

Authority to Construct/Permit to Operate 15923

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EQUIPMENT OWNER:

Harry's House, LP.

EQUIPMENT OPERATOR:

Harry's House, LP.

EQUIPMENT LOCATION:

890 N. Refugio Road, Santa Ynez

STATIONARY SOURCE/FACILITY:

Harry's House, LP. EQUIPMENT DESCRIPTION: SSID: 11563 FID: 11812

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 <u>http://www.ourair.org/dice-atcm/</u>.

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.

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- 2. **Operational Restrictions.** The equipment permitted herein is subject to the following operational restrictions. The equipment may operate as many hours as necessary for emergency use, as defined in the ATCM¹.
 - a. <u>Maintenance & Testing Use Limit</u>: 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. <u>Impending Rotating Outage Use</u>: 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. <u>Fuel and Fuel Additive Requirements</u>: 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. <u>Near-School Provisions</u>: The stationary emergency standby diesel-fueled engine(s) shall not be operated for non-emergency use, including maintenance and testing, between 7:30 a.m. and 3:30 p.m. on days school is in session.
 - e. <u>Initial Startup Hours</u>: Initial startup hours shall not exceed 5 hours.
 - f. <u>Diesel Particulate Filter (DPF) Operations</u>: The DPF shall be in place and operational at all times the engine is operational. The DPF shall be operated and maintained according to CARB Executive Order DE-07-001-08 and the manufacturer's operation and maintenance manual.
 - g. <u>Number of Hours of Operation before Inspection/Cleaning of Filter</u>. The engine may operate no more than 1,000 hours under normal operating conditions before the diesel particulate filters must be inspected and cleaned if needed. [*Re: EO DE-07-001-08*].

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

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- 3. **Monitoring.** The equipment permitted herein is subject to the following monitoring requirements:
 - a. <u>Non-Resettable Hour Meter</u>: 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.
- 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. District Form ENF-92 (*Diesel-Fired Emergency Standby Engine Recordkeeping Form*) can be used for this requirement.
 - a. emergency use hours of operation.
 - b. maintenance and testing hours of operation.
 - c. hours of operation for emission testing to show compliance with the ATCM {if specifically allowed for under this permit}.
 - d. initial start-up hours {if specifically allowed for under this permit}.
 - e. hours of operation for all uses other than those specified in items (a) (c) 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 include the date of each inspection and engine hour meter reading at the time of each inspection, maintenance activities including any filter cleanings, and any corrective actions taken for the DPF.
- 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.

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- 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 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: engr@sbcapcd.org) to the District (Attn: Engineering Supervisor).
 - 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: engr@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.

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- 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).
 - 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: <u>engr@sbcapcd.org</u>) 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.

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- 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. **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 Evaluation prepared for and issued with the permit.
- 12. **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.
- 13. **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.
- 14. **Severability.** In the event that any condition herein is determined to be invalid, all other conditions shall remain in force.
- 15. **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.
- 16. 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.
- 17. **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 issued by the manufacturer and shall be affixed to the equipment in a permanent and conspicuous position.
- 18. **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.
- 19. **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.

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20. Initial Operations and District Inspection. The permittee shall:

- a. Within 14 days of initial operations, the permittee shall provide the District written notification of the initial operations start date using the attached yellow Startup Notification card or by e-mail to <u>enfr@sbcapcd.org</u>.
- b. Arrange for equipment inspection by calling the District's Compliance Manager at (805) 979-8050 or via e-mail to <u>enfr@sbcapcd.org</u> no later than fourteen (14) calendar days after initial operations commence. The equipment inspection shall occur not more than thirty (30) calendar days (or other mutually agreed upon time period) after initial operations begin. The Compliance Division may waive this inspection requirement if an initial inspection is deemed unnecessary to verify that the modifications authorized by this permit are in compliance with District rules and permit conditions.

AIR POLLUTION CONTROL OFFICER

DATE

Attachments:

- Table 1 Mass Emission Limits
- Table 2 Emission Standards
- Permit Equipment List
- Permit Evaluation for Authority to Construct/Permit to Operate 15923

Notes:

- Reevaluation Due Date: October 1, 2025
- 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 is valid for one year from the date stamped above if unused.

