Background
At its May 25, 2006, public hearing, California Air Resources Board (ARB) amended the existing emission standards and test procedures for off-road large spark-ignition (LSI) engines to make them more stringent (the LSI Regulation). Concurrently, ARB adopted new fleet average emission level standards for existing fleets of LSI engine-powered forklifts, airport ground support equipment (GSE), sweeper/scrubbers, and industrial tugs (tow tractors). The standards become progressively more stringent over time, requiring fleet operators to reduce their fleet average emission level through retrofit or replacement of equipment without emission controls and procurement of electric or cleaner LSI engine equipment. As adopted, the first fleet average emission level (FAEL) standard effective date is January 1, 2009.

What is the issue?
Retrofit emission control systems are an important tool for achieving compliance with the prescribed FAEL standards. To date, several systems have been marketed for propane-fueled LSI engines, but systems designed for gasoline-fueled LSI engines have only recently been marketed. The lack of availability of these systems is an issue for GSE operators because the vast majority of their LSI-engined GSE are gasoline-fueled.

How is ARB addressing the issue?
ARB anticipated that GSE operators might have difficulty obtaining gasoline-fueled retrofit kits in a timely manner and added exclusion provisions to the LSI Regulation for use in cases where either the Executive Officer of ARB had not verified a retrofit emission control system, or the retrofit emission control system was not commercially available for a particular engine and equipment combination.

Specifically, section 2775.2(e)(2)(a) of the LSI Regulation (Compliance Extension Based on No Verified or Commercially Available Retrofit Emission Control Systems for Airport Ground Support Equipment) provides that GSE of model year 1990 or newer with uncontrolled LSI engines for which there are no verified retrofit emission control systems as of January 1, 2007, or for which such systems are not commercially available by that date shall be excluded from calculations to determine compliance with the GSE FAEL standard contained in Section 2775.1(a) Table 2 until January 1, 2011.
In other words, as there were no retrofit emission control systems verified by January 1, 2007 for those gasoline-fueled pieces of GSE originally required to be included in the fleet average calculation for the purposes of determining compliance with the January 1, 2009, FAEL standard, these pieces of GSE may now be excluded from the fleet average calculation until January 1, 2011.

For more information

To obtain a copy of the regulation or other related compliance assistance documents, visit the LSI website at www.arb.ca.govlsi. Additional questions may be addressed by calling the toll-free DOORS Hotline at (877) 59DOORS (877-593-6677) or doors@arb.ca.gov.