

LUBE

TECHNI-GRAM



FROM:

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INDUSTRY UPDATE

Off-Road Diesel Rules

It is expected that the Environmental Protection Agency (EPA) will issue a new diesel fuel standard for off-road construction, agricultural, locomotive, and marine engines. While the rule would probably not go into effect until 2007, the EPA's move is a major step toward having one diesel fuel available in the future for the sophisticated emission controls that it wants on truck engines and will require on new farm tractor engines.

According to the EPA, the off-road sector ranks 2nd in the amount of harmful emissions it generates...only stationary sources such as power plants generate more. The agency is considering a two-stage process to reduce the sulfur in diesel fuel for off-road vehicles. It would first be reduced to 500 parts per million and then dropped again to 15 parts per million by 2010. While this time-table is still several years away, it only stands to reason that, as the EPA gives closer scrutiny to these off-road markets, the need for SWEPCO 501 Premium Diesel Fuel Improver continues to grow.

Rise in Hydraulic Temperature

According to industry sources, an unexplained rise in a hydraulic systems operating temperature can in many cases be traced to a leak in the system. When hydraulic fluid moves from an area of high pressure to an area of low pressure without performing useful work, heat is generated. This means that any component in the hydraulic system that has abnormal, internal leakage will increase the heat load on the system and can cause the system to overheat. This could be anything from a cylinder that is leaking high-pressure fluid past its piston seal, to an incorrectly adjusted relief valve. Any heat-generating components need to be identified and changed-out.

What's the right weight of oil?

There continues to be much confusion over the increasing practice of OEM's recommending light-weight oil such as 5W-20 engine oils for automobiles, vans and trucks. As pointed out in previous Techni-Grams, the recommendation of 5W-20 engine oils help the OEM's tremendously in meeting their Corporate Average Fuel Economy (CAFE) requirements. The questions consumers have, however, is whether this 5W-20 oil is



... to keep it running

providing the same protection for an individual in, say, Tucson, Arizona as an owner in Oshkosh, Wisconsin?

Most people use a multi-graded oil that covers the highest and lowest temperatures that will be encountered. This temperature change may be seasonal or it can occur geographically such as during a winter trip from the cold Northern states to the warm South. Where these temperature changes are experienced, the engine's viscosity requirements are most generally covered by SAE 10W-30. Where warmer average temperatures are the rule, SAE 15W-40 and even 20W-50 may be the choice. In the colder areas, and SAE 5W-20 or 5W-30 may be fine. **The general rule is to go no lower in SAE Grade, that is to a thinner oil, than is required by the lowest temperature to be encountered.**