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TABLE 1. MASS EMISSION LIMITS

Device	NO	X	RO	C	CC)	SO	X	PN	1	PM10		PM2.5	
ID #	lb/day	tpy												
397815	11.85	0.07	0.85	0.01	11.01	0.07	0.03	0.01	0.09	0.01	0.09	0.01	0.09	0.01

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

Device ID #	NOx	ROC	СО	SOx	PM	PM10	PM2.5
397815	2.80	0.20	2.60	0.01	0.02	0.02	0.02

Table Notes:

- (a) Mass emission limits based on allowable maintenance and testing hours.
- (b) NO_x as NO_2 . SO_x as SO_2 . 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.

PERMIT EQUIPMENT LIST

Device ID #	397815	Maximum Rated BHP	480
Device Name	E/S Diesel Engine	Serial Number	TBD
Engine Use	Electrical Power	EPA Engine Family Name	NCPXL08.8NZS
Manufacturer	Caterpillar	Operator ID	TBD
Model Year	2022	Fuel Type	CARB Diesel - ULSD
Model	C9		
DRP/ISC?	No	Healthcare Facility?	No
Daily Hours	4.00	Annual Hours	50
Location			
Note			
Device	Tier 3 Engine, Turbocharged	Aftercooled. Equipped v	with a CARB level 3+
Description	verified Rypos HDPF/C dies	el particulate filter.	



PERMIT EVALUATION FOR AUTHORITY TO CONSTRUCT/PERMIT TO OPERATE 15923

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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.

The emergency standby diesel engine is located at Harry's House, a senior congregated residential facility in Santa Ynez and is equipped with a CARB level 3+ verified Rypos HDPF/C diesel particulate filter (DPF) with an attached oxidation catalyst. The filter is designed to actively regenerate during normal engine loads and provides a minimum 85% reduction in PM emissions.

The engine is located within 500 feet of Valley Christian Academy and Santa Ynez High School, as a result the engine is prohibited from operating for non-emergency purposes between 7:30 am and 3:30 pm on days when school is in session per the requirements of Section 93115.6(a)(1)(B) of the DICE ATCM. A 30-day school notice was required per the Health and Safety Code Section 42301.6

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 generator is located near a school (k-12) and is subject to additional operational restrictions (near a school means that the engine is located within 500 feet of school grounds).

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 exempt from the requirements of the RICE NESHAP because the engine was constructed after 2005.

PERMIT EVALUATION FOR AUTHORITY TO CONSTRUCT/PERMIT TO OPERATE 15923

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3.0 EMISSIONS

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

E1, lb/day	=	Engine Rating (bhp) * EF (g/bhp-hr) * Daily Hours (hr/day) * (lb/453.6 g)
E2, tpy	=	Engine Rating (bhp) * EF (g/bhp-hr) * Annual Hours (hr/yr) * (lb/453.6 g) * (ton/2000 lb)

The emission factors (EF) were chosen based on the engine's rating and Tier standard. An additional 85% reduction was applied to the Tier 3 PM emission factor. 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 assumed to be 4 hrs/day as requested by the applicant.

4.0 **REEVALUATION REVIEW** (not applicable)

5.0 AQIA

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.

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 30-day school notice pursuant to the requirements of H&SC §42301.6 is required as the project site is located within 1,000 feet of Valley Christian Academy and Santa Ynez High School.

PERMIT EVALUATION FOR AUTHORITY TO CONSTRUCT/PERMIT TO OPERATE 15923

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10.0 PUBLIC and AGENCY NOTFICATION PROCESS/COMMENTS ON DRAFT PERMIT

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

Draft comments, if any, may be found in the final permit attachments.

11.0 FEE DETERMINATION

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.

