

To Whom it May Concern

Subject: ATCMs for Diesel Internal Combustion Engines (DICE)

Dear Sir/Madam:

On December 8, 2004 the California Air Resources Board (CARB) Airborne Toxic Control Measure (ATCM) for Stationary DICE Title 17 CCR 93115 became effective. Additionally, amendments to the ATCM were passed October 18, 2007. The purpose of this ATCM is to protect public health by reducing the emissions of Diesel Particulate Matter (PM).

This ATCM requires the owners or operators of DICE submit an “Initial Notification” to the AVAQMD **within 30 days of the receipt of this notice.** A hardcopy is included in this packet. If you wish to submit electronically, the notification form in ‘excel’ format may be downloaded from the following website address (electronic submittal is preferred):

<http://www.avaqmd.ca.gov/forms/dice.xls>

The ATCM for Stationary DICE can be reviewed at: <http://www.arb.ca.gov/diesel/statport.htm>.

On March 11, 2005 the CARB ATCM for Portable DICE, Title 17 CCR 93116 became effective. The ATCM for Portable DICE can be reviewed at:

<http://www.arb.ca.gov/diesel/statport.htm>.

The Portable DICE ATCM also covers the auxiliary (pony) DICE on mobile equipment. Example of mobile equipment with auxiliary portable DICE are; abrasive blasters, road sweepers, drill rigs, concrete mix trucks, welders, sewer pump trucks, cranes, aircraft support equipment, etc.

Included in this packet are “Fact Sheets” and “Definitions” for both portable and stationary ICEs. These two ATCMs define portable equipment different than other agencies, such as Building and Safety and Mine Safety.

These two ATCMs are a part of the CARB Diesel Risk Reduction Program. This program has several other ATCM that effect mobile sources that your company may have. Important websites for the Diesel Risk Reduction Program are as follows:

ATCMs for Diesel ICE (DICE)

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Diesel Risk Reduction Program: <http://www.arb.ca.gov/diesel/dieselrrp.htm>

Idling Vehicles: <http://www.arb.ca.gov/toxics/idling/idling.htm>

Idling School Buses: <http://www.arb.ca.gov/toxics/sbidling/sbidling.htm>

Trash Trucks: <http://www.arb.ca.gov/msprog/SWCV/SWCV.htm>

Public Transit Agency: <http://www.arb.ca.gov/msprog/bus/bus.htm>

Public Fleets: <http://www.arb.ca.gov/msprog/publicfleets/publicfleets.htm>

These ATCMs also apply to contractors who work at your facility. Therefore, please advise the contractors of these ATCMs, and have the contractors contact the AVAQMD for more information.

The mailing address for all documents is as follows:

DICE ATCM
Antelope Valley AQMD
43301 Division St, Suite 206
Lancaster, CA 93535-4649

If you have any questions or need further information contact Chris Anderson, AQS at (661) 723-8070 or email to canderson@avaqmd.ca.gov

Sincerely,

Bret S. Banks
Operations Manager
Antelope Valley AQMD

Enc: AVAQMD Fact Sheet for Stationary DICE
AVAQMD Fact Sheet for Portable DICE
Definition of Stationary & Portable
AVAQMD Initial Notification Form with Instructional Key

DEFINITION of STATIONARY & PORTABLE DICE

STATIONARY DICE ACTM Title 13 CCR 93115(d)

