



air pollution control district
SANTA BARBARA COUNTY

DRAFT

Authority to Construct/Permit to Operate 16041

Page 1 of 13

EQUIPMENT OWNER:

Solvang Lutheran Home, Inc.

EQUIPMENT OPERATOR:

Solvang Lutheran Home, Inc.

EQUIPMENT LOCATION:

636 Atterdag Road, Solvang

STATIONARY SOURCE/FACILITY:

Solvang Lutheran Home, Inc.

SSID: 10369

FID: 10484

EQUIPMENT DESCRIPTION:

Diesel-fired emergency standby engine(s) as listed in the table at the end of this permit.

PROJECT/PROCESS DESCRIPTION:

The diesel engine(s) subject to this permit provide electrical backup power in times of emergencies as defined by the State's *Airborne Toxics Control Measure for Stationary Compression Ignition Engines* (ATCM). This ATCM (CCR Section 93115, Title 17) limits annual engine maintenance and testing hours (as listed for each engine in the equipment list) with no limitation for emergency use.

Definitions of the terms "*maintenance and testing*" and "*emergency use*" are found in the ATCM and the District's webpage at <http://www.ourair.org/dice-atcm/>.

CONDITIONS:

1. **Emission Limitations.** The mass emissions from the equipment permitted herein shall not exceed the values listed in Table 1. Emissions of PM and other pollutants shall not exceed the emissions standards listed in Table 2 of this permit. Compliance shall be based on the operational, monitoring, recordkeeping and reporting conditions of this permit.

DRAFT

Authority to Construct/Permit to Operate 16041

Page 2 of 13

2. **Operational Restrictions.** The equipment permitted herein is subject to the following operational restrictions listed below. Emergency use operations, as defined in the ATCM¹, have no operational hours limitations.
- a. Maintenance & Testing Use Limit: The stationary emergency standby diesel-fueled engine(s), except for in-use firewater pump engines, shall not be operated for more than the hours listed in the attached equipment list for maintenance and testing² purposes.
 - b. Impending Rotating Outage Use: The stationary emergency standby diesel-fueled engine(s) may be operated in response to the notification of an impending rotating outage if all the conditions cited in the ATCM are met.
 - c. Fuel and Fuel Additive Requirements: The permittee may only add fuel and/or fuel additives that comply with the ATCM to the engine or to any fuel tank directly attached to the engine.
 - d. At-School and Near-School Provisions: The in-use stationary emergency standby diesel-fueled CI engine subject to this permit may not be operated for non-emergency use, including maintenance and testing, whenever there is a school sponsored activity between 7:30 a.m. and 3:30 p.m. on days when school is in session.
 - e. Diesel Particulate Filter (DPF) Operations: The DPFs shall be in place and operational at all times the engines are operational. The DPFs shall be operated and maintained according to the District-approved *DPF Operation & Maintenance Plan* and manufacturer's operation and maintenance manual.
 - f. Backpressure Monitor Alarm Response Actions: The response actions defined in the District-approved *DPF Operation & Maintenance Plan* shall be taken in the event of an alarm condition.
 - g. Number of Hours of Operation before Inspection/Cleaning of Filter. The engines may operate no more than 1,000 hours each under normal operating conditions before the associated diesel particulate filters must be inspected and cleaned if needed. [Re: EO DE-07-001-01].

¹ As used in the permit, "ATCM" means Section 93115, Title 17, California Code of Regulations. Airborne Toxic Control Measure for Stationary Compression Ignition (CI) Engines

² "maintenance and testing" is defined in the ATCM and may also be found on the District webpage at http://www.ourair.org/wp-content/uploads/ES_MT_DICE_Definitions.pdf

DRAFT

Authority to Construct/Permit to Operate 16041

Page 3 of 13

3. **Monitoring.** The equipment permitted herein is subject to the following monitoring requirements:
 - a. Non-Resettable Hour Meter: Each stationary emergency standby diesel-fueled engine(s) shall be equipped with a non-resettable hour meter with a minimum display capability of 9,999 hours, unless the District has determined (in writing) that a non-resettable hour meter with a different minimum display capability is appropriate in consideration of the historical use of the engine and the owner or operator's compliance history.
 - b. Pressure Transmitter Check: The permittee shall check each pressure transmitter every 200 hours of operation. Each pressure transmitter shall be removed and pressure applied to the line in order to check the function of the DPF transmitter and the line for leaks.
 - c. Visual Leak Check: The permittee shall perform a visual check of each exhaust system every 200 hours of operation. This shall include checking for signs of exhaust leaks such as evidence of soot. The following components shall be checked: piping, fittings, clamps, and gaskets. Corrective action shall be taken within 24 hours when leaks are found.
 - d. DPF System Operation Check: The permittee shall regularly check the dual controller status panels associated with each DPF for operational status when the engines are running. Corrective actions shall be performed according to the manufacturer's recommendations.
 - e. All monitoring required by the District-approved *DPF Operation & Maintenance Plan*.

4. **Recordkeeping.** The permittee shall record and maintain the information listed below. Log entries shall be retained for a minimum of 36 months from the date of entry. Log entries made within 24 months of the most recent entry 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. Log entries made from 25 to 36 months from most recent entry shall be made available to District staff within 5 working days from request. Use of District Form ENF-92 (*Diesel-Fired Emergency Standby Engine Recordkeeping Form*) can be used for this requirement. The permittee shall record the following information for each engine and associated DPF, separately:
 - a. emergency use hours of operation.
 - b. maintenance and testing hours of operation.

DRAFT

Authority to Construct/Permit to Operate 16041

Page 4 of 13

- c. hours of operation for emission testing to show compliance with the ATCM {if specifically allowed for under this permit}.
 - d. hours of operation to comply with the requirements of the NFPA for healthcare facilities.
 - e. hours of operation for all uses other than those specified in items (a) – (d) above along with a description of what those hours were for.
 - f. fuel purchase records that demonstrate that only fuel meeting the requirements of the ATCM is purchased and added to each emergency standby engine, or to any fuel tank directly attached to each emergency standby engine.
 - g. A log shall be maintained that records all required diesel particulate filter inspections, maintenance activities, and corrective actions for the DPF. The log shall also include leak and pressure transmitter checks and filter cleaning.
5. **Reporting.** By March 1 of each year, a written report documenting compliance with the terms and conditions of this permit and the ATCM for the previous calendar year shall be provided by the permittee to the District (Attn: *Annual Report Coordinator*). All logs and other basic source data not included in the report shall be made available to the District upon request. The report shall include the information required in the Recordkeeping condition above.
6. **Temporary Engine Replacements - DICE ATCM.** Any reciprocating internal combustion engine subject to this permit and the stationary diesel ATCM may be temporarily replaced only if the requirements (a – h) listed herein are satisfied.
- a. The permitted engine that is being temporarily replaced is in need of routine repair or maintenance.
 - b. The permitted engine does not have a cracked block, unless the block will be replaced under manufacturer’s warranty.
 - c. Replacement parts are available for the permitted engine.
 - d. The permitted engine is returned to its original service within 180 days of installation of the temporary engine.
 - e. The temporary replacement engine has the same or lower manufacturer rated horsepower and same or lower potential to emit of each pollutant as the permitted engine. At the written request of the permittee, the District may approve a replacement engine with a

DRAFT

Authority to Construct/Permit to Operate 16041

Page 5 of 13

larger rated horsepower if the proposed temporary engine has manufacturer guaranteed emissions (for a brand new engine) or source test data (for a previously used engine) less than or equal to the permitted engine.

- f. The temporary replacement engine shall comply with all rules and permit requirements that apply to the permitted engine.
- g. For each permitted engine to be temporarily replaced, the permittee shall submit a completed *Temporary IC Engine Replacement Notification* form (Form ENF-94) within 14 days of the temporary engine being installed. This form may be sent hardcopy, or can be e-mailed (e-mail: enr@sbcapcd.org) to the District (Attn: Engineering Supervisor).
- h. Within 14 days of returning the original permitted engine to service, the permittee shall submit a completed *Temporary IC Engine Replacement Report* form (Form ENF-95). This form may be sent hardcopy, or can be e-mailed (e-mail: enr@sbcapcd.org) to the District (Attn: Engineering Supervisor).

Any engine in temporary replacement service shall be immediately shut down if the District determines that the requirements of this condition have not been met. If the requirements of this condition are not met, the permittee must obtain an ATC before installing or operating a temporary replacement engine.

- 7. **Permanent Engine Replacements.** The permittee may install a new engine in place of an engine permitted herein without first obtaining an ATC only if the requirements (a – f) listed herein are satisfied.
 - a. The permitted stationary diesel-fueled engine is an E/S engine, a firewater pump engine or an engine used for an essential public service (as defined by the District).
 - b. The permitted engine breaks down, cannot be repaired, and needs to be replaced by a new permanent engine.
 - c. The facility provides “good cause” (in writing) for the need to install a new permanent engine before an ATC can be obtained for a new engine.
 - d. The new permanent engine must comply with the requirements of the ATCM for new engines. A temporary replacement engine may be used while the new permanent engine is being procured only if it meets the requirements of the *Temporary Engine Replacements - DICE ATCM* permit condition.
 - e. An ATC application for the new permanent engine must be submitted to the District within 15 days of the existing engine being replaced and the ATC must be obtained no later than 180 days from the date of engine replacement (these timelines include the use of a temporary engine).

DRAFT

Authority to Construct/Permit to Operate 16041

Page 6 of 13

- f. For each new permanent engine installed pursuant to this condition, the permittee shall submit a completed *Permanent IC Engine Replacement Notification* form (Form ENF-96) within 14 days of the new engine being installed. This form may be sent hardcopy, or can be e-mailed (e-mail: engr@sbcapcd.org) to the District (Attn: Engineering Supervisor).

Any engine installed pursuant to this condition shall be immediately shut down if the District determines that the requirements of this condition have not been met.

8. **Notification of Non-Compliance.** Owners or operators who have determined that they are operating their stationary diesel-fueled CI engine(s) in violation of the requirements specified in the ATCM shall notify the District immediately upon detection of the violation and shall be subject to District enforcement action.
9. **Notification of Loss of Exemption.** Owners or operators of in-use stationary diesel-fueled CI engines who are exempt from all or part of the requirements of the ATCM shall notify the District within five days after they become aware that the exemption no longer applies and shall demonstrate compliance within 180 days after the date the exemption no longer applies.
10. **Enrollment in a DRP/ISC.** Owners or operators shall obtain an ATC before enrolling a stationary diesel-fueled CI engine rated over 50 bhp in a Demand Response Program/Interruptible Service Contract (as defined in the ATCM) for the first time.
11. **Source Testing.** The following source testing provisions shall apply:
 - a. Source testing shall be performed upon request by the District. The permittee shall conduct source testing of air emissions and process parameters listed in Table 3 of this permit. Source testing may be required if the equipment does not comply with permitted limitations or if other compliance problems, as determined by the District, occur.
 - b. The permittee shall submit a written source test plan to the District for approval at least thirty (30) days prior to initiation of each source test. The source test plan shall be prepared consistent with the District's Source Test Procedures Manual (revised May 1990 and any subsequent revisions). The permittee shall obtain written District approval of the source test plan prior to commencement of source testing. The District shall be notified at least ten (10) calendar days prior to the start of source testing activity to arrange for a mutually agreeable source test date when District personnel may observe the test.
 - c. Source test results shall be submitted to the District within forty-five (45) calendar days following the date of source test completion and shall be consistent with the requirements approved within the source test plan. Source test results shall document the permittee's compliance status with mass emission rates and applicable permit conditions, rules and NSPS (if applicable). All District costs associated with the review and approval of all

DRAFT

Authority to Construct/Permit to Operate 16041

Page 7 of 13

plans and reports and the witnessing of tests shall be paid by the permittee as provided for by District Rule 210.

- d. A source test for an item of equipment shall be performed on the scheduled day of testing (the test day mutually agreed to) unless circumstances beyond the control of the operator prevent completion of the test on the scheduled day. Such circumstances include mechanical malfunction of the equipment to be tested, malfunction of the source test equipment, delays in source test contractor arrival and/or set-up, or unsafe conditions on site. Except in cases of an emergency, the operator shall seek and obtain District approval before deferring or discontinuing a scheduled test, or performing maintenance on the equipment item on the scheduled test day. If the test can not be completed on the scheduled day, then the test shall be rescheduled for another time with prior authorization by the District. Once the sample probe has been inserted into the exhaust stream of the equipment unit to be tested (or extraction of the sample has begun), the test shall proceed in accordance with the approved source test plan. In no case shall a test run be aborted except in the case of an emergency or unless approval is first obtained from the District. Failing to perform the source test of an equipment item on the scheduled test day without a valid reason and without the District's authorization shall constitute a violation of this permit. If a test is postponed due to an emergency, written documentation of the emergency event shall be submitted to the District by the close of the business day following the scheduled test day.

