

# **Comments on CARB Proposed Regulations for In-Use TRUs**

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## **Overview:**

- Support the Proposed Regulation.
- Identify A Major “Flaw”.
- Recommend Solutions.
- Establish a Structure to Come Back to the Board with Specific Staff/Stakeholder Recommendations.

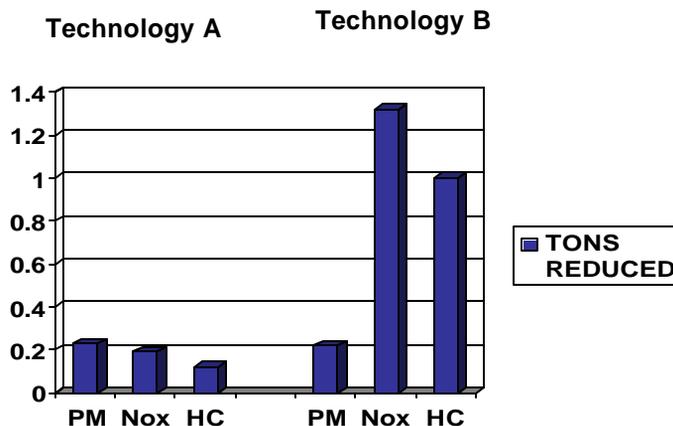
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## Proposed Regs have PM “Blinders”

- Exclusive focus on PM reduction.
- Ignores benefits of reductions in NO<sub>x</sub>, ROG, other criteria pollutants, and CO<sub>2</sub>.
- RESULT: Businesses are forced to make regulatory choices that do NOT result in the capturing the most emissions reductions, or the most cost-effective emissions reductions.
- RESULT: Un-level playing field for E/S and other very clean technologies.

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## Theoretical Example:



Which technology is best for society? (B)

Under proposed regulations, which technology will companies choose? (A)

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## Real World Example:

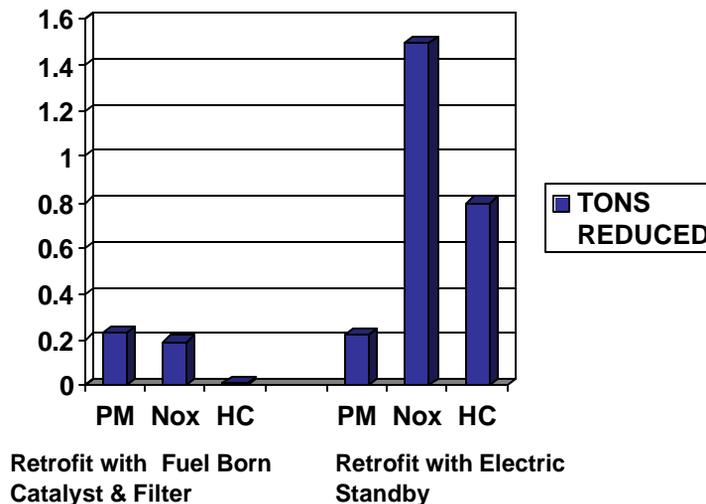
CARB Assumptions – cost, PM, NOx, HC, 14,650 lifetime hours, etc

Technology	Life time NOx & NMHC reduced due to ATCM	Life time PM reduced due to ATCM
Semi-Trailer Diesel TRU retrofit with fuel born catalyst +wire mesh filter) to meet 2008 LETRU	<b>0.20 tons</b> (all NOx)	<b>0.23 tons</b>
Semi-Trailer Diesel TRU retrofit with E/S	<b>2.32 tons</b> (1.5 NOx+ 0.8 HC )	<b>0.22 tons</b>
Delivery Van Diesel TRU retrofit with E/S	<b>0.56 tons</b> (0.50 NOx +0.06 HC)	<b>0.04 tons</b>

- If this extra NOx and HC were monetized in ERCs it would pay for much of the up-front cost of electric stand-by. Some of the extra NOx + HC could not be traded and would go to the SIP.

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## Same Real World Example for Semi-Trailer TRUs:



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## Legislative Intent on This Issue

- Chapter 738, Statutes of 2003 (SB 656; Sher):
- “In order to be effective, control measures to reduce particulate pollution **need to control not only diesel particulate** and other directly emitted PM 10 and PM 2.5, **but also control precursors** that contribute to formation of particulate matter, **including** but not limited to, **oxides of nitrogen, sulfur oxide, reactive organic gases** and ammonia.”
- “It is the intent of the Legislature that the State Air Resources Control Board, and each air quality management district and air pollution control district in the state consider the impact of proposed control measures for PM 2.5 and PM 10 on the other criteria pollutants when adopting the implementation schedule pursuant to Section 39614 of the Health and Safety Code.”

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## Solution:

- **(1a) CARB needs to give value to, or “monetize”, the emissions reductions that are GREATER than that required by the proposed regulations.**
  - This is key to encouraging advanced near-zero emission technology.
  - This can be done through emissions credit trading. CARB needs to develop procedures.
- **(or 1b) CARB may want to broaden the reg to include reductions in criteria pollutants.**

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## Detailed Solution Concept:

“Blue Chip ER Credit” program for select technologies

- Bob Wyman’s preferred concept
- Example “blue chip” technologies -- start a few select ones that are good candidates to be incentivized.
  - super clean TRUs,
  - Truck stop electrification, etc.
- ARB pre-certified – specify minimum amount of credit in advance
- Purchase or use generates discrete credit (demand-pull)
- Credit can be used to comply with otherwise applicable mobile or stationary source rule (federal or state) or for offsets so long as:
  - No double counting
  - No toxic concern (resolved by independent state or federal air toxics protection program)
- Only a percentage of the total emissions reduction could be traded.
- To save on staff time- statewide rule developed by ARB for adoption by state / local. Much already exists with SC pilot rules 1633 and 1634

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## Other Regulatory Recommendations:

- Create additional regulatory incentives for emission reductions in areas that have concentrated emissions levels (“hot spots”), such as ports, urban distribution centers, etc.
- Include reduction in criteria pollutants in future CARB regs for new TRUs. Do more than adopt draft federal TRU regulations. (currently set for 2004 hearing)

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## **We Recommend:**

- CARB should direct staff and stakeholders to work together over the next six months to develop recommendations and options which will reward, or give value to, emissions reductions greater than that required by the proposed regulations.
- These recommendations will come back to the Board.