

“Shanghai City Boiler Atmospheric Emissions Standards” (DB31/387-2014)  
in effect on October 1, 2014

The “Shanghai City Boiler Atmospheric Emissions Standards” (DB31/ 387-2014) went into effect on October 1, 2014. The original local standard, “Pollution Emissions Standards for Boilers”(DB31/387-2007) is no longer in effect.

The new standards, based on the original set, eliminate further classification of coal boilers, fuel oil boilers, and natural gas boilers, and unify the definition of emissions limits for coal, fuel oil and natural gas boilers. The Standards greatly tighten the requirements for pollution control on outdated boiler models and boilers burning highly polluting fuels; they unilaterally set emissions standards for boilers burning biomass fuels, increase requirements for pollution control apparatus on coal boilers, and enhance control of unorganized emissions from supplementary equipment in boiler rooms. Starting from State emissions limits as a foundation, the Standards further tighten emissions limits for coal and fuel oil boilers; they also add emissions limits for mercury and other chemicals from coal-burning boilers. The new Standards set the limits for emissions of soot, SO<sub>2</sub>, NO<sub>x</sub>, mercury and other chemicals at 20mg/m<sup>3</sup>, 100mg/m<sup>3</sup>, 150mg/m<sup>3</sup> and 0.03mg/m<sup>3</sup> respectively, limits that are 25% or more stricter than the corresponding specific State emissions standards.

The new Standards also assess progress in the city on bringing boilers up to standard. City-wide, there are more than 2000 coal and fuel oil burners, primarily distributed in the suburbs. After implementation of this Standard, a significantly lower compliance rate will be seen on individual standards for three major pollutant categories (soot, SO<sub>2</sub>, and NO<sub>x</sub>). Under the existing level of equipment, it will be very difficult for coal and fuel-oil fired burners to consistently meet the standard. Implementation of alternative clean energies will be necessary. For burners that burn light fuel oil, in situations where the conditions for natural gas are temporarily not present, the quality of oil used must be improved, low-nitrogen burners must be retrofitted, and improvements made to the burn to reach the prevailing standard. At the same time, during the process of switching to alternative clean energies, active guidance must be provided to enterprises in selecting burners with low-nitrogen burn technology, and emphasis placed on managing of how these burners are used, to ensure that NO<sub>x</sub> standards are met.