The timelines in (a), (b), and (c) above may be extended for good cause provided a written request is submitted to the District at least three (3) days in advance of the deadline, and approval for the extension is granted by the District.

12. **Documents Incorporated by Reference.** The documents listed below, including any District-approved updates thereof, are incorporated herein by reference and shall have the full force and effect of a permit condition for this permit. These documents shall be implemented for the life of the Project and shall be made available to District inspection staff upon request.
 - a. *DPF Operation & Maintenance Plan* (submitted on August 17, 2012).
13. **Consistency with Analysis.** Operation under this permit shall be conducted consistent with all data, specifications and assumptions included with the application and supplements thereof (as documented in the District's project file) and the District's analyses under which this permit is issued as documented in the Permit Analyses prepared for and issued with the permit.
14. **Equipment Maintenance.** The equipment listed in this permit shall be properly maintained and kept in good condition at all times. The equipment manufacturer's maintenance manual, maintenance procedures and/or maintenance checklists (if any) shall be kept on site.
15. **Compliance.** Nothing contained within this permit shall be construed as allowing the violation of any local, state or federal rules, regulations, air quality standards or increments.

DRAFT

Authority to Construct/Permit to Operate 16041

Page 8 of 13

16. **Severability.** In the event that any condition herein is determined to be invalid, all other conditions shall remain in force.
17. **Conflict Between Permits.** The requirements or limits that are more protective of air quality shall apply if any conflict arises between the requirements and limits of this permit and any other permitting actions associated with the equipment permitted herein.
18. **Access to Records and Facilities.** As to any condition that requires for its effective enforcement the inspection of records or facilities by the District or its agents, the permittee shall make such records available or provide access to such facilities upon notice from the District. Access shall mean access consistent with California Health and Safety Code Section 41510 and Clean Air Act Section 114A.
19. **Equipment Identification.** Identifying tag(s) or name plate(s) shall be displayed on the equipment to show manufacturer, model number, and serial number. The tag(s) or plate(s) shall be affixed to the equipment in a permanent and conspicuous position.
20. **Emission Factor Revisions.** The District may update the emission factors for any calculation based on USEPA AP-42 or District emission factors at the next permit modification or permit reevaluation to account for USEPA and/or District revisions to the underlying emission factors.
21. **Nuisance.** Except as otherwise provided in Section 41705 of the California H&SC, 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 to the public, or which endanger the comfort, repose, health, or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property.
22. **Grounds for Revocation.** Failure to abide by and faithfully comply with this permit or any Rule, Order, or Regulation may constitute grounds for revocation pursuant to California Health & Safety Code Section 42307 *et seq.*
23. **Transfer of Owner/Operator.** This permit is only valid for the owner and operator listed on this permit unless a *Transfer of Owner/Operator* application has been applied for and received by the District. Any transfer of ownership or change in operator shall be done in a manner as specified in District Rule 203. District Form –01T and the appropriate filing fee shall be submitted to the District within 30 days of the transfer.

DRAFT

Authority to Construct/Permit to Operate 16041

Page 9 of 13

AIR POLLUTION CONTROL OFFICER

DATE

Attachments:

- Table 1 – Mass Emission Limit
- Table 2 – Emission Standards
- Table 3 – Source Test Requirements
- Permit Equipment List(s)
- Permit Evaluation for Authority to Construct / Permit to Operate 16041

Notes:

- Reevaluation Due Date: May 2026
- ATCM information can be located online at <http://www.ourair.org/dice-atcm/>
- Detailed recordkeeping is required. See Form ENF -92 at the above webpage.
- Stationary sources are subject to an annual emission fee (see Fee Schedule B-3 of Rule 210).
- Annual reports are due by March 1st of each year.
- This permit supersedes Reeval 13619-R3