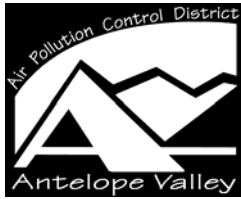
- (50) “Portable CI Engine” means a compression ignition (CI) engine designed and capable of being carried or moved from one location to another, except as provided in subsection (d)(63). Indicators of portability include, but are not limited to, wheels, skids, carrying handles, dolly, trailer, or platform. The provisions of this definition notwithstanding, an engine with indicators of portability that remains at the same facility location for more than 12 consecutive rolling months or 365 rolling days, whichever occurs first, not including time spent in a storage facility, shall be deemed a stationary engine.
- (63) “Stationary CI Engine” means a CI engine that is designed to stay in one location, or remains in one location. A CI engine is stationary if any of the following are true:
- (A) the engine or its replacement is attached to a foundation, or if not so attached, resides at the same location for more than 12 consecutive months. Any engine such as backup or standby engines, that replaces an engine at a location and is intended to perform the same or similar function as the engine(s) being replaced, shall be included in calculating the consecutive time period. The cumulative time of all engine(s), including the time between the removal of the original engine(s) and installation of the replacement engine(s), will be counted toward the consecutive time period, or
 - (B) the engine remains or will reside at a location for less than 12 consecutive months if the engine is located at a seasonal source and operates during the full annual operating period of the seasonal source, where a seasonal source is a stationary source that remains in a single location on a permanent basis (at least two years) and that operates at that single location at least three months each year; or
 - (C) the engine is moved from one location to another in an attempt to circumvent the 12-month residence time requirement. The period during which the engine is maintained at a storage facility shall be excluded from the residency time determination.

PORTABLE DICE ACTM Title 13 CCR 93116.2

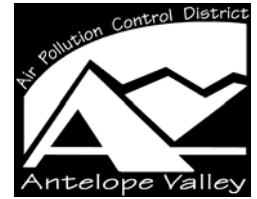
- (bb) **Portable** means designed and capable of being carried or moved from one location to another. Indicia of portability include, but are not limited to, wheels, skids, carrying handles, dolly, trailer, or platform. For the purposes of this regulation, dredge engines on a boat or barge are considered portable. The engine is not portable if:
- (1) the engine or its replacement is attached to a foundation, or if not so attached, will reside at the same location for more than 12 consecutive months. The period

during which the engine is maintained at a storage facility shall be excluded from the residency time determination. Any engine, such as a back-up or stand-by engine, that replace engine(s) at a location, and is intended to perform the same or similar function as the engine(s) being replaced, will be included in calculating the consecutive time period. In that case, the cumulative time of all engine(s), including the time between the removal of the original engine(s) and installation of the replacement engine(s), will be counted toward the consecutive time period; or

- (2) the engine remains or will reside at a location for less than 12 consecutive months if the engine is located at a seasonal source and operates during the full annual operating period of the seasonal source, where a seasonal source is a stationary source that remains in a single location on a permanent basis (at least two years) and that operates at that single location at least three months each year; or
- (3) the engine is moved from one location to another in an attempt to circumvent the portable residence time requirements.



Fact Sheet



Airborne Toxic Control Measure for Stationary Compression Ignition (CI) Engines

- (a) **Purpose** – Reduce Diesel Particular Matter (DPM) from Diesel fueled compressor Engines (DICE)
- (b) **Applicability** – Stationary DICE, including seasonal units rated at greater than 50 bhp (>50 bhp) Prime ('B' & 'M' permits) and Emergency – Standby ('E' permits)
- (c) **Exemptions** - 19 exemptions that exempt some DICE from part or all of the ATCM
- (d) **Definitions** – 69 definitions
- (e) **Requirements**
 - (1) Use of CARB diesel fuel by January 1, 2006
 - (2) Operating Requirements and Emission Standards for Stationary DICE greater than 50 bhp
 - (A) New Emergency-Standby DICE as of January 1, 2005
 - (B) In-Use (Existing) Emergency Standby DICE
 - (C) New Stationary Prime DICE as of January 1, 2005
 - (D) In-Use (Existing) Stationary Prime DICE
 - 1. Off-Road CI Engine Certified per Title 13 CCR section 2423
 - 2. Off-Road CI Engine NOT Certified per Title 13 CCR section 2423
 - (E) New Stationary DICE > 50 bhp for Agricultural Operations as of January 1, 2005
 - (F) Demand Response Program (DRP) Engines
 - (3) New Stationary DICE Less Than or Equal to 50 Brake Horsepower (≤ 50 bhp).
 - (A) Off-Road CI Engine Certified per Title 13 CCR section 2423
 - (4) Recordkeeping, Reporting, and Monitoring Requirements
 - (A) Reporting Requirements for Owners or Operators of New and In-Use Stationary DICE
 - 1. New Stationary DICE inform the District APCO (ATC).
 - 2. In-use Stationary DICE submit a report to the District APCO by July 1, 2005.
 - 3. Submit a 'Compliance Plan' 180 days prior to the earliest compliance date
 - (B) Reporting Requirements for Sellers of New DICE Sold To Agricultural Operations
 - (C) Reporting Requirements for Sellers of Stationary DICE ≤ 50 bhp
 - (D) Demonstration of Compliance with Emission Limits
 - (E) Notification of Non-Compliance
 - (F) Notification of Loss of Exemption
 - 1. By owner/operator (o/o) to District – compliance within 180 days
 - 2. By District APCO to o/o - compliance within 180 days.
 - (G) Monitoring Equipment
 - 1. Have a non-resettable 4- digit (9,999) hour meter by January 1, 2005.
 - 2. All DICE with a DPF a backpressure
 - 3. The District may require additional monitoring

