Emission compliance: today and tomorrow

JOHN DEERE

After running on diesel power for over 50 years, our industry finds itself being powered by something new – rapidly changing emission standards.

If you're reading this on the West coast or from almost any high-density population center – often called non-attainment areas these days – emission compliance is a major part of your working life. Strict state air-quality regulations have also become more prevalent, making life even more complicated for the heavy-equipment owner.

The year 2011 is important to John Deere – and every Original Equipment Manufacturer (OEM) – because that's when Tier 4 emissions take effect.* It's a set-in-stone deadline that has teams of resolute John Deere engineers toiling with a failure-is-not-an-option urgency. John Deere is committed to meeting this deadline with the same "We're on it!™" mindset as the current Tier 3 benchmark. It won't be easy, but we'll get there.

In the meantime, we also expect our Tier 4 engines to continue to lead the off-highway industry in performance and fuel economy.

*Above 175 horsepower. Tier 4 emission standards take effect for 75 to 175 horsepower engines in 2012. Interim Tier 4 emission standards for engines below 75 horsepower took effect in 2008.

The current line of John Deere Tier 3-compliant engines provides best-in-class fuel economy and power. Reducing emissions requires a combination of proven technologies, some new ideas, and a keen understanding of the unique demands of non-road (construction and forestry) applications. John Deere engineers look at meeting engine emission regulations as an opportunity to advance new technologies that increase fuel efficiency and improve engine performance attributes such as power bulge, peak torque, low-speed torque, and transient response time.

A bridge to the future

Generations of John Deere PowerTech™ engines have set the industry standard for clean power in the face of mounting regulations. Technologies like exhaust gas recirculation and variable-geometry turbo-charging were pioneered by John Deere engineers for the construction industry. Soon, innovations like diesel-oxidation catalysts and diesel particulate filters with advanced electronic control will help provide the same kind of reliable and efficient performance you've come to expect from John Deere engines.

Federal. Local. Today. Tomorrow.

The John Deere dealer network is armed with a suite of solutions tailored to meet and exceed local emission requirements.

Fleet review: We'll help you sort through the details of your local emission-reduction program and perform an equipment assessment so your fleet develops the best emission-reduction strategy. And we'll assist you with any required reporting functions.

Equipment replacement: Most new John Deere machines are powered by a Tier 3 or Tier 4 engine. Replacing older machines with new ones will significantly reduce your fleet's emissions. Machines with engines below 75 horsepower are Tier 4 certified.

Engine replacement: Repower kits are available for select John Deere equipment. They're engineered to the highest standards to meet original performance specs and are Tier 2 or Tier 3 certified.

Rental equipment: Get low-emission John Deere equipment for the short or long haul by renting or leasing a low-emission machine from your dealer.

Retrofitted after treatment: Your John Deere dealer may be able to retrofit your engine with an aftermarket emission-conversion kit or auxiliary filtration system. Call your dealer for further details.

DKB5047 Litho in U.S.A. (09-04)