power Systems, Inc. reserves the right to revise this information without prior notice.
- Consult state and local regulatory agencies for specific permitting requirements.
- The emission performance data supplied by the equipment manufacturer is only one element required toward completion of the permitting and installation process. State and local regulations may vary on a case-by-case basis and local agencies must be consulted by the permit application/equipment owner prior to equipment purchase or installation. The data supplied herein by Generac Power Systems cannot be construed as a guarantee of installability of the generating set.

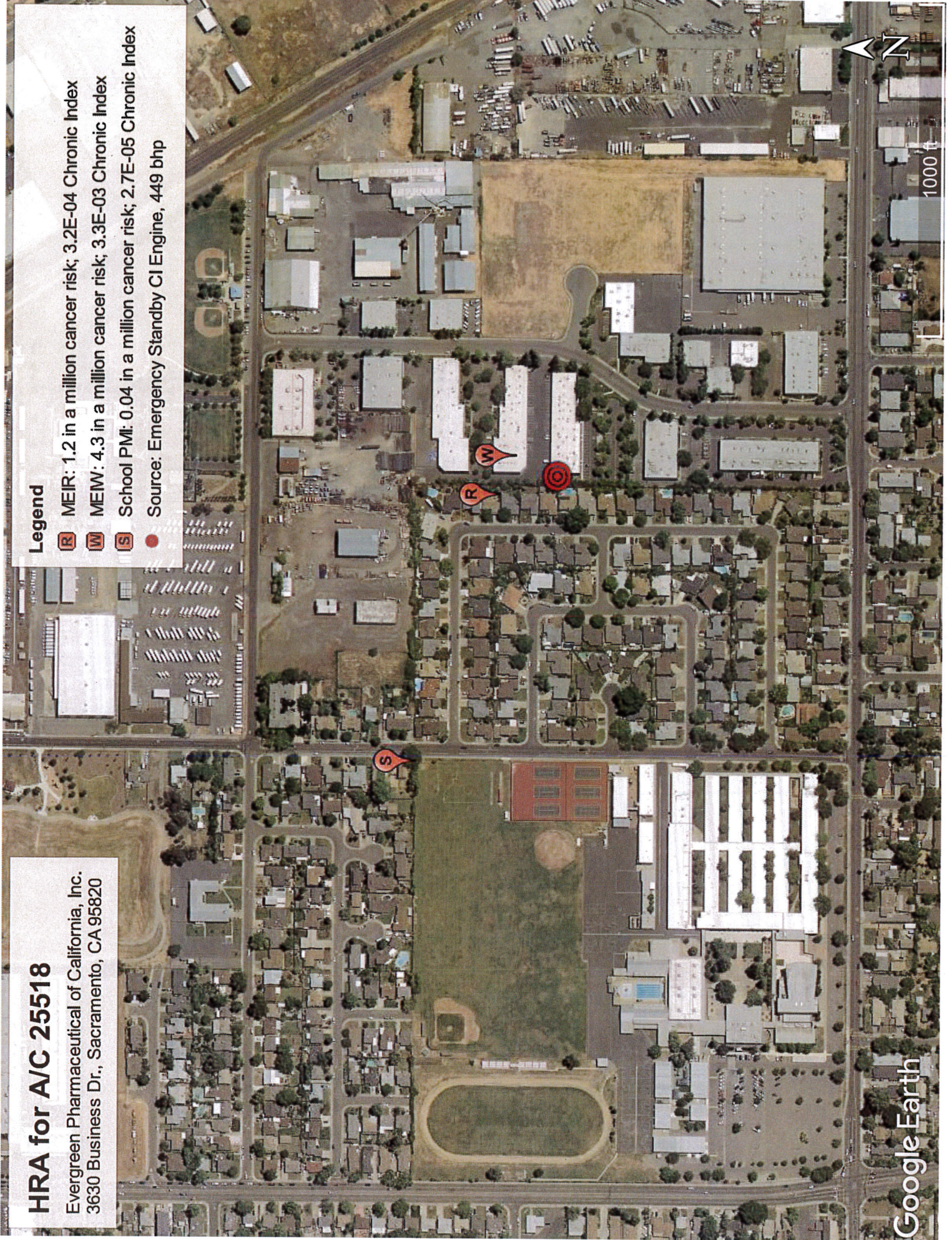
Attachment C
Health Risk Assessment

HRA for A/C 25518

Evergreen Pharmaceutical of California, Inc.
3630 Business Dr., Sacramento, CA 95820

Legend

- R** MEIR: 1.2 in a million cancer risk; 3.2E-04 Chronic Index
- W** MEIW: 4.3 in a million cancer risk; 3.3E-03 Chronic Index
- S** School PMI: 0.04 in a million cancer risk; 2.7E-05 Chronic Index
- Source: Emergency Standby CI Engine, 449 bhp




```

**
*****
**
** AERMOD Input Produced by:
** AERMOD View Ver. 9.4.0
** Lakes Environmental Software Inc.
** Date: 12/11/2017
** File: L:\SSD FOLDERS\Permitting\1 - Permits\25500 - 25999\25518\HRA25518 AERMOD
Input File.inp
**

```

```

*****
**
**
*****
** AERMOD Control Pathway
*****
**
**

```

```

CO STARTING
TITLEONE L:\SSD FOLDERS\Modeling\25500-25999\25518\25518 All\25518 All.isc
MODELOPT DFAULT CONC
AVERTIME 1 PERIOD
URBANOPT 1353923
POLLUTID OTHER
RUNORNOT RUN
ERRORFIL "25518 All.err"

```

```

CO FINISHED
**
*****
** AERMOD Source Pathway
*****
**
**

```

```

SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
LOCATION S0001 POINT 637673.280 4267146.460 11.590
** DESCRSRC Emergency Standby CI Engine 449 bhp
** Source Parameters **
SRCPARAM S0001 1.0 3.658 783.150 121.75853 0.101

```

```

** Building Downwash **

```

BUILDHGT S0001	5.49	5.49	5.49	5.49	5.49	5.49
BUILDHGT S0001	5.49	5.49	5.49	5.49	5.49	5.49
BUILDHGT S0001	5.49	5.49	5.49	5.49	5.49	0.00
BUILDHGT S0001	5.49	5.49	5.49	5.49	5.49	5.49
BUILDHGT S0001	5.49	5.49	5.49	5.49	5.49	5.49
BUILDHGT S0001	5.49	5.49	5.49	5.49	5.49	0.00
BUILDWID S0001	94.67	94.08	90.62	84.41	75.64	64.57
BUILDWID S0001	51.54	36.94	28.32	43.31	57.55	70.04
BUILDWID S0001	80.40	88.31	93.55	95.94	95.41	0.00
BUILDWID S0001	94.67	94.08	90.62	84.41	75.64	64.57
BUILDWID S0001	51.54	36.94	28.32	43.31	57.55	70.04
BUILDWID S0001	80.40	88.31	93.55	95.94	95.41	0.00
BUILDLIN S0001	43.31	57.55	70.04	80.40	88.31	93.55
BUILDLIN S0001	95.94	95.41	92.47	94.67	94.08	90.62
BUILDLIN S0001	84.41	75.64	64.57	51.54	36.94	0.00
BUILDLIN S0001	43.31	57.55	70.04	80.40	88.31	93.55

BUILDLN	S0001	95.94	95.41	92.47	94.67	94.08	90.62
BUILDLN	S0001	84.41	75.64	64.57	51.54	36.94	0.00
XBADJ	S0001	-19.28	-17.69	-15.56	-12.96	-9.96	-6.66
XBADJ	S0001	-3.16	0.44	3.54	2.33	1.05	-0.26
XBADJ	S0001	-1.57	-2.83	-4.00	-5.05	-5.94	0.00
XBADJ	S0001	-24.03	-39.86	-54.47	-67.44	-78.35	-86.88
XBADJ	S0001	-92.77	-95.85	-96.01	-97.00	-95.12	-90.36
XBADJ	S0001	-82.85	-72.82	-60.57	-46.49	-31.00	0.00
YBADJ	S0001	-49.67	-48.09	-45.05	-40.64	-34.99	-28.29
YBADJ	S0001	-20.72	-12.53	-6.69	2.37	11.08	19.46
YBADJ	S0001	27.24	34.19	40.11	44.81	48.14	0.00
YBADJ	S0001	49.67	48.09	45.05	40.64	34.99	28.29
YBADJ	S0001	20.72	12.53	6.69	-2.37	-11.08	-19.46
YBADJ	S0001	-27.24	-34.19	-40.11	-44.81	-48.14	0.00

URBANSRC ALL
SRCGROUP S0001 S0001
SRCGROUP ALL

SO FINISHED

**

** AERMOD Receptor Pathway

**

**

RE STARTING

INCLUDED "25518 All.rou"

RE FINISHED

**

** AERMOD Meteorology Pathway

**

**

ME STARTING

SURFFILE "D:\MET Data\Exec 10-14 N1MD.SFC"

PROFFILE "D:\MET Data\Exec 10-14 N1MD.PFL"

SURFDATA 23232 2010 SACRAMENTO/EXECUTIVE_ARPT

UAIRDATA 23230 2010 OAKLAND/WSO_AP

PROFBASE 4.6 METERS

ME FINISHED

**

** AERMOD Output Pathway

**

**

OU STARTING

RECTABLE ALLAVE 1ST

RECTABLE 1 1ST

** Auto-Generated Plotfiles

PLOTFILE 1 ALL 1ST "L:\SSD FOLDERS\Modeling\25500-25999\25518\25518 All\25518

ALL.AD\01H1GALL.PLT" 31

PLOTFILE 1 S0001 1ST "L:\SSD FOLDERS\Modeling\25500-25999\25518\25518 All\25518

ALL.AD\01H1G001.PLT" 32

PLOTFILE PERIOD ALL "L:\SSD FOLDERS\Modeling\25500-25999\25518\25518 All\25518

ALL.AD\PE00GALL.PLT" 33

PLOTFILE PERIOD S0001 "L:\SSD FOLDERS\Modeling\25500-25999\25518\25518 All\25518
ALL.AD\PE00G000.PLT" 34

SUMMFILE "L:\SSD FOLDERS\Modeling\25500-25999\25518\25518 All\25518 All.sum"

OU FINISHED

**

** Project Parameters

** PROJCTN CoordinateSystemUTM
** DESCPTN UTM: Universal Transverse Mercator
** DATUM North American Datum 1983
** DTMRGN CONUS
** UNITS m
** ZONE 10
** ZONEINX 0
**

GLCs loaded successfully
Pollutants loaded successfully
Pathway receptors loaded successfully

RISK SCENARIO SETTINGS

Receptor Type: Resident
Scenario: All
Calculation Method: Derived

EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: -0.25
Total Exposure Duration: 30

Exposure Duration Bin Distribution
3rd Trimester Bin: 0.25
0<2 Years Bin: 2
2<9 Years Bin: 0
2<16 Years Bin: 14
16<30 Years Bin: 14
16 to 70 Years Bin: 0

PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True
Soil: True
Dermal: True
Mother's milk: True
Water: False
Fish: False
Homegrown crops: False
Beef: False
Dairy: False
Pig: False
Chicken: False
Egg: False

INHALATION

HRA25518 HARPRESOutput

Daily breathing rate: RMP

Worker Adjustment Factors

Worker adjustment factors enabled: NO

Fraction at time at home

3rd Trimester to 16 years: OFF

16 years to 70 years: ON

SOIL & DERMAL PATHWAY SETTINGS

Deposition rate (m/s): 0.02

Soil mixing depth (m): 0.01

Dermal climate: Mixed

TIER 2 SETTINGS

Tier2 not used.

Calculating cancer risk

Cancer risk breakdown by pollutant and receptor saved to: L:\SSD

FOLDERS\Modeling\25500-25999\25518\25518 All\25518ALL\hra\25518ALLRESCancerRisk.csv

Cancer risk total by receptor saved to: L:\SSD

FOLDERS\Modeling\25500-25999\25518\25518

All\25518ALL\hra\25518ALLRESCancerRiskSumByRec.csv

Calculating chronic risk

Chronic risk breakdown by pollutant and receptor saved to: L:\SSD

FOLDERS\Modeling\25500-25999\25518\25518

All\25518ALL\hra\25518ALLRESNCChronicRisk.csv

Chronic risk total by receptor saved to: L:\SSD

FOLDERS\Modeling\25500-25999\25518\25518

All\25518ALL\hra\25518ALLRESNCChronicRiskSumByRec.csv

Calculating acute risk

Acute risk breakdown by pollutant and receptor saved to: L:\SSD

FOLDERS\Modeling\25500-25999\25518\25518 All\25518ALL\hra\25518ALLRESNCAcuteRisk.csv

Acute risk total by receptor saved to: L:\SSD

FOLDERS\Modeling\25500-25999\25518\25518

All\25518ALL\hra\25518ALLRESNCAcuteRiskSumByRec.csv

HRA ran successfully

HARP2 - HRACalc (dated 17023) 12/11/2017 12:59:45 PM - Output Log

GLCs loaded successfully
Pollutants loaded successfully
Pathway receptors loaded successfully

RISK SCENARIO SETTINGS

Receptor Type: Worker
Scenario: All
Calculation Method: Derived

EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: 16
Total Exposure Duration: 25

Exposure Duration Bin Distribution
3rd Trimester Bin: 0
0<2 Years Bin: 0
2<9 Years Bin: 0
2<16 Years Bin: 0
16<30 Years Bin: 0
16 to 70 Years Bin: 25

PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True
Soil: True
Dermal: True
Mother's milk: False
Water: False
Fish: False
Homegrown crops: False
Beef: False
Dairy: False
Pig: False
Chicken: False
Egg: False

INHALATION

HRA25518 HARPWKROutput

Daily breathing rate: Moderate8HR

****Worker Adjustment Factors****

NOTE: The worker adjustment factors below are only used for cancer assessments. However, the GLC adjustment factor is also applied to 8-hr noncancer chronic assessments.