- (H) Reporting Provisions for Exempted Prime Engines
 - 1. Keep month records for a minimum of 36 months from the date of entry.
- (I) Reporting Requirements for Emergency Standby Engines
 - 1. Keep a monthly log starting January 1, 2005
 - 2. Log retained for a minimum of 36 months from the date of entry.
- (J) Reporting Requirements for the SDG&EC regarding the RBRP
- (K) Reporting Requirements for DICE within an Interruptible Service Contract (ISC)

(f) Compliance Schedule for Owners or Operators of Three or Fewer Engines (> 50 bhp) Located within the District

- (1) Compliance by reducing maintenance and testing time by no later than January 1, 2006.
- (2) Compliance by other methods shall meet the following schedule:
 - (A) All pre-1989 through 1989 model year - January 1, 2006
 - (B) All 1990 through 1995 model year - January 1, 2007
 - (C) All 1996 and later model year - January 1, 2008.

(g) Compliance Schedule for Owners or Operators of Four or More Engines (> 50bhp) Located within the District

- (1) Compliance by reducing maintenance and testing time by no later than January 1, 2006
- (2) Compliance by other methods shall meet the following schedule
 - (A) All pre-1989 through 1989 model year –
50% by 01/01/07; 75% by 01/01/08; & 100% by 01/01/09
 - (B) All 1990 through 1995 model year –
30% by 01/01/07; 60% by 01/01/08; & 100% by 01/01/09
 - (C) All 1996 and later model year -50% by 01/01/08; & 100% by 01/01/09

(h) Emissions Data

- (1) District approved sources of data can be used to meet the emission data
- (2) Emissions testing shall be done in accordance with the district approved “Source Test Plan”

(i) Test Methods

- (1) List of CARB approved source test methods
- (2) The District APCO may approve the use of alternatives to the source test methods

The web address for this ATCM is as follows

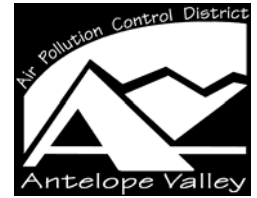
<http://www.arb.ca.gov/regact/statde/fro1.pdf>

For more information and/or assistance contact

Richard Wales
AVAQMD
43301 Division Street, Suite 206
Lancaster, CA 93535-4649
(760) 245-1661 ext 1803
rwales@mdaqmd.ca.gov



Fact Sheet



Airborne Toxic Control Measure for Portable Compression Ignition (CI) Engines

- (a) **Purpose** – Reduce Diesel Particular Matter (DPM) from Portable Diesel fueled compressor Engines (DICE) – 17 CCR 93116
- (b) **Applicability** – Portable DICE rated at equal to or greater than 50 bhp (>50 bhp) – 17 CCR 93116.1(a)
- (c) **Exemptions** - 7 exemptions from the ATCM – 17 CCR 93116.1(b)
- (d) **Definitions** – 39 definitions – 17 CCR 93116.2
- (e) **Requirements** - 17 CCR 93116.3
 - (1) Use of CARB diesel fuel, alternative diesel fuel, or verified fuel additives – 17 CCR 93116.3(a)
 - (2) Diesel PM Standard – 17 CCR 93116.3(b)
 - (A) In-Use (Existing) Portable DICE permitted or registered on or before December 31, 2005
 - 1. Comply with Title 13 CCR 2423 by January 1, 2010
 - (B) Portable DICE not permitted or registered prior to January 1, 2006
 - 1. Comply with Title 13 CCR section 2423 upon startup
 - (C) Emergency or Low-use Portable Dice must comply with one of the following by January 1, 2020:
 - 1. Tier 4 of 17 CCR 2423,
 - 2. Functioning level-3 verified technology, or
 - 3. Verified Emission Control Strategy of at least 85% reduction of DPM
 - (D) Lattice Boom Cranes – special requirements per 17 CCR 93116.3(b)(4)
 - (3) Fleet Requirements – 17 CCR 93116.3(c)

