

# OTC Committee Meeting

April 17th, 2018

Washington, DC

## Mobile Source Committee Update

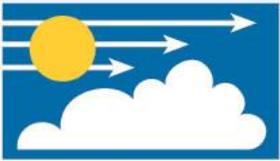


# Current Committee Charge

- Goal: To identify potential strategies for consideration at the 2018 Fall Meeting
- Strategies Include:
  1. Develop an OTC Idling Toolkit of Educational Materials
  2. Good Neighbor SIP Strategies
    - a) Calculate emissions reductions inside and outside of the OTR from the recommended mobile source GN SIP strategies
    - b) Develop recommendations for additional strategies for consideration
  3. Report on EPA's Progress on Critical Federal Strategies
  4. Report on State Progress on the VW settlement, ZEVs, DERA, SmartWay<sup>®</sup>, and EPA's Ports Initiative
  5. Additional Transportation Strategies

# Idling Toolkit: Resource Review

Workgroup first looked through existing toolkits and resources to avoid duplication of efforts and compiled the resources

 <p>Clean Cities U. S. Department of Energy</p>	 <p>OZONE TRANSPORT COMMISSION</p>	 <p>CONNECTICUT ENERGY ENVIRONMENT</p>	 <p>DEPARTMENT OF ENERGY &amp; ENVIRONMENT</p>
Idle Box Toolkit	Best Idling Practices	Brochures/Children's Book	Brochures/Postcards
 <p>MassDEP Massachusetts Department of Environmental Protection</p>	 <p>Maryland Department of the Environment</p>	 <p>Ontario Ministry of the Environment and Climate Change</p>	 <p>UNITED STATES ENVIRONMENTAL PROTECTION AGENCY</p>
FAQs	Poster	Campaign Toolkit	SmartWay

<https://www.dropbox.com/sh/3zegu6oygt5g1e3/AAAP2-uMugTzOSo82KBrXrSka?dl=0>

# Idling Toolkit: New Resources - Brochures



# Good Neighbor SIP Calculations: Aftermarket Converters

In 2016, Aftermarket Workgroup drafted a technique to model an aftermarket program using MOVES emission rates databases

Ran 2 national default MOVES runs with the aftermarket converter database and assumed the following to estimate domain wide emission reductions:

- Any program would result in reductions similar to adopting OTC model rule
- Program would go into effect in 2020 including in any states that have a program already in effect
- Areas without I/M would see same repair rates as those with I/M
- Other local programs such as RFG would have no effect



# Good Neighbor SIP Calculations: Onroad Idling

Mobile Source Committee examined existing approaches used by member states in approved SIPs, which led to creation of a MOVES emission rate database that reduced emissions from idling operation modes by 80%

Ran 2 national default MOVES runs with the idling database and assumed the following to estimate domain wide emission reductions:

- Would effect running, hoteling run modes equally
- Reductions associated with hoteling were not included from NJ due to inclusion in baseline projections



# Good Neighbor SIP Calculations: Nonroad Idling

In 2012, Mobile Source Committee finalized a methodology to calculate emission reductions from nonroad idling programs

Used this technique assuming the following to estimate domain wide emission reductions:

- Emissions from idling are part of the activity data used to calculate emission in NONROAD based on reading of the model's TSD
- Program would effect diesel equipment, but not pleasure craft or rail
- John Deere's telemetric data more accurately represented idling activity
- States without programs would adopt a 5 minute idling limits
- Rule effectiveness and penetration would be 80%





# Good Neighbor SIP Calculations: Draft NO<sub>x</sub> Reductions

	Percent Reduced	East of the MS		OTR	
		TPY	TPD	TPY	TPD
Aftermarket Converters	~2%	22,000	59	5,700	16
Idling (Onroad)	~16%	180,000	480	41,000	112
Idling (Nonroad)	~13%	39,000	110	17,000	47
Idling (Improved MD Only)	TBD	2,600	7	2,600	7

## Notes:

East of the Mississippi will be improved to be based on modeling domain when SMOKE reports become available

Number do not yet consider overestimations from state with existing programs

TPD calculations do not consider differences between weekdays and weekends

# State Updates - Connecticut

## VW Settlement

- Connecticut released a draft final mitigation plan and held a formal public comment period on the plan which ended on March 9, 2018.
- Connecticut will review comments received and finalize and submit its mitigation plan to the Trustee within the next month or two. Project solicitations can be expected after the mitigation plan is submitted to the Trustee.

## Diesel Emission Reduction Act (DERA)

- 2017 FY State DERA projects will be funded by a combination of DEEP's 2017 State DERA allocation, "DERA Option" matching funds from the VW Trust, and an EPA match incentive.
- DEEP conducted an open and competitive solicitation in the fall of 2017 after which three projects were selected for funding:
  - Metropolitan District (MDC) in Hartford: \$137,628.23 toward the early replacement of a Vactor truck for pumping sewers;
  - Town of Coventry: \$45,115.77 toward the early replacement of a heavy-duty, snowplowing dump truck; and
  - C & S Wholesale Grocers, Inc.: \$350,110.83 toward the replacement of twelve (12) diesel-powered refrigerated trailers with hybrid electric refrigerated trailers and the installation of sixty (60) electric connection stations, for all the hybrid electric refrigerated trailers in the fleet, to effectively eliminate diesel idling at the Windsor Locks distribution center.
- The MDC and Woodstock grants are being awarded from DEEP's 2017 State DERA allocation and may be increased when the VW Trust funds become available.

## Zero Emission Vehicles (ZEV)

- **Connecticut Hydrogen and Electric Automobile Rebate (CHEAPR):** Since its launch in May 2015, through the end of February 2018, over \$5.2 million has been returned to Connecticut consumers and businesses for purchasing over 2,500 EVs.
- **EV Roadmap:** The Transportation Section of DEEP's 2018 Comprehensive Energy Strategy calls for the development of an EV Roadmap process in 2018 to identify Connecticut-specific policies, programs, and strategies the State should pursue to optimize deployment of EVs and associated infrastructure. Chief among the goals for the EV Roadmap is pursuing sustainable funding for CHEAPR.
- **ZEV Task Force:** DEEP continues to work closely with ZEV Task Force towards fully implementing the 2013 Multi-State ZEV MOU and providing the basis for regional coordination and cooperative actions taken by the states with ZEV programs. This spring the Task Force will update the Multi-State ZEV Action Plan.

## Improved Idling Programs

- As part of Connecticut's commitment to improve its idling reduction program, several outreach and education initiatives have been assessed.
- Currently, there is an anti-idling PSA looped on CCTV in state department of motor vehicles offices.
- CT is also working on incorporating anti-idling education into the training given to department staff working at our state parks and forests.



# State Updates - Delaware

## VW Settlement

- A public workshop was held on March 28, 2018 to discuss the draft work plan.
- The funds will be spent in three phases.
  - Phase 1 - the Department proposes to use 1/3 of the state allocation to replace diesel school buses with propane fueled buses.
  - Phase 2 - the Department will issue a competitive request for proposal and direct 1/3 of the state allocated funds on eligible NOx reducing projects.
  - Phase 3 - Delaware proposes to allocate 15% of the funds for EVSE and will evaluate phase 1 and 2 to develop a path forward to best fit Delaware's needs.
- Public comments are being accepted on the mitigation plan through April, 27, 2018. The mitigation work plan and funding request is anticipated to be submitted to the Trustee by the end of the third quarter 2018.



## Diesel Emission Reduction Act (DