San Diego Air Pollution Control District
Guideline for Emergency Diesel Engine Acute Prioritization Score Scenario

Applicability

This guidance applies to facilities with multiple emergency diesel engines and that are subject to the California Air Resource Board's (CARB's) AB2588 "Hot Spots" Program.

Introduction

The San Diego County Air Pollution Control District's (District) Prioritization Procedures are used to determine prioritization scores according to CARB's AB2588 Air Toxics "Hot Spots" Program, which is a screening tool to categorize whether a Health Risk Assessment (HRA) will be required. A separate prioritization score is calculated for Carcinogenic Compounds, Acute Non-Cancer, and for Chronic Non-Cancer. To be health-protective, the acute non-cancer score is calculated with the assumption that the maximum hourly emissions for each emergency diesel engine at a facility are operated simultaneously in the same hour. For a more accurate Acute Non-Cancer score, developing a specific acute scenario may be necessary. This guidance will describe a few common acute scenario parameters and what documentation is required for the District to create an acute scenario for facilities with multiple emergency diesel engines.

Acute Scenario Parameters

1. **Acute Scenario Based on Operation Logs/Testing Schedule**
    a. The District will review diesel engine run time based on actual operational logs. In the absence of operational logs, the District has defaulted to assuming they run during the same hour.
    b. Operational logs must include all run time for each engine and will be reviewed to confirm which engines ran during the same hour. Then, the acute scenario with the greatest prioritization score will be applied accordingly.
    c. If two engines run within the same hour, but the logs prove they did not run at the same time and the max hourly is calculated from run time/hour meter, then the engine with the higher prioritization score will be applied.
2. **Duration of Engine Operation (Less than an Hour)**
    a. If the max hourly usage is calculated from run time/hour meter, then applying less than one hour can be accepted.
    b. If the max hourly usage is based off a measured fuel amount, then applying a less than one hour refinement is not accurate. Fuel logs will be required in this scenario.
3. **Applying Engine Load**
    a. Engine load can be applied to emission factors which are created/documented at 100% load, such as certified engine factors.
    b. The default emission factors in the Emissions Inventory System (EIS) come from AP-42 and are measured from a range of loads; therefore, a specific load cannot be applied to the default emission factors.

Uploading Documentation

The best way to account for the above acute scenario parameters is to upload all the required documents into the EIS Portal as part of the initial Emissions Inventory (EI) submittal or revision request. For revision requests, please also email the District with a revision request through APCDInventory@sdapcd.org.

Modification of Permits

The District highly recommends any facility, which has an acute scenario applied based on testing schedule/operation logs, submit applications to the District to modify all their emergency diesel engine permits to create enforceable permit conditions which mirror their testing schedule. This would eliminate the need to produce the operational logs and review the run times for each acute scenario.

Additional Resources

1. https://www.sdapcd.org/content/dam/sdapcd/documents/permits/air-toxics/Prioritization-Procedures.pdf

2. https://www.sdapcd.org/content/dam/sdapcd/documents/permits/emissions-calculation/instructions/Combustion-Diesel-Fired-Engine.pdf
3. https://www.sdapcd.org/content/dam/sdapcd/documents/permits/emissions-calculation/combustion-diesel-fired-engines-/APCD-combustion-Diesel-Fired-Engines.pdf