{Note: per 17 CCR 93116.2(p) a fleet is one or more portable DICE.}

The average DPM from the fleet must meet the following:

Fleet Standard Compliance Date	Engines <175 hp (g/bhp-hr)	Engines ≥175 to 749 hp (g/bhp-hr)	Engines ≥750 hp (g/bhp-hr)
1/1/2013	0.3	0.15	0.25
1/1/2017	0.18	0.08	0.08
1/1/2020	0.04	0.02	0.02

g/bhp-hr = grams per brake horsepower-hour

- (4) Fleet Average Calculation – 17 CCR 93116.3(d)

(f) Fleet Recordkeeping and Reporting Requirement – 17 CCR 93116.4

- (1) Not required if the entire fleet meets the following: 17 CCR 93116.4(a)
 1. Tier 4 of 17 CCR 2423,
 2. Functioning level-3 verified technology, or
 3. Verified Emission Control Strategy of at least 85% reduction of DPM
- (2) Special requirements for Portable DICE with a SCR – 17 CCR 93116.4(b)
- (3) Effective January 1, 2012: - 17 CCR 93116.4(c)
 - A. Keep and Maintain Records for
 1. Alternative-fueled Portable DICE
 2. Portable DICE affected by electrification
 3. Portable DICE qualifying as low-use DICE
 4. Portable DICE used exclusively in emergency applications
 - B. The following shall be done
 1. Install a non-resettable hour-meter
 2. Maintain calendar year based records
 3. Maintain records for 5 years
 - C. For fleets using electrification to determine fleet average
 1. Project Plan
 2. Identify Portable DICE
 3. Identify electricity used
 4. Retain copies of Contract
 - D. Retain copies of SCR test results for 5 years
- (4) Effective January 1, 2008 for alternative-fuel engines added prior to January 1, 2009: - 17 CCR 93116.4(d)
 - A. Install a non-resettable hour-meter
 - B. Maintain calendar year based records
 - C. Maintain records for 5 years
- (5) ‘Status Reports’ and ‘Statements of Compliance’ are due as follows: - 17 CCR 93116.4(e)
 - A. March 1, 2011
 - B. March 1, 2013
 - C. March 1, 2017
 - D. March 1, 2020

(g) Enforcement of Fleet Requirements – 17 CCR 93116.5

- (1) By both ARB and the District

The web address for this ATCM is as follows

<http://www.arb.ca.gov/diesel/portdiesel.htm>

For more information and/or assistance contact

Richard Wales
AVAQMD
43301 Division Street, Suite 206
Lancaster, CA 93535-4649
(760) 245-1661 ext. 1803
rwales@mdaqmd.ca.gov

Supplemental Permits information and Initial Notification form for DICE *

Initial Notification for Existing DICE - ATCM for Stationary Compression Ignition Engines - Due on or before July 1, 2005 *

See the key for an explanation for the data fields that are required to be reported

Engine owner or company name:	
Co. owner, or operator #: *	
Facility or equip. location #: *	
Email address:	
Type of business/facility:	
# of diesel engines (>50hp) at this location:	
Contact name:	
Phone number:	
Mailing address:	

