Harvard University

Diesel Emission Controls For Construction Equipment

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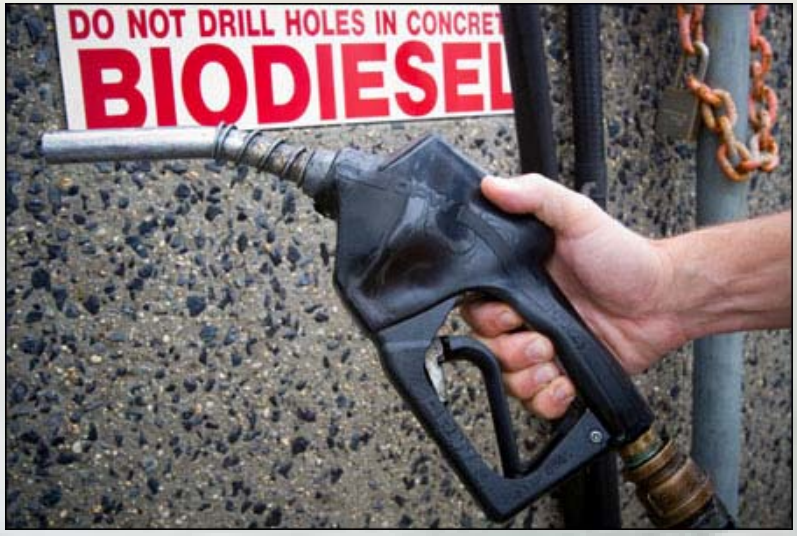
Previous, Ongoing Efforts



