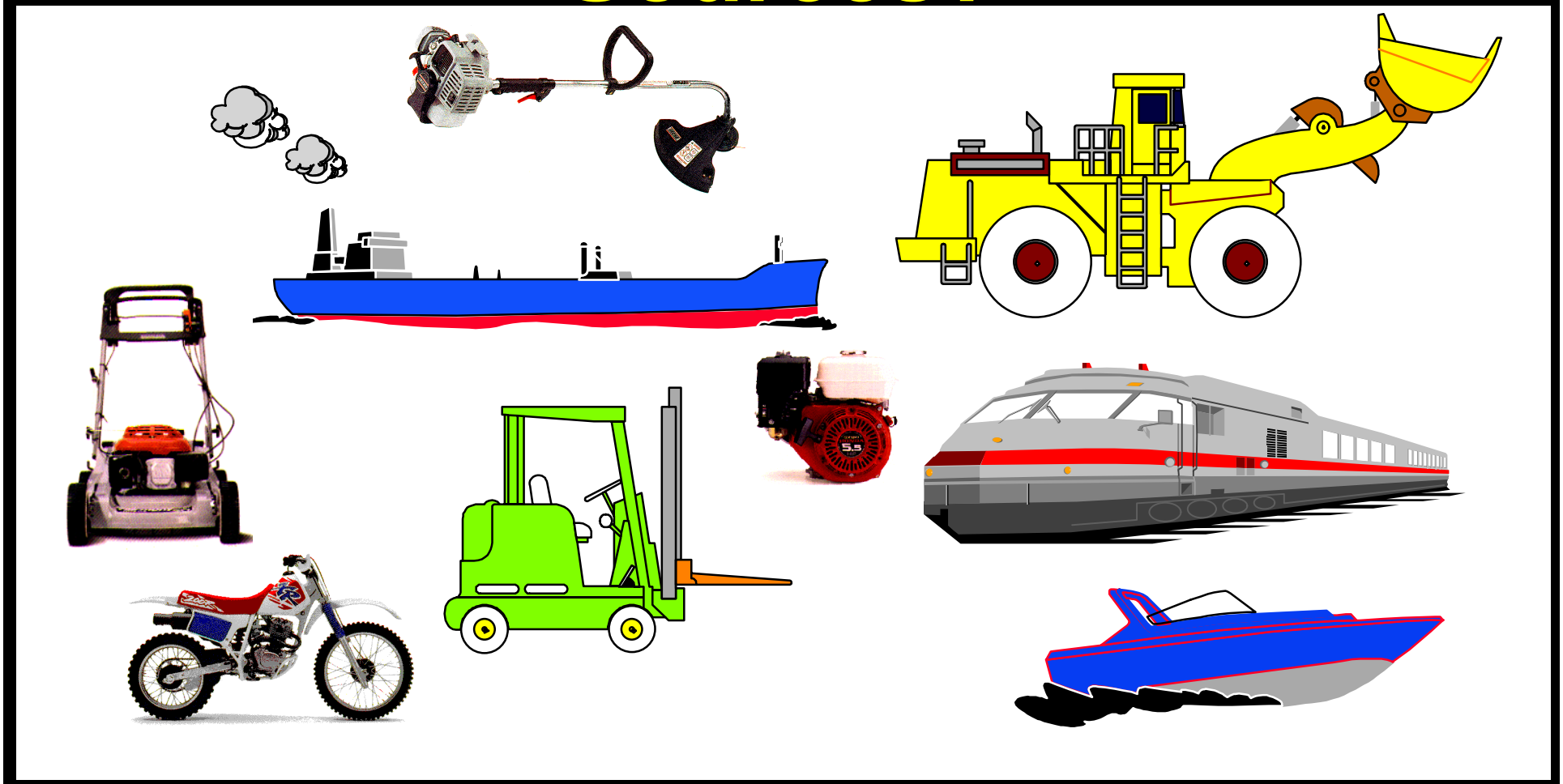
OFF-ROAD MOBILE SOURCE TECHNOLOGY REVIEW WORKSHOP

DAY 2 - Compression-Ignition

What are Off-Road Mobile Sources?



Why a Technology Review?

- Board directed staff to prepare a review of technologies available for use in off-road sources.
- Determine industry progress towards meeting the existing standards and requirements.
- Ensure staff and industry are fully aware of possible options for future control, including benefits and detriments.