Worker adjustments factors enabled: YES

GLC adjustment factor: 4.2

Exposure frequency: 250

****Fraction at time at home****

3rd Trimester to 16 years: OFF

16 years to 70 years: OFF

SOIL & DERMAL PATHWAY SETTINGS

Deposition rate (m/s): 0.02

Soil mixing depth (m): 0.01

Dermal climate: Mixed

TIER 2 SETTINGS

Tier2 not used.

Calculating cancer risk

Cancer risk breakdown by pollutant and receptor saved to: L:\SSD

FOLDERS\Modeling\25500-25999\25518\25518 All\25518ALL\hra\25518ALLWKRCancerRisk.csv

Cancer risk total by receptor saved to: L:\SSD

FOLDERS\Modeling\25500-25999\25518\25518

All\25518ALL\hra\25518ALLWKRCancerRiskSumByRec.csv

Calculating chronic risk

Chronic risk breakdown by pollutant and receptor saved to: L:\SSD

FOLDERS\Modeling\25500-25999\25518\25518

All\25518ALL\hra\25518ALLWKRNCChronicRisk.csv

Chronic risk total by receptor saved to: L:\SSD

FOLDERS\Modeling\25500-25999\25518\25518

All\25518ALL\hra\25518ALLWKRNCChronicRiskSumByRec.csv

Calculating acute risk

Acute risk breakdown by pollutant and receptor saved to: L:\SSD

FOLDERS\Modeling\25500-25999\25518\25518 All\25518ALL\hra\25518ALLWKRNCAcuteRisk.csv

Acute risk total by receptor saved to: L:\SSD

FOLDERS\Modeling\25500-25999\25518\25518

All\25518ALL\hra\25518ALLWKRNCAcuteRiskSumByRec.csv

HRA ran successfully

Attachment D
CEQA Notice of Exemption

Notice of Exemption

Appendix E

To: Office of Planning and Research
P.O. Box 3044, Room 113
Sacramento, CA 95812-3044

County Clerk
County of: Sacramento
600 8th Street
Sacramento, CA 95814

From: (Public Agency): Sacramento Metropolitan AQMD
777 12th Street, Suite 300
Sacramento, CA 95814

(Address)

Project Title: Emergency Standby Compression Ignition Engine Operation (A/C 25518)

Project Applicant: Evergreen Pharmaceutical of California, Inc. - 1 CVS Dr. MC2340, Woonsocket, RI 02895

Project Location - Specific:
3630 Business Dr., Sacramento, CA 95820

Project Location - City: Sacramento Project Location - County: Sacramento

Description of Nature, Purpose and Beneficiaries of Project:
The project beneficiary, Evergreen Pharmaceutical of California, Inc., is permitting a new emergency standby engine. Evergreen Pharmaceutical of California, Inc. is a supplier of medical and pharmaceutical products that is using an emergency standby engine for electrical power during power outages.

Name of Public Agency Approving Project: Sacramento Air Quality Management District

Name of Person or Agency Carrying Out Project: Evergreen Pharmaceutical of California, Inc.

Exempt Status: (check one):

- Ministerial (Sec. 21080(b)(1); 15268);
Declared Emergency (Sec. 21080(b)(3); 15269(a));
Emergency Project (Sec. 21080(b)(4); 15269(b)(c));
Categorical Exemption. State type and section number:
Statutory Exemptions. State code number: Sec. 1506(b)(3)

Reasons why project is exempt:
SMAQMD determined there is no possibility that the project will have a significant adverse impact on the environment because its air pollutant emissions are within the Districts' acceptable limits and no other environmental medium is expected to be adversely affected. Also, this permitting action is covered under an existing BACT, therefore it is considered ministerial.

Lead Agency Contact Person: Ali Othman Area Code/Telephone/Extension: 916-874-4857

If filed by applicant:

- 1. Attach certified document of exemption finding.
2. Has a Notice of Exemption been filed by the public agency approving the project? Yes No

Signature: [Signature] Date: 12-12-17 Title: Program Supervisor

Signed by Lead Agency Signed by Applicant

Authority cited: Sections 21083 and 21110, Public Resources Code. Date Received for filing at OPR:
Reference: Sections 21108, 21152, and 21152.1, Public Resources Code.