B20 Biodiesel

Rainwater Recovery

Bio-Based lubricants and Oils

Veggie Oil Recycling Truck

Motivation for Emissions Requirement

Neighbors

Health

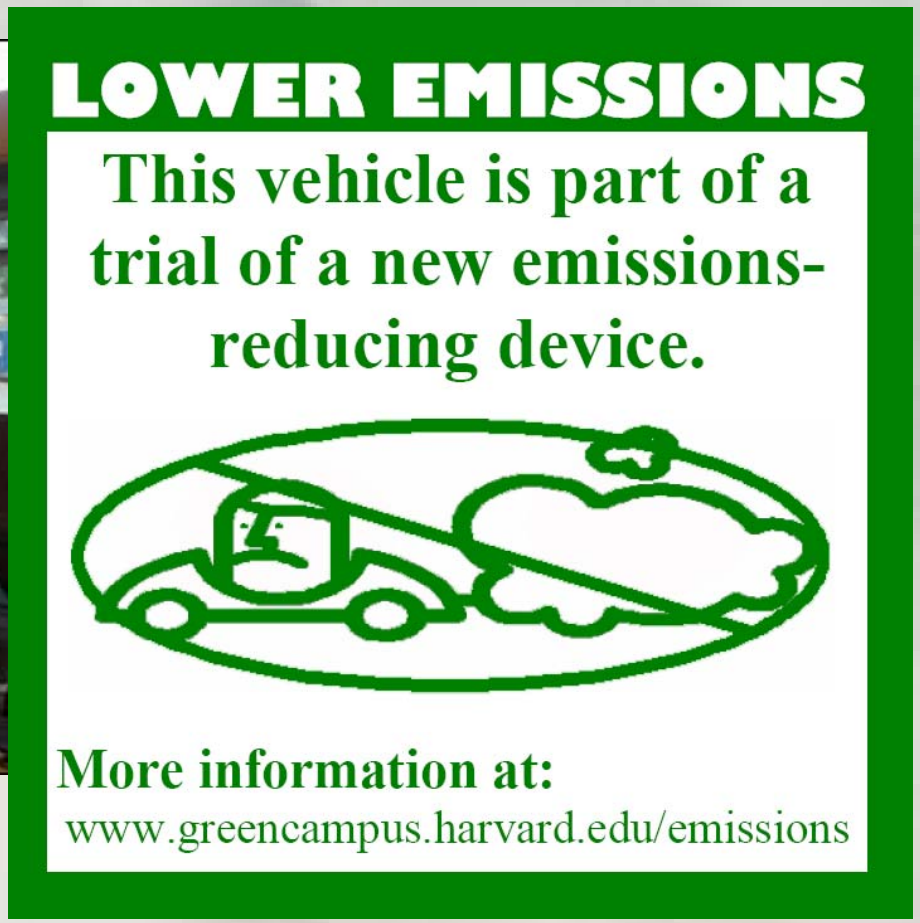
Environmental

Staying Ahead of Legislation

Process to Implementation

- Trial, Education, Buy-In, Meetings…

Harvard Transportation Services Vehicle



Harvard Emissions Spec

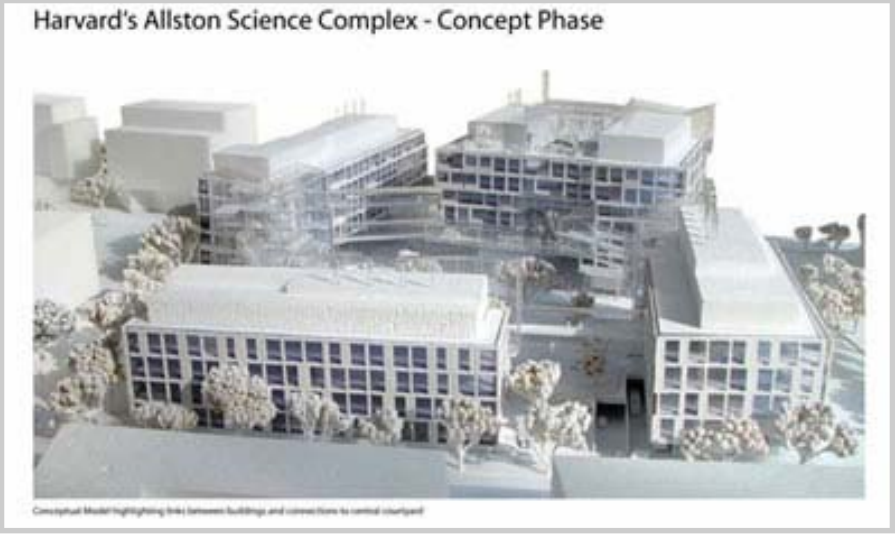
- Retrofits - 60HP+ onsite 20+ working days
- DOCs are the minimum. Preference for DPFs
- EPAs verified list, or approved by Harvard
- ULSD. Preference for biodiesel, ethanol
- Anti-idling, equipment location, electric equipment

Cost

- Spec included in bid documents
- Cost included in bid price
- Generally agreed that the requirement is not a significant addition to the bid cost

Current Harvard Projects

Rockefeller Hall
Harvard Divinity School



First Science
Allston

Weld Hill
Arnold Arboretum

Retrofitted Vehicles

Enforcement

Harvard Allston Science Complex
Project # 13820Po
Diesel Emissions Control

Yellow=Onsite

Contractor/Sub-Contractor	Diesel-Powered Equipment				Engine Rating (HP)	Start Date	End Date	Working Days	Retrofit Emission Control Device		
	Model	Type	Make	Contractors Number					Make	Model	Serial Number
JF White	980G	Loader	CAT	08.024	317	9/10/07			Mine-X	8421.39	B0F9-MD-1RXX-22
JF White	375L	Excavator	CAT	04.242	428	9/4/07			Mine-X	158463	BOOW-MX-1R10-22
JF White	M322C	Excavator	CAT	04.674		10/3/07			U	#5043370	serial# H2E306
JF White	EC55B	Excavator	Volvo	.04.701		11/1/07			Mine-X	x 0010-0000-59	s/n 159623
JF White	185	Compressor	Ingersolrand	10.125	JD 4 cyl.	9/10/07			Oxidation Catalyst	6SX	48942
JF White	Zaxis 75 US	Excavator	Hitachi	41165	54	June	9/10/07	65	#####	#####	#####
JF White	Zaxis 80	Excavator	Hitachi	04.403	54	9/26/07	10/18/07	16	U	8421.39	8923-MD-1R05-21
JF White	400s	Boom Lift	JLG Lift	40.508	82	9/4/07	9/10/07	5	#####	#####	#####
JF White	938G	Loader	CAT			10/15/07			Catalystic E	10SX-1376995	U
A.A. WILL	375L	Excavator	CAT	316	428	11/26/07			Mine-X	11W2-MD-1R12-22	s/n 53958
A.A. WILL	IT62	Loader	CAT	355		11/29/07			U	10SX-1281009	SERIAL# 53242
A.A. WILL	M318	Excavator	CAT		131	11/26/07			U	PTX 5230	S/N 7802-35836
A.A. WILL	DCA220SSJ	Generator	JOHN DEERE			1/17/08					
A.A. WILL	DCA125USJ	Generator	JOHN DEERE			1/17/08					

Questions?

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