William Sarraf	10/5/2022		
AQ Engineer/Technician	Date	Supervisor	Date

13.0 ATTACHMENT(S)

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

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ATTACHMENT A Fee Statement



air pollution control district santa barbara county FEE STATEMENT ATC/PTO No. 15923 FID: 11812 Harry's House, LP. / SSID: 11563

Device Fee

						Max or						
				Fee		Min.	Number					
Device		Fee	Qty of Fee	per	Fee	Fee	of Same	Pro Rate	Device	Penalty	Fee	Total Fee
No.	Device Name	Schedule	Units	Unit	Units	Apply?	Devices	Factor	Fee	Fee?	Credit	per Device
					Per 1 million							
397815	E/S Diesel Engine	A3	3.4080	598.34	Btu input	No	1	1	2,039.14	0.00	0.00	2,039.14
	Device Fee Sub-Totals =								\$2,039.14	\$0.00	\$0.00	
	Device Fee Total =											\$2,039.14

Permit Fee

Fee Based on Devices

\$2,039.14

Fee Statement Grand Total = \$2,039

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.

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ATTACHMENT B IDS Tables

PERMIT POTENTIAL TO EMIT

	NO _x	ROC	СО	SO _x	PM	PM_{10}	PM _{2.5}
lb/day	11.85	0.85	11.01	0.03	0.09	0.09	0.09
lb/hr							
TPQ							
TPY	0.07	0.01	0.07	0.01	0.01	0.01	0.01

FACILITY POTENTIAL TO EMIT

	NO _x	ROC	СО	SO _x	PM	PM_{10}	PM _{2.5}
lb/day	11.85	0.85	11.01	0.03	0.09	0.09	0.09
lb/hr							
TPQ							
TPY	0.07	0.01	0.07	0.01	0.01	0.01	0.01

STATIONARY SOURCE POTENTIAL TO EMIT

	NO _x	ROC	СО	SO _x	PM	PM_{10}	PM _{2.5}
lb/day	11.85	0.85	11.01	0.03	0.09	0.09	0.09
lb/hr							
TPQ							
TPY	0.07	0.01	0.07	0.01	0.01	0.01	0.01

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.

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ATTACHMENT C Air Toxics Documentation

1.0Summary

An air toxics Health Risk Assessment (HRA) screening was conducted by the Santa Barbara County Air Pollution Control District (District) for a proposed diesel-fired internal combustion engine (DICE) located at 890 Refugio Rd in Santa Ynez. The proposed engine is a 480-bhp Model C9, manufactured by Caterpillar. The HRA screening was conducted using the USEPA-recommended screening model, AERSCREEN, with the Hotspots Analysis and Reporting Program (HARP) software, Version 2 (Build 21081). Cancer risk and chronic non-cancer Hazard Index (HI) risk values were calculated and compared to *significance thresholds* for cancer and chronic non-cancer risk adopted by the District's Board of Directors. The calculated risk values and applicable thresholds are as follows:

	<u>890 Refugio Rd DICE Max Risks</u>	Significance Threshold
Cancer risk:	1.3/million	\geq 10/million
Chronic non-cancer risk:	<0.1	>1

Based on these results, the proposed DICE at 890 Refugio Rd in Santa Ynez does not present a significant risk to the surrounding community.

2.0Modeling Information

The stack parameter inputs to AERSCREEN View are outlined in Table 2.1.

Source ID	Source	Release	Release	Temperature	Velocity	Diameter
	Type	Type	Height (ft)	(°F)	(ft/s)	(ft)
STCK1	POINT	Capped	14.6	927.0	75.206	0.833

Table 2.1 – Summary of Stack Parameter Inputs

The rural option was enabled, and a flagpole height of 1.5 meters was used for all receptors. The AERSURFACE output file for the 2012-2016 Lompoc H Street meteorological data set was used. The closest residential receptor at 13.72 m and the closest worker receptor at 61 m from the source were included. The inversion break-up fumigation and shoreline fumigation options were not enabled. Terrain effects were not included in the model. Building downwash was included, and the building information is shown in Table 2.2. The X and Y coordinates in the table are relative to the location of the diesel engine.

