

**THE CHEMISTRY OF THE THERMAL DeNO<sub>x</sub> PROCESS:  
A REVIEW OF THE TECHNOLOGY'S POSSIBLE APPLICATION  
TO CONTROL OF NO<sub>x</sub> FROM DIESEL ENGINES**

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This paper presents a review of the Thermal DeNO<sub>x</sub> process with respect to its application to control of NO<sub>x</sub> emissions from diesel engines. The chemistry of the process is discussed first in empirical and then theoretical terms. Based on this discussion, the possibilities of applying the process to controlling NO<sub>x</sub> emissions from diesel engines is considered. Two options are examined: modifying the requirements of the chemistry of the Thermal DeNO<sub>x</sub> process to suit the conditions provided by diesel engines and modifying the engines to provide the conditions required by the process chemistry. While the former examination did not reveal any promising opportunities, the latter did. Turbocharged diesel engine systems in which the turbocharger is a net producer of power seem capable of providing the conditions necessary for NO<sub>x</sub> reduction via the Thermal DeNO<sub>x</sub> reaction.