#### **BAY AREA AIR QUALITY MANAGEMENT DISTRICT**

375 Beale Street, Suite 600, San Francisco, CA 94105 Engineering Division (415) 749-4990

www.baaqmd.gov fax (415) 749-5030

Internal	Combustion	=ngines

Form ICE

Form ICE is to be completed for all internal combustion engines except turbines. (For turbines, submit Form C). Submit one form for each engine. If this is a new engine or a modification to an existing engine, you must also complete Form HRSA Health Risk Screen Analysis. Additional forms and all District regulations and rules are available on the District's web site. Contact your assigned permit engineer or the Engineering Division at the above telephone number if you need assistance completing this form. Please include the engine manufacturer's **equipment specifications**.

engine manufact  1. SUMMARY	turer's <b>equipment specifications</b> .  New Construction	☐ Loss of Exem	ention				
		☐ COSS OF EXELL	•				
Company Name							
Source Descript			Source No.* */If	unknown leave	hlank)		
Initial Date of Op	peration (Not required to	for modification of an existing pe	ermitted source)	anni lown loave	, biariky		
Operating Sche	dule Typical hrs/day Days/week	Weeks/yr	Maximur	n hrs/day			
2. ENGINE INFO	<b>DRMATION</b> Check here if applying for a po	rtable equipment permit. (Se	ee Reg. 2-1-413 for re	equirements)			
Engine Type: (C	Check one)	sion Ignition (Diesel) or	☐ 4 Stroke ☐ 2 Str	oke Spark l	gnition		
Engine Manufac	cturer	Model	Model Y	ear			
EPA/CARB Eng	ine Family Name	Engine Serial N	lo				
Engine Displace	ement (cu in) Maximum rated ou	utput (bhp)T	ypical load as % of b	hp rating			
Is this an emerg	ency/standby engine?						
(Complete and	check all that apply)						
Certification:	☐ EPA Certified ☐ CARB Certified CARB	Executive Order No.					
	☐ None (If None is checked, please indicate be	elow the items applicable to t	his engine.)				
	☐ Naturally aspirated ☐ Supercharged ☐ Turbocharged ☐ Inter-cooled ☐ After-cooled						
	☐ Timing retard ≥ 4° ☐ Lean-burn	☐ Rich-burn					
Primary Use:	☐ Electrical generation ☐ Cogeneration	☐ Pump driver	☐ Fire pump driver				
•	☐ Compressor driver ☐ Tub grinder driver	·					
	<b>DEVICE INFORMATION</b> Complete this section e if the engine has more than one add-on abatem t device.				al		
Abatement devi	ce number A (If unknown leave	e <i>blank)</i>	ting				
Device type:	☐ Diesel catalyzed particulate filter ☐ Oxida		e catalytic reduction	(SCR)			
	☐ Non-selective catalytic reduction (NSCR or 3						
Make, Model, ar	nd Rated Capacity						
	ce control efficiencies at typical operation (Use th		If unknown leave bla	nk)			
	, , , , , , , , , , , , , , , , , , ,			Wt %	Basis		
Control Efficiency/	Emission Factor Basis Codes: (Submit supporting docu	ımentation if available)	Pollutant Name	Reduction	Code		
• •	g or other measurement by plant	(8) Guess	Particulates				
	g or measurement by BAAQMD (District use only)	(9) EPA/CARB Certification	Organics				
(3) Specification			Nitrogen Oxides				
` '	nce by plant using knowledge of process		Sulfur Dioxide				
	nce by BAAQMD ( <i>District use only</i> )	Carbon Monoxide  Others – ☐ Check he	ere and attach	а			
• •	ent AP-42 Emission Factors terature other than AP-42		separate list of polluta	ants. Include th			

