



Equipment Engines need Air Pollution Permits: DEP to Increase Enforcement & Seek Greater Compliance

Who is affected by this initiative?

Any individual operating an internal combustion engine that meets the following criteria:

1. The engine is NOT used for propulsion .
2. The engine has a maximum rated heat input equal to or greater than 1,000,000 BTU/hr (Approximately 140 horsepower).

Common applications of these engines are to power dredges, pumps, cranes, lifts, conveyors, tumblers, crushers, generators, etc. Common operations using these engines include concrete and aggregate production, dredging, mining, milling, etc.

Single, dual-use engines (used both in the above referenced applications and to move equipment from location to location) are exempt and do NOT require a permit.

Final determinations of air pollution permit applicability are made using the engine's maximum fuel consumption rate as per the manufacturer (gal/hr or cubic feet/hr) multiplied by accepted energy values for commercial grades of fuel (Gasoline - 125,000 BTU/gal; Diesel fuel 138,690 BTU/gal; LP gas 93,300 BTU/gal; Natural gas 1,030 Btu's/cubic foot).

Example: An engine burning a maximum of 7.5gal/hour of diesel fuel that only provides the pumping power, and not propulsion to a dredge:

7.5 gal diesel fuel per hour x 138,690 BTU/gal = 1,040,175 BTU heat input –**An air permit is required!**

Why is DEP concerned with Internal Combustion Engines?

New Jersey is not meeting the national ambient air quality standards for Ozone. These engines produce emissions of nitrogen oxides and volatile organic compounds, both precursors to Ozone. Further, these engines can be a significant source of both particulate matter and carbon monoxide. While there are small numbers of these engines compared to all motor vehicles, these engines are typically operated for much longer periods and through widely varying loads (stop and go) that increase their contribution to poor air quality.

What is DEP doing?

Through an Internal Combustion Engine Compliance Program (ICECP), DEP is working with the New Jersey Concrete and Aggregate Association to identify engines for members and non-members that still need permits. In exchange for this information, the DEP is ensuring that those

COMPLIANCE ADVISORY

participating in the ICECP receive the maximum possible penalty protections and grace periods for compliance.

DEP Compliance and Enforcement began to look carefully at these engines in June of 2002, starting with dredging and mining operations in southern New Jersey. In some cases, equipment required by law to have an air pollution permit was not previously identified or evaluated during inspections. The DEP does not consider engines on or connected to mobile pieces of equipment automatically exempt. The only exemption is an engine that functions in part or in whole to move the equipment from one location to another.

DEP will continue to focus on these engines throughout the state strictly applying the permit applicability. Visits to facilities across all sectors will increase. Where permits are needed, the standards of the permits will be strictly applied including the application of new State of the Art (SOTA) standards for emission reductions for these engines. Failure to permit an engine or to meet a permit requirement will result in a DEP Administrative Order with penalties.

What should I do?

Examine any engines powering your equipment. If they meet the criteria above they will need a permit. With new State of the Art (SOTA) standards, a permit could impose controls that add to costs. See standards at:

<http://www.state.nj.us/dep/aqpp/downloads/publicnotpost/SOTAManualNTC.pdf>

1. Consider replacement with electric powered engines or reduced power engines to avoid the need for a permit
2. Apply immediately for any needed permits for combustion engines you continue to use.
3. Consider contacting the New Jersey Concrete and Aggregate Association to participate in the ICECP. *This is not required and DEP extends similar approaches to all facilities seeking to comply independently. No protections or flexibility will exceed that offered through ICECP.*

Whom should I contact with questions?

NJDEP Air Compliance and Enforcement-Metro Field Office (Bergen, Essex and Hudson Counties)	973- 669-3935
NJDEP Air Compliance and Enforcement-Northern Field Office (Hunterdon, Morris, Passaic, Somerset, Sussex, and Warren Counties)	973-299-7700
NJDEP Air Compliance and Enforcement-Central Field Office (Mercer, Middlesex, Monmouth, Ocean, and Union Counties)	609-584-4100
NJDEP Air Compliance and Enforcement-Southern Field Office (Atlantic, Burlington, Camden, Cape May, Cumberland, Gloucester, and Salem Counties)	856-614-3601
NJDEP Air Quality Permitting	609-633-2829
New Jersey Concrete and Aggregate Association	609-393-3352

Web Links for Additional Info

Compliance and Enforcement	http://www.state.nj.us/dep/enforcement/ca-intro.html
Air Quality Permitting	http://www.state.nj.us/dep/aqpp
New Jersey Concrete and Aggregate Association	http://www.njconcrete.com/index.html

Please note this advisory is intended to be a summary explanation of a department initiative. It does not include all potentially applicable requirements.