DRAFT

Authority to Construct/Permit to Operate 16041

TABLE 1. MASS EMISSION LIMITS

Device ID #	NO _x		ROC		CO		SO _x		PM		PM10		PM2.5	
	lb/day	tpy	lb/day	tpy	lb/day	tpy	lb/day	tpy	lb/day	tpy	lb/day	tpy	lb/day	tpy
113770	11.85	0.07	0.85	0.01	11.01	0.07	0.03	0.01	0.63	0.01	0.63	0.01	0.63	0.01
113771	9.83	0.06	0.70	0.01	9.13	0.06	0.02	0.01	0.53	0.01	0.53	0.01	0.53	0.01
Total	21.68	0.13	1.55	0.02	20.14	0.13	0.05	0.02	1.16	0.02	1.16	0.02	1.16	0.02

TABLE 2. EMISSION FACTORS (g/bhp-hr)

Device ID #	NO _x	ROC	CO	SO _x	PM	PM10	PM2.5
113770	2.80	0.20	2.60	0.01	0.15	0.15	0.15
113771	2.80	0.20	2.60	0.01	0.15	0.15	0.15

Table Notes:

- (a) Mass emission limits based on allowable maintenance and testing hours.
- (b) NO_x as NO₂. SO_x as SO₂. PM means diesel PM.
- (c) Device ID # from permit equipment list.
- (d) lb/day = pounds per day. tpy = tons per year
- (e) Emission data that round down to 0.00 has been set to a default of 0.01.

DRAFT

Authority to Construct/Permit to Operate 16041

TABLE 3. SOURCE TEST REQUIREMENTS

Emission Limit & Test Points ^(g)	Pollutants	Parameters	Test Methods ^{(a),(b)}	Limit	
				Concentration (g/bhp-hr)	Mass Emissions (lb/hr)
Device # 113770 Engine Exhaust	PM	g/bhp-hr	EPA Method 5	0.023	0.05
Device # 113771 Engine Exhaust	PM	g/bhp-hr	EPA Method 5	0.023	0.04
Diesel Particulate Filter (DPF)	Inlet Temperature	% PM Reduction	EPA Method 2		
	Outlet Temperature		EPA Method 2		
	Inlet Pressure				
	Outlet Pressure				
	PM Control Efficiency				
	Sampling Point Det.		EPA Method 1		
	Stack Gas Flow Rate		EPA Method 2 or 19		
	Moisture Content		EPA Method 4		
Fuel Gas	Fuel Gas Flow Rate	BTU/gal	Fuel Gas Meter ^(e)		
	Higher Heating Value		ASTM D 1826-88		
	Total Sulfur Content ^(c)		ASTM D 1072		
IC Engine Setup	Ignition Timing		Setting used during test to be documented		

Notes:

- ^(a) Alternative methods may be acceptable on a case-by-case basis.
- ^(b) For PM a minimum of three 40-minute runs shall be obtained during each test.
- ^(c) Total sulfur content fuel samples shall be obtained using EPA Method 18 with Tedlar Bags (or equivalent) equipped with Teflon tubing and fittings.
- ^(d) Source testing shall be performed for the IC engine operating at a representative, District-approved, IC engine load (gal/hr).
- ^(e) Fuel meter shall meet the calibration and metered volume corrections specified in Rule 333, §G.3.a.
- ^(f) PM means “diesel PM” per the ATCM. PM testing is required only upon written request of the APCD.
- ^(g) All emission limit and test points shall be tested for each engine and associated DPF.

DRAFT

Authority to Construct/Permit to Operate 16041

Page 12 of 13

PERMIT EQUIPMENT LIST

ATC/PTO 16041 / FID: 10484 Solvang Lutheran Home dba Atterdag Village of Solvang /
SSID: 10369

A PERMITTED EQUIPMENT

1 E/S Diesel Generator #1

<i>Device ID #</i>	113770	<i>Maximum Rated BHP</i>	480.00
<i>Device Name</i>	E/S Diesel Generator #1	<i>Serial Number</i>	S9L04032
<i>Engine Use</i>	Electrical Power	<i>EPA Engine Family Name</i>	BCPXL08.8NZZ
<i>Manufacturer</i>	Caterpillar	<i>Operator ID</i>	#1
<i>Model Year</i>	2011	<i>Fuel Type</i>	CARB Diesel - ULSD
<i>Model</i>	C9		
<i>DRP/ISC?</i>	No	<i>Healthcare Facility?</i>	Yes
<i>Daily Hours</i>	4.00	<i>Annual Hours</i>	50
<i>Location</i>	636 Atterdag Rd., Solvang, CA 93463		
<i>Note</i>			
<i>Device Description</i>	Tier 3, 480 bhp, 2011, diesel-fired emergency standby engine with direct diesel injection, turbocharger, engine control module, charge air cool and connected to Rypos HDPF/C		

2 E/S Diesel Generator #2

<i>Device ID #</i>	113771	<i>Maximum Rated BHP</i>	398.00
<i>Device Name</i>	E/S Diesel Generator #2	<i>Serial Number</i>	S9L04030
<i>Engine Use</i>	Electrical Power	<i>EPA Engine Family Name</i>	BCPXL08.8NZZ
<i>Manufacturer</i>	Caterpillar	<i>Operator ID</i>	#2
<i>Model Year</i>	2011	<i>Fuel Type</i>	CARB Diesel - ULSD
<i>Model</i>	C9		
<i>DRP/ISC?</i>	No	<i>Healthcare Facility?</i>	Yes
<i>Daily Hours</i>	4.00	<i>Annual Hours</i>	50
<i>Location</i>	636 Atterdag Rd., Solvang, CA 93463		
<i>Note</i>			
<i>Device Description</i>	Tier 3, 398 bhp, diesel-fired emergency standby engine with direct diesel injection, turbocharger, charge air cool, and and connected to Rypos HDPF/C		

DRAFT

Authority to Construct/Permit to Operate 16041

3 DPF (Engine #1)

<i>Device ID #</i>	113785	<i>Device Name</i>	DPF (Engine #1)
<i>Rated Heat Input</i>		<i>Physical Size</i>	
<i>Manufacturer</i>	Rypos	<i>Operator ID</i>	
<i>Model</i>	RH 400	<i>Serial Number</i>	n/a
<i>Location Note</i>	636 Atterdag Rd., Solvang, CA 93463		
<i>Device</i>	hybrid active diesel particulate filter and diesel oxidation catalyst system		
<i>Description</i>	(Rypos HDPF/C), connected to E/S Diesel Generator 2		

4 DPF (Engine #2)

<i>Device ID #</i>	113786	<i>Device Name</i>	DPF (Engine #2)
<i>Rated Heat Input</i>		<i>Physical Size</i>	
<i>Manufacturer</i>	Rypos	<i>Operator ID</i>	
<i>Model</i>	RH 400	<i>Serial Number</i>	n/a
<i>Location Note</i>	636 Atterdag Rd., Solvang, CA 93463		
<i>Device</i>	hybrid active diesel particulate filter and diesel oxidation catalyst system		
<i>Description</i>	(Rypos HDPF/C), connected to E/S Diesel Generator 3		



DRAFT

**PERMIT EVALUATION FOR
AUTHORITY TO CONSTRUCT/PERMIT TO OPERATE 16041**

Page 1 of 3

1.0 BACKGROUND

This permit addresses requirements of the State's Airborne Toxic Control Measure for Stationary Compression Ignition Engines (DICE ATCM). On March 17, 2005, District Rule 202 {*Exemptions to Rule 201*} was revised to remove the compression-ignited engine (e.g., diesel) permit exemption for units rated over 50 brake horsepower (bhp). That exemption was removed to allow the District to implement the DICE ATCM. This permit authorizes an increase to the daily permitted hours of operation from 2 hours per day to 4 hours per day in order to accommodate annual load testing requirements.

2.0 DICE ATCM/NESHAP COMPLIANCE

Owners of New Stationary DICE E/S engines are subject to the requirements of Table 1 of the ATCM. The ATCM requires that the hours of operation be monitored with a non-resettable hour meter, that CARB Diesel Fuel be used (or approved alternative) and that detailed records of use be recorded and reported.

The Federal NESHAP for reciprocating internal combustion engines (RICE NESHAP) established inspection and maintenance requirements for emergency standby diesel engines. Engines at residential, institutional, and commercial facilities are exempt from these new requirements. Additionally, engines constructed after 2005 are subject to federal New Source Performance Standards (NSPS) and are not subject to further requirements under NESHAP. The engine on this permit is subject to the requirements of the RICE NESHAP. The engine on this permit is exempt from the requirements of the RICE NESHAP because the engine was constructed after 2005.

3.0 EMISSIONS

Emissions: Mass emission estimates are based on the maximum allowed hours for maintenance and testing. Emissions are determined by the following equations:

$$\begin{aligned} E1, \text{ lb/day} &= \text{Engine Rating (bhp)} * \text{EF (g/bhp-hr)} * \text{Daily Hours (hr/day)} * (\text{lb}/453.6 \text{ g}) \\ E2, \text{ tpy} &= \text{Engine Rating (bhp)} * \text{EF (g/bhp-hr)} * \text{Annual Hours (hr/yr)} * (\text{lb}/453.6 \text{ g}) * (\text{ton}/2000 \text{ lb}) \end{aligned}$$

The emission factors (EF) were chosen based on each engine's rating and age. Unless engine specific data was provided, default emission factors are used as documented on the District's webpage at <http://www.ourair.org/dice/emission-factors/>. Daily hours are 4 hrs/day.

4.0 REEVALUATION REVIEW (not applicable)

5.0 AQIA

DRAFT

PERMIT EVALUATION FOR AUTHORITY TO CONSTRUCT/PERMIT TO OPERATE 16041

Page 2 of 3

The project is not subject to the Air Quality Impact Analysis requirements of Regulation VIII.

6.0 OFFSETS/ERCs

Offsets: The emission offset thresholds of Regulation VIII are not exceeded.

ERCs: This source does not generate emission reduction credits.

7.0 AIR TOXICS

An air toxics health risk assessment was not performed for this permitting action because only the daily emissions have increased. Health risk assessments are based on annual and hourly pollutant emission rates and state-approved health risk data. Therefore, the authorized increase in daily emissions does not affect health risk.

A cancer Health Risk Assessment (HRA) screening was originally run for this project as part of the original issuance of ATC/PTO 13619. The results showed a maximum cancer risk of 5.90 in a million, which is below the District's significant risk threshold of 10 in a million. Please see attachment C for documentation of the Health Risk Assessment originally performed for ATC/PTO 13619.

8.0 CEQA / LEAD AGENCY

The District is the lead agency under CEQA for this project. This project is exempt from CEQA pursuant to the Environmental Review Guidelines for the Santa Barbara County APCD (revised April 30, 2015). Appendix A (*APCD Projects Exempt from CEQA and Equipment or Operations Exempt from CEQA*) provides an exemption specifically for Engines – Diesel-fired emergency/standby engines that comply with the applicable state Air Toxics Control Measure (ATCM). No further action is necessary.

9.0 SCHOOL NOTIFICATION

A school notice pursuant to the requirements of H&SC §42301.6 was required as the project site is located within 1,000 feet of Solvang School District. A notice to the parents of the students, and residences and businesses within 1,000 feet of the project will be mailed.

10.0 PUBLIC and AGENCY NOTIFICATION PROCESS/COMMENTS ON DRAFT PERMIT

This project is subject to a 30-day school public notice.

Draft comments, if any are submitted, may be found in this section of the final permit.

11.0 FEE DETERMINATION

DRAFT

**PERMIT EVALUATION FOR
AUTHORITY TO CONSTRUCT/PERMIT TO OPERATE 16041**

Page 3 of 3

Fees for this permit were assessed pursuant to Schedule A.3 of Rule 210.

12.0 RECOMMENDATION

It is recommended that this permit be granted with the conditions as specified in the permit.

AQ Engineer/Technician

Date

Supervisor

Date

13.0 ATTACHMENT(S)

- A. Fee Statement
- B. IDS Tables
- C. Air Toxics Documentation

DRAFT

Authority to Construct/Permit to Operate 16041

ATTACHMENT A
Fee Statement



air pollution control district
SANTA BARBARA COUNTY

FEE STATEMENT

ATC/PTO No. 16041

FID: 10484 Solvang Lutheran Home dba Atterdag Village of Solvang / SSID: 10369

Device Fee

Device No.	Device Name	Fee Schedule	Qty of Fee Units	Fee per Unit	Fee Units	Max or Min. Fee Apply?	Number of Same Devices	Pro Rate Factor	Device Fee	Penalty Fee?	Fee Credit	Total Fee per Device
113770	E/S Diesel Generator #1	A3	1.000	644.42	Per 1 million Btu input	No	1	1.000	644.42	0.00	0.00	644.42
113771	E/S Diesel Generator #2	A3	1.000	644.42	Per 1 million Btu input	No	1	1.000	644.42	0.00	0.00	644.42
113785	DPF (Engine #1)	A3	1.000	644.42	Per 1 million Btu input	No	1	1.000	644.42	0.00	0.00	644.42
113786	DPF (Engine #2)	A3	1.000	644.42	Per 1 million Btu input	No	1	1.000	644.42	0.00	0.00	644.42
	Administrative Change		1.000	496.00					496.00	0.00	0.00	496.00
	Device Fee Sub-Totals =								\$3,073.68	\$0.00	\$0.00	
	Device Fee Total =											\$3,073.68