	Example	Engine #1	Engine #2
Engine Information			
Dist. permit # of diesel engine (if known and permitted)	E009876		
Street address of diesel engine	14306 Park Ave		
City	Victorville		
Zip code	92392-2310		
County	San Bernardino		
Local air district (if known)	MDAQMD		
Engine installation date	1986 (new)		
Maximum rated brake horsepower (@ given rpm)	330bhp @ 2200 rpm		
Engine type (Prime, Standby, Emergency) *	Emergency		
Equipment Powered by ICE *	Well Pump		
Stationary or Portable *	Portable		
State Portable Registration # *			
Does this ICE qualify for an exemption *			
If yes, list Stationary exemption number *			
If yes, list Portable exemption number *			
Engine manufacturer	Acme		
Model	3006D		
Engine family			
Serial #	D-77-123		
Year of manufacture	1986		
Exhaust stack ht. from ground (feet)	13		
Inside diameter of stack outlet (inches)	5		
Direction of outlet (horizontal or vertical)	vertical		
End of stack (open or capped)	open - no raincap		
Longitude / UTME *	-117.32524		
Latitude / UTMN *	34.51112		
Control Equipment			
Diesel particulate filter (Y/N)	No		
Diesel oxidation catalyst (Y/N)	No		

	Example	Engine #1	Engine #2
Turbo (Y/N)	No		
Aftercooler (Y/N)	No		
Injection timing retard (Y/N)	No		
Other (describe)	None		
Operation Information			
Typical load (% of max bhp rating)	85%		
Typical annual hours of operation	12		
Operating schedule	One hour per month		
Hours per day *	1		
Days per week *	1		
Weeks per year *	12		
Actual hours operated in 2004 *			
Type of fuel or fuels *	CARB diesel		
Throughput Units *	gallons		
Hourly Fuel usage rate (if available in throughput units per hour) *	3		
Annual Fuel usage rate (if available in throughput units per year) *	31		
Distance from engine to nearest fenceline on property (feet)	100		
Distance from engine to nearest residence (feet)	300		
Distance to nearest business (feet)	200		
Is engine located within 500 feet of a school (Y, N)	Y		
If yes, distance from engine to nearest school (feet) *	450		
If yes, which school.	Hoover Elementary		
Is facility included in an existing AB 2588 inventory?	No		
Is engine part of a demand response plan?	No		
Engine Emission Factors (g/bhp-hr)			
PM (default is 1.0 g/bhp-hr)	0.25		
source of PM emission factor	source test (4/96)		
NOx (default is 10 g/bhp-hr)	4		
source of NOx emission factor	source test (4/96)		
CO (default is 5 g/bhp-hr)	2.5		
source of CO emission factor	EPA AP-42 data		
VOC or NMHC (default is 5 g/bhp-hr)	1.2		
source of VOC or NMHC emission factor	EPA AP-42 data		

Please email this spreadsheet on or before July 1, 2005:
For assistance contact Chris Anderson of the AVAQMD at:

(661) 723-8070
FAX: (661) 723-3450

* Data fields added or modified by the MDAQMD

email: canderson@avaqmd.ca.gov

This is a key or explanation for the data fields required to be reported.

DICE	Diesel fueled ICE
Engine owner or company name:	Name of owner or operator of the ICE
Company, owner, or operator number: *	If the facility has a District permits this the 4-digit number on the left side of the permit
Facility or equipment location number: *	If the facility has a District permits this the 5-digit number on the right side of the permit
Email address:	Email address of the person to be contacted for clarification of information or additional information
Type of business/facility:	Type of business such, aggregate plant, agriculture, asphalt plant, hospital, manufacturing, military, mine, power plant, school, space program
Number of diesel engines (>50hp) at this location:	Number of diesel engines (>50hp) at this location
Contact name:	Name of the person to be contacted for clarification of information or additional information
Phone number:	Telephone number of the person to be contacted for clarification of information or additional information
Mailing address:	Address to which the permit is to be mailed.
Engine Information	
District permit number of diesel engine (if known and permitted)	If the ICE has a District permits this the alpha & 6-digit number on the upper-right side of the permit
Street address of diesel engine	The street address where the engine is located. If no address is available, provide the name of a street or highway that is nearby. If UTM's (GPS Coordinates) are available, please specify datum and spheroid along with the coordinates). If township, parcel and range are available, please include this information.
City	City where the engine is located. If no city, leave blank.
Zip code	Zip code where the engine is located. For help finding a zip code, try http://zip4.usps.com/zip4/welcome.jsp .
County	County where the engine is located.
Local air district (if known)	http://www.arb.ca.gov/capcoa/dismap.htm
Engine installation date	Determine which month and year the engine was installed at the facility, either new or rebuilt.
Maximum rated brake horsepower (@ given rpm)	Rated brake horsepower of engine (usually between 50 and 2500 hp)
Engine type (Prime, Standby, Emergency) *	Prime ('B' permit), Standby ('M' permit), Emergency 'E' permit) *
Equipment Powered by ICE *	Generator, fire pump, well pump, welder, crusher, screen etc.
Stationary or Portable *	Stationary - at one location for more than 12 month or seasonal for 3 months; Portable - if relocated within 365 days
State Portable Registration Number *	For portable ICE in the already in the 'Statewide Portable Equipment Registration Program' provide the state registration number.
Does this ICE qualify for an exemption *	Does the ICE qualify for any of the 19 stationary or 7 portable exemptions.

This is a key or explanation for the data fields required to be reported.

If yes, list Stationary exemption number *	The 19 stationary DICE exemptions per Title 17 CCR 93115(c) are as follows (for detail go to http://www.arb.ca.gov/regact/statde/fro.doc): S.1. - Used to power on-road and off-road vehicles S.2. - Used to propel or on a marine vessel S.3. - An in-use engine for agricultural operations S.4. - A new engine for agricultural operations S.5. - Single cylinder octance test engine S.6. - An in-use engine complying with "Risk Management Guidance for the Permitting new DICE" dated October 2000 S.7. - Subject to an approved OSHPD 'Compliance Plan' S.8. - Used by the DoD for training and testing S.9. - Located on San Nicalos or San Clemente Island S.10 - Used sole on OCS platforms S.11. - Emergency engines at nuclear facilities S.12. - Low-use prime engine outside of school boundaries S.13. - In-use dual-fueled diesel pilot ICE using an alternative fuel or an alternative diesel fuel S.14. - Dual-fueled pilot ICE that also uses digester gas or landfill gas S.15. - In-use DICE with an SCR system S.16. - In-use emergency fire pump driven directly by an ICE per NFPA 25
If yes, list Portable exemption number *	The 7 portable DICE exemption per Title 17 CCR 93116.1(b) are as follows (for detail go to http://www.arb.ca.gov/regact/portreg/fro.doc): P.1. - Used to power on-road and off-road vehicles P.2. - Using an alternative fuel P.3. - Dual-fueled diesel pilot ICE using an alternative fuel or an alternative diesel fuel P.4. - Tactical support equipment P.5. - Located on San Nicalos or San Clemente Island P.6. - Preempted from State regulations under 42 USC §7543(e)(1) P.7. - Airline ground service equipment under the MOU with SCAQMD
Engine manufacturer	Name of company that manufactured the engine (e.g. Caterpillar, Cummins, Detroit Diesel, John Deere, etc.)
Model	Model number of the engine.
Engine family	Each group of engines with similar emission characteristics is defined as a separate engine family. A permanent label is affixed to the engine which lists the engine family designation as well as other important information.
Serial #	Serial number - this is a unique number that may contain several letters.
Year of manufacture	When was the engine manufactured? Was it rebuilt?
Exhaust stack height from ground (feet)	The height above the ground of the top of the smokestack
Inside diameter of stack outlet (inches)	The inside diameter (width) of the smokestack
Direction of outlet (horizontal or vertical)	Direction of the end of the stack - is the end pointed straight up, or sideways?
End of stack (open or capped)	Is the end of the stack open to the air, or is there a rain cap that flaps open when the engine is operating.
Longitude / UTM East *	See attached instruction sheet entitled 'LOC'. Report 'longitude' to the nearest 0.00001 degrees and UTM East to the nearest meter (0.001 km). West 'longitude' is be reported in negative (-) degrees. The UTM Zone is 11.
Latitude / UTM North *	See attached instruction sheet entitled 'LOC'. Report 'latitude' to the nearest 0.00001 degrees and UTM North to the nearest meter (0.001 km). The UTM Zone is 11.
Control Equipment	
Diesel particulate filter (Y/N)	Diesel particulate filters (DPFs) are devices installed in diesel engine vehicles that collect particulate matter without obstructing the flow of exhaust gases.
Diesel oxidation catalyst (Y/N)	A DOC is a device that uses a chemical process to break down pollutants in the exhaust stream into less harmful components. More specifically, it is a physical device with a porous ceramic honeycomb-like structure that is coated with a material that catalyzes a chemical reaction to reduce pollution
Turbo (Y/N)	A turbocharger is a device used in internal-combustion engines to increase the power output of the engine by increasing the mass of oxygen and fuel entering the engine.