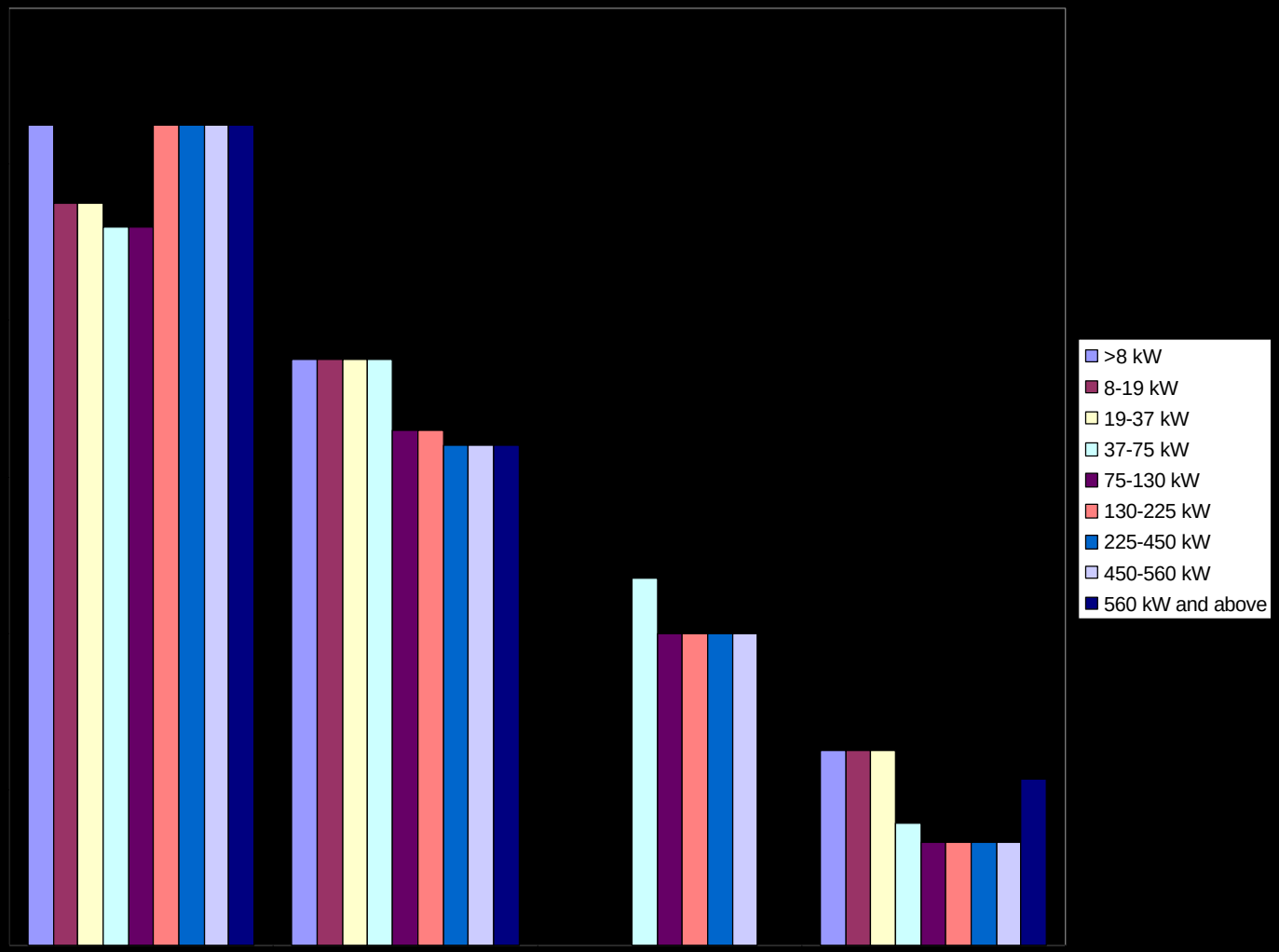
Technology Review

- Comment period extended to March 15
- Comments should address issues noted in the workshop notice
- Sign up for individual meetings
- Report tentatively scheduled for November of this year