Permit Fee

Fee Based on Devices

\$3,073.68

Fee Statement Grand Total = \$3,073

Notes:

-
- (1) Fee Schedule Items are listed in District Rule 210, Fee Schedule "A".
 - (2) The term "Units" refers to the unit of measure defined in the Fee Schedule.

DRAFT

Authority to Construct/Permit to Operate 16041

ATTACHMENT B
IDS Tables

PERMIT POTENTIAL TO EMIT

	NO _x	ROC	CO	SO _x	PM	PM ₁₀	PM _{2.5}
lb/day	21.68	1.55	20.14	0.05	1.16	1.16	1.16
lb/hr							
TPQ							
TPY	0.13	0.02	0.13	0.02	0.02	0.02	0.02

FACILITY POTENTIAL TO EMIT

	NO _x	ROC	CO	SO _x	PM	PM ₁₀	PM _{2.5}
lb/day	21.68	1.55	20.14	0.05	1.16	1.16	1.16
lb/hr							
TPQ							
TPY	0.13	0.02	0.13	0.02	0.02	0.02	0.02

STATIONARY SOURCE POTENTIAL TO EMIT

	NO _x	ROC	CO	SO _x	PM	PM ₁₀	PM _{2.5}
lb/day	21.68	1.55	20.14	0.05	1.16	1.16	1.16
lb/hr							
TPQ							
TPY	0.13	0.02	0.13	0.02	0.02	0.02	0.02

Notes:

- (1) Emissions in these tables are from IDS.
- (2) Because of rounding, values in these tables shown as 0.00 are less than 0.005, but greater than zero.

DRAFT

Authority to Construct/Permit to Operate 16041

ATTACHMENT C
Air Toxics Documentation

Diesel I.C. Engines (DICE) Screening Risk Tool

Project Information
Region: Facility ID: Unit #:
Project #: ATC/PTO 13619
Date: 3/17/2011

Met Station
District: SBAPCD
Met Site: SANTA MARIA
Model Type: URBAN BD
Year: 63

Engine Data
BHP: 480
% Load: 100
PM10 EF (g/BHP): 0.0225
Hours / Yr: 50
Lbs / Yr: 1.19
Convert to G/BHP
Convert to G/KW
Update Emissions

Receptor Data
Quad: QUAD 2
Distance(m): 7.62
Miles: Feet: 25
Yards: 10th Mi:
NW N NE
W Quad 4 Quad 1 E
SW S SE

Cancer Risk
Resident Risk: Maximum Res. Risk
In a Million: 2.87 2.87
Worker Risk: Maximum Worker Risk
In a Million: 1.09 1.09
Quad: 2
Distance: 25
Calculate Risk
Print Form

New SAVE Close Form

Diesel I.C. Engines (DICE) Screening Risk Tool

Project Information
Region: Facility ID: Unit #:
Project #: ATC/PTO 13619
Date: 3/17/2011

Met Station
District: SBAPCD
Met Site: SANTA MARIA
Model Type: URBAN BD
Year: 63

Engine Data
BHP: 398
% Load: 100
PM10 EF (g/BHP): 0.0225
Hours / Yr: 50
Lbs / Yr: 0.99
Convert to G/BHP
Convert to G/KW
Update Emissions

Receptor Data
Quad: QUAD 2
Distance(m): 7.62
Miles: Feet: 25
Yards: 10th Mi:
NW N NE
W Quad 4 Quad 1 E
SW S SE

Cancer Risk
Resident Risk: Maximum Res. Risk
In a Million: 3.03 3.03
Worker Risk: Maximum Worker Risk
In a Million: 1.15 1.15
Quad: 2
Distance: 25
Calculate Risk
Print Form

New SAVE Close Form