



# Compliance Assistance ADVISORY

**SUBJECT: SMAQMD Rule 202:  
BACT Emission Standards for Diesel  
Internal Combustion Engines**

**ADVISORY #04-02**

**February 2004**

**IMPORTANT INFORMATION FOR ALL OWNERS AND OPERATORS STATIONARY &  
PORTABLE DIESEL ENGINES**

<b>Purpose of this advisory</b>	The purpose of this advisory is to inform the regulated community of Best Available Control Technology (BACT) emission limits and permit requirements for internal combustion engines greater than 50 horsepower (hp). Engines affected by these new emission limits include, but are not limited to, engines that drive back-up power generators, pumps, compressors, and other industrial utility equipment. Engines used to propel a motor vehicle exclusively are exempt.
<b>Who needs this information?</b>	This advisory has important information for stationary and portable diesel engine manufacturers, distributors, installers, service providers, owners and operators of this type of equipment.
<b>Background</b>	In an effort to ensure healthier air for the residents of Sacramento County, the Sacramento Metropolitan Air Quality Management District (SMAQMD) <b>requires a Permit to Operate for diesel engines with a rated horsepower greater than 50.</b> In order to legally operate a stationary or portable diesel engine greater than 50 hp you must obtain a Permit to Operate which will require BACT.
<b>Why has BACT changed?</b>	The SMAQMD's BACT for engines has been changed to be consistent with the Federal non-road diesel engine emission standards. The BACT emission standards for engines rated at greater than 100 hp have been lowered effective January 1, 2004, and the BACT emission standards for engines rated between 50 and 100 hp will be lowered effective July 1, 2004 (6 months after the Federal standards are in place for this size category.) These BACT standards will be applied to all incoming applications for Authority to Construct/Permit to Operate received by SMAQMD. Please see the table on page two for specific emission standards for associated engine ratings.
<b>How will this affect my engines?</b>	<p><b>For applications received and deemed complete prior to July 1, 2004:</b></p> <p>All unpermitted engines will be required to meet the BACT emission standards that were in effect at the time the engine was installed.</p> <p><b>For applications received or deemed complete on or after July 1, 2004:</b></p> <p>All engines will be required to meet the more stringent current emission standards <b>regardless of installation date or engine manufacture date.</b></p>
<b>For More Information &amp; Technical Assistance</b>	For permit application assistance, copies of applicable rules or for further information please call the SMAQMD Compliance Assistance Hotline at (916) 874-4884. You also may visit our web site at <a href="http://www.airquality.org">www.airquality.org</a> to obtain permit applications, copies of rules, and information on the SMAQMD.

**BACT Emission Standards For Internal Combustion Engines  
Effective January 1, 2004**

Please consult the Internal Combustion Engine Policy Manual for updated information.

≥ 50 hp < 100 hp (emission factors in g/bhp-hr)

	Prior to July 1, 2004	July 1, 2004	2005	2006	2007	July 1, 2008*
NOx	6.9	NA				
VOC (NMHC)	1.0	NA				
NOx + VOC (NMHC)	NA	5.6				5.5
CO	8.5	3.7				
PM	0.4	0.3				

≥ 100 hp < 175 hp (emission factors in g/bhp-hr)

	2003	Jan 1, 2004	2005	2006	2007	July 1, 2008*
NOx	6.9	NA				
VOC (NMHC)	1.0	NA				
NOx + VOC (NMHC)	NA	4.9				3.0
CO	8.5	3.7				
PM	0.4	0.22				

≥ 175 hp < 300 hp (emission factors in g/bhp-hr)

	2003	Jan 1, 2004	2005	July 1, 2006*	2007	2008
NOx	6.9	NA				
VOC (NMHC)	1.0	NA				
NOx + VOC (NMHC)	NA	4.9		3.0		
CO	8.5	2.6				
PM	0.15	0.15				

≥ 300 hp < 750 hp (emission factors in g/bhp-hr)

	2003	Jan 1, 2004	2005	July 1, 2006*	2007	2008
NOx	6.9	NA				
VOC (NMHC)	1.0	NA				
NOx + VOC (NMHC)	NA	4.8		3.0		
CO	8.5	2.6				
PM	0.15	0.15				

≥ 750 hp (emission factors in g/bhp-hr)

	2003	Jan 1, 2004	2005	July 1, 2006*	2007	2008
NOx	6.9			NA		
VOC (NMHC)	1.0			NA		
NOx + VOC (NMHC)	NA			4.8		
CO	8.5			2.6		
PM	0.1	0.15				

\*Effective 6 months after EPA Non Road Diesel Engine Emissions new Tier Standards go into effect.