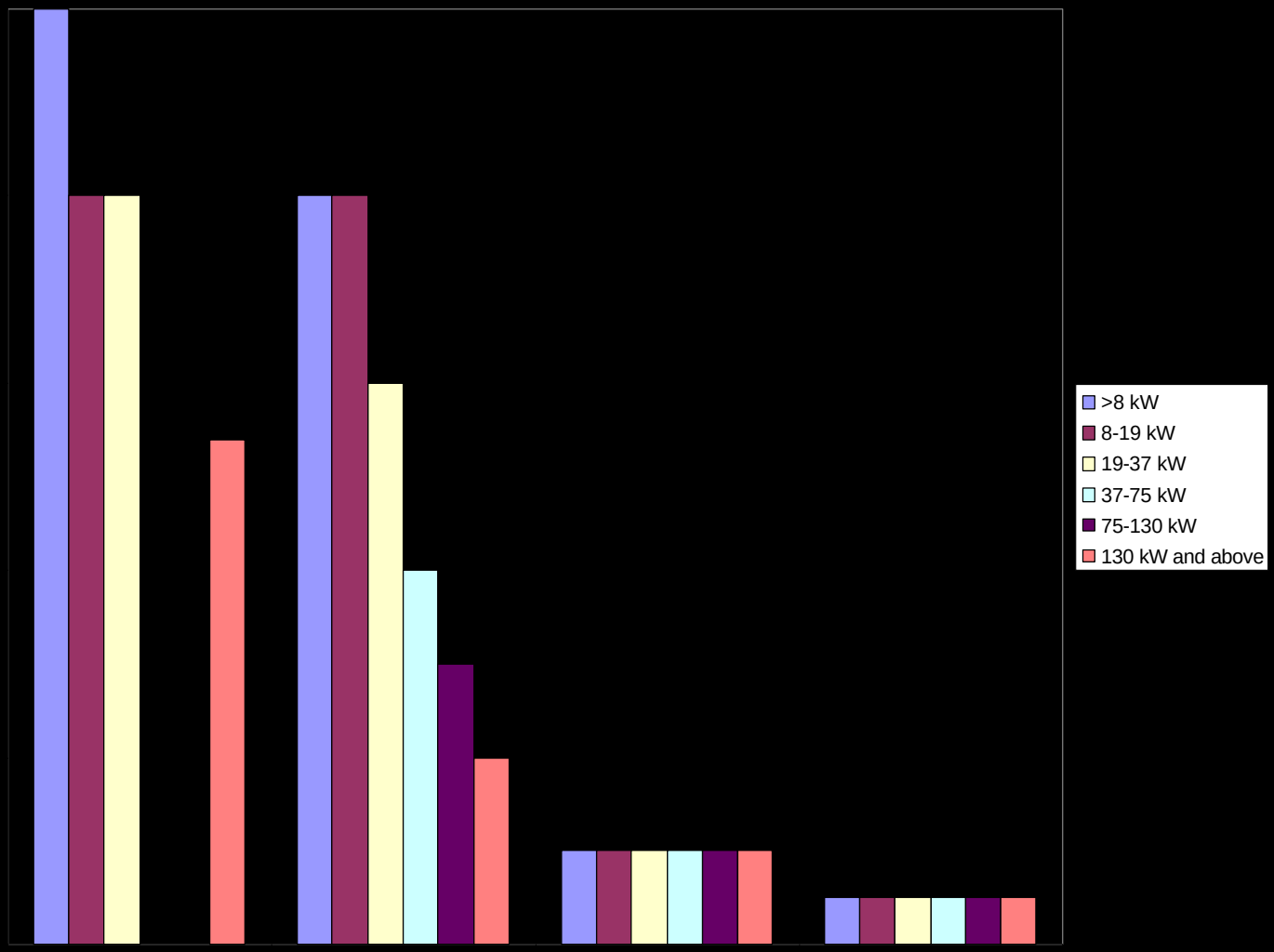
Today's Workshop

- Compression-Ignition Engines
- Early step in preparing technology review report for the Board
- Stimulate thought and inform

HC+NOx Emissions Standards



PM Emissions Standards



ARB Compression-Ignition Engine Research

- In Conjunction with EPA, contracts with Southwest Research
  - to meet Tier 3 levels and determine appropriate Tier 3 PM levels
  - to evaluate transient operation emissions/need for transient certification testing

Compression-Ignition Agenda

- Emissions Control Technologies for Off-Road Compression-Ignition Engines - Dale McKinnon, Manufacturers of Emissions Controls Association

- The QuadCAT Four-Way Catalytic Converter: An Integrated Emission Control System for Diesel Engines - Dr. Brad Edgar, Cyrex

Compression-Ignition Agenda

- Innovative Reengineering of Two-Cycle Diesel Engines - Terry Ellis, Clean Cam Technology Systems

- Emissions Technologies for Off-Highway Compression-Ignition Engines - Peter Church, AVL

Compression-Ignition Agenda

- ARCO Clean Diesel Fuel - Charles LeTavec, ARCO