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### Form ICE

# Internal Combustion Engines

4. EMISSION POIL emission monitor					e engine has more th int	an one stack or	has a continud	ous pollu	tant	
Emission point nur	mber P	(If un	known le	eave blanl	() New Ex	isting				
Stack outlet height										
Diameter of stack	outlet (inches)		or O	utlet cross	s-section area (squa	re inches)				
Direction of outlet		<u>.</u>	☐ Ve		End of outlet (check	· —	n/hinged flap	□R	ain cap	
Exhaust rate at typ	oical operation (a	ncfm)		Exha	ust temperature at ty	pical operation	(°F)			
5. RISK ASSESSI	MENT INFORMA	TION.								
Distance from end	ine to the proper	tv line of the ne	earest re	sidence (	ft)	or (check if)	☐ Greate	er than o	ne mile	
Distance from engine to the property line of the nearest residence (Distance from engine to the property line of the nearest school <sup>1</sup> (ft)						or (check if)	_			
Describe the near		-			 ☐ Industrial	Commercial			00011	
Describe the near	est non-residenti	_		•	_	Commercial	□ позы	.aı		
			•	re center	Other					
_		-	earest no	on-resider	itial, non- school site	(ft)	or ∐ Grea	ter than	one mile	
attach a <b>fuel ana</b> measurement un	omplete the table alysis indicating iit that correspon	e below for each the higher hea ads to the inforr	ting valu nation y	e, sulfur c	ou are using a fuel o ontent, and nitrogen omitting.   Check h	content. Please	e clearly indica	te the		
attach a copy of			ueis.							
	Primary	Fuel			4	Secondary	/ Fuel			
Fuel Code <sup>1</sup>	Name		.,,		Fuel Code <sup>1</sup>	Name		.,,	205#	
Maximum Fuel Use				or SCF/hr	Maximum Fuel Use	-		gal/hr or		
Annual Fuel Usage		gal/yr or ti	-	-	Annual Fuel Usage <sup>3</sup>	-	gal/yr or therm/yr or SCF/yr			
	/pical Heat Content <sup>4</sup> BTU/gal or BTU/SCF			Typical Heat Conter						
Sulfur Content <sup>4</sup>		wt% liquid	is or ppm	v gases	Sulfur Content <sup>4</sup>		wt% liquid	ds or ppm	v gases	
Pollutant Name	Emission Fact Emission Factor	ors ( <i>Optional</i> ) Units <sup>5</sup>	Basis Code <sup>6</sup>	Abated Factor (√) <sup>7</sup>	Pollutant Name	Emission Factor Emission Factor	ors ( <i>Optional)</i> Units <sup>5</sup>	Basis Code <sup>6</sup>	Abated Factor (√) <sup>7</sup>	
Particulates					Particulates					
Organics					Organics					
Nitrogen Oxides					Nitrogen Oxides					
Carbon Monoxide					Carbon Monoxide					
Others –  Check	here and attach a	ıseparate list und	er each f		Others –  Check I	nere and attach a s	separate list und	ler each f	uel used.	
<ol> <li>Maximum fuel us</li> <li>The annual fuel us liquid fuel, therm</li> <li>If you are using a fuels. Sulfur confusion factors</li> <li>See the Control of Place a check in</li> </ol>	atural Gas (189) se rate units: gallor usage is the actual s for natural gas, a diesel, natural gas, atent units: weight may be reported a Efficiency/Emission this column if the	l or projected eng and SCF for othe or gasoline, you % for liquid fuels, as gram/brakehp n Factor Basis C emission factor a	I1) Is and SC gine fuel or gaseous may skip ppmv fo -hr, or as ode table pplies to ation co	Digester G CF/hr for ga- consumption is fuels. (the pothis entry. It gaseous f lb per gallo under Sec emissions intained he	as (493) Li seous fuels. (SCF = Stan over a rolling 12-morem = 100,000 BTUs, E Heat content units: B uels. (ppmv = parts pe on, or as lb per therm, of tion 3 on page 1 of this after abatement by an a erein is true and corr	th time period. And the time period. And the	nnual usage unit nal Unit) d fuels, BTU/SC e) device. n and date this	F for gase		
Ans			4		Estant IB		5 .			
Approved By:	(District Use O		ιe:		Entered By:		Date Form ICE Rev 04		e 2 of 2	