

Mobile Sources

and Rhode Island

Fact Sheet #3—On-Road vs. Non-Road Mobile Sources

August 2014

On-Road vs. Non-Road Mobile Sources



On-Road Mobile Sources:

Are considered those vehicles that are certified for highway use—cars, trucks, and motorcycles. On-road mobile source emissions comprise nearly fifty percent of the emissions of the nitrogen oxide (NO_x) emissions for most of Rhode Island. Emissions from motor vehicles occur throughout the day while the vehicle is in motion, at idle, parked, and during refueling. All of these emissions processes need to be estimated in order to properly reflect the total emissions from this source category.

For reporting on-road mobile source emissions, vehicles are divided into two major classes – Light-duty and heavy-duty. Light-duty vehicles include passenger cars, light-duty trucks (up to 8500 lbs gross vehicle weight rate (GVWR)), and motorcycles. Heavy-duty vehicles are trucks of more than 8500 lbs GVWR.

Non-Road Mobile Sources

Encompasses a wide variety of equipment types that either move under their own power or are capable of being moved from site to site. Non-road mobile sources are defined as those that move or are moved within a 12-month period and are covered under the EPA's emissions regulations for non-road mobile sources. Non-road mobile sources are vehicles and engines in the following categories:

- Agricultural equipment, such as tractors, combines, and balers;
- Aircraft jet and piston engines;
- Airport ground support equipment, such as terminal tractors;
- Commercial marine vessels, such as ocean-going deep draft vessels;
- Commercial and industrial equipment, such as fork lifts and sweepers;
- Construction and mining equipment, such as graders and back hoes;
- Lawn and garden equipment, such as leaf and snow blowers;
- Locomotives, switching and line-haul trains;
- Logging equipment, such as shredders and large chain saws;
- Pleasure craft, such as power boats and personal watercraft;
- Railway maintenance equipment, such as rail straighteners;
- Recreational equipment, such as all-terrain vehicles and non-road motorcycles; and
- Underground mining and oil field equipment, such as mechanical drilling engines.



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