This is a key or explanation for the data fields required to be reported.

Aftercooler (Y/N)	An aftercooler/intercooler is a device used on turbocharged internal combustion engines to improve the volumetric efficiency and increase the amount of charge in the engine, thereby increasing power.
Injection timing retard (Y/N)	Injection timing retard is used to reduce the peak flame temperature and, thus, NOx emissions. However, timing retard typically lowers efficiency, resulting in increased fuel consumption and PM emissions.
Other (describe)	
Operation Information	
Typical load (% of max bhp rating)	Percentage of the engine's maximum rated brake horsepower is being utilized
Typical annual hours of operation	Number of hours that the engine is operated for maintenance and testing (not including actual emergency hours).
Operating schedule	Is the engine used all 12 months? Just of a season? If yes, list months operated.
Hours per day *	Topical or average hours per day
Days per week *	Topical or average days per week
Weeks per year *	Topical or average weeks per year
Actual hours operated in 2004 *	Actual hours operated in 2004
Type of fuel or fuels	What fuel is used (natural gas, LPG, gasoline, CARB diesel, jet fuel, diesel, biodiesel 50). for dual or multi-fuelsD DICE list all fuels.
Throughput Units *	Natural gas - thermo, mmcf; Liquid - gallons
Hourly Fuel usage rate (if available in throughput units per hour) *	Maximum fuel throughput in units per hour
Annual Fuel usage rate (if available in throughput units per hour) *	Actual fuel throughput in units per year
Distance from engine to nearest fenceline on property (feet)	Distance from the engine to the nearest fenceline on the property.
Distance from engine to nearest residence (feet)	Distance from the engine to the nearest house or apartment.
Distance to nearest business (feet)	Distance from the engine to the nearest offsite workplace ('offsite' generally does not include workers on the same property as the engine). If unsure, leave this blank.
Is engine located within 500 feet of a school (Y, N)	Distance from the engine to the nearest school (>12 kids between the grades kindergarten through 12th). If unsure, leave this blank.
If yes, distance to nearest school (feet) *	Distance from the engine to the nearest school
If yes, which school.	Provide the name of the school property closest to the engine.
Is facility included in an existing AB 2588 inventory?	Contact your local district to determine if the engine information is already part of an air toxics inventory.
Is engine part of a demand response plan?	A demand response plan is a contract between a business/facility and an electricity provider whereby the company agrees to have their power shut off during an emergency, or operate their diesel engines to supply power back to the electricity grid during an electricity emergency, in order to secure better electricity rates.
Engine Emission Factors (g/bhp-hr)	
PM (default is 1.0 g/bhp-hr)	Particulate matter emission factor is measured in grams per brake horsepower - hour (usually between 0.01 and 3 g/bhp-hr).
source of PM emission factor	source test or other measurement, EPA AP-42 factors, other literature, manufacturer's data or engine certification, guess
NOx (default is 10 g/bhp-hr)	Nitrogen oxides emission factor (g/bhp-hr).
source of NOx emission factor	source test or other measurement, EPA AP-42 factors, other literature, manufacturer's data or engine certification, guess
CO (default is 5 g/bhp-hr)	Carbon monoxide emission factor (g/bhp-hr).
source of CO emission factor	source test or other measurement, EPA AP-42 factors, other literature, manufacturer's data or engine certification, guess
VOC or NMHC (default is 5 g/bhp-hr)	Volatile Organic Compounds or Non-Methane Hydrocarbon emission factor (g/bhp-hr).
source of VOC or NMHC emission factor	source test or other measurement, EPA AP-42 factors, other literature, manufacturer's data or engine certification, guess
Please email this spreadsheet to canderson@avaqmd.ca.gov	