



OVERVIEW – LOCOMOTIVES MITIGATION MEASURE TABLE

Summary

This document provides an overview of Table X, locomotive mitigation measure examples, and how to use the information provided in the table. Additionally, a link is included to company contact information for projects that have been achieved in practice.

Table X - Mitigation Measure Examples: Repowered, Retrofitted and New Locomotives

Table X (*Mitigation Measure Examples: Repowered, Retrofitted and New Locomotives*) provides examples of specific locomotive engines repowered or retrofitted with Tier 2 engines that operate within the AQMD's jurisdiction.

In particular, Table X provides the following details organized by engine horsepower:

- Locomotive category
- Project where the locomotive category has been achieved in practice (all listed examples are uncontrolled baseline engines repowered or retrofitted, or old locomotives replaced with new locomotives, through the District's Carl Moyer Memorial Air Quality Standards Attainment Program and funded in 2003, 2004, or 2005)
- Baseline engine model year
- Repowered/retrofitted/new engine:
 - Model year
 - EPA Certification Level
 - Cost
- Achieved emission reductions

The CEQA practitioner can calculate emission reductions achieved by repowering, retrofitting, or replacing with a new locomotive, a given uncontrolled engine using the data listed in Table X. To do so, apply the emission reduction to the applicable uncontrolled pollutant emission rate.

As an example, a 1200 HP, pre-1973 model year baseline switcher engine repowered with a Tier 2 engine yields the following emission reductions: 48% NO_x; 39% VOC; and 39% PM. Assuming the baseline engine emits 100 pounds per hour (lb/hr) NO_x, the quantity mitigated is 48 lb/hr NO_x, while the repowered emission rate is 52 lb/hr NO_x.

Table X can be downloaded from the following location:

<http://www.aqmd.gov/ceqa/handbook/mitigation/locomotives/TableX.doc>.

Company Contact Information

For additional information on the locomotive control measures that have been achieved in practice, company contact information can be downloaded from the following location:

<http://www.aqmd.gov/ceqa/handbook/mitigation/AIPContact.doc>