Building	Height (m)	Building	SW Corner	SW Corner	X-Length	Y-Length
ID		Type	X-coordinate (m)	Y-coordinate (m)	(m)	(m)
BLD1	9.37	Rectangular	-27.5	-54.5	91.67	40.72

Table 2.2 – Summary of Building Information

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ATTACHMENT C Air Toxics Documentation

After the pollutant concentrations were entered into HARP 2, the cancer risk was determined at the maximally exposed individual resident (MEIR) using the "individual resident" receptor type and the breathing rate from the "RMP using the Derived Method" for an exposure duration of 30 years. Under the inhalation pathway, the fraction of time at home (FAH) values were not applied for any age bins. The cancer risk was also determined at the maximally exposed individual worker (MEIW) using the "worker" receptor type and the breathing rate from the "OEHHA Derived Method" for an exposure duration of 25 years, with a worker adjustment factor of 4.2. The chronic non-cancer hazard index was calculated for the MEIR using the "individual resident" receptor type and the breathing rate from the "OEHHA Derived Method." The chronic non-cancer hazard index was also calculated for the MEIW using the "worker" receptor type and the breathing rate from the "OEHHA Derived Method." The only exposure pathway analyzed was the inhalation pathway because diesel PM is not a multipathway pollutant. A list of multipathway pollutants can be found in Table 5.1 of OEHHA's 2015 Guidance Manual, which is included in Section 4.4 of the District's Modeling Guidelines for Health Risk Assessments, referenced in Section 5.0 of this document. It was determined that the MEIW and MEIR are located at 102 m from the engine stack because the concentration at 102 m is greater than at 13.72 m (the closest resident location) and 61 m (the closest worker location).

3.0Emissions

The calculated emissions for this DICE are shown in Table 3.1. The maximum permitted usage of 50 hours per year for maintenance and testing purposes, maximum rated brake horsepower of 480 bhp for this engine, and a particulate matter (PM) emission factor of 0.0225 g/bhp-hr calculated from CARB's *Airborne Toxic Control Measure for Stationary Compression Ignition Engines* particulate matter (PM) emission standard 0.15 g/bhp-hr with an 85% PM reduction from the use of a DPF were used to calculate the annual emissions of diesel PM.

Pollutant	Emissions (lb/yr)
Diesel PM	1.190

Table 3.1 – Facility Emissions Summary

4.0Results

The cancer and chronic non-cancer risks are higher at the MEIR than at the MEIW. Table 4.1 displays the cancer and chronic non-cancer risk results at the MEIR. All of the calculated risk values are below the District's significance thresholds.

Pollutant	C _{annual} at MEIR (µg/m ³)	Cancer Risk at MEIR (per million)	Chronic Non-Cancer Risk at MEIR (Hazard Index)
Diesel PM	1.7551E-03	1.33	0.0004

Table 4.1 – Summary of Screening Model Results

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ATTACHMENT C Air Toxics Documentation

5.0References

- Risk notification levels were adopted by the Santa Barbara County Air Pollution Control Board of Directors on June 1993. The risk notification levels were set at 10 per million for cancer risk and a Hazard Index of greater than 1.0 for non-cancer risk.
- California Air Resources Board. May 2011. Final Regulation Order: Amendments to the Airborne Toxic Control Measure for Stationary Compression Ignition Engines. https://www.arb.ca.gov/diesel/documents/FinalReg2011.pdf.
- Office of Environmental Health Hazard Assessment. February 2015. *Air Toxics Hot Spots Program: Risk Assessment Guidelines*. California Environmental Protection Agency. <u>http://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf</u>.
- Santa Barbara County Air Pollution Control District. 2022. *Meteorological Data*. <u>https://www.ourair.org/metdata/</u>.
- Santa Barbara County Air Pollution Control District. June 2020. *Modeling Guidelines for Health Risk Assessments*. <u>http://www.ourair.org/wp-content/uploads/apcd-15i.pdf</u>.

6.0Attachment

Source parameter data and the AERSCREEN and HARP 2 input and output files for this project may be found in the following location:

 $\label{eq:shares} org\shares\Toxics\SourceFiles\DICE_Screenings\SSID11563_Harrys_House_LP\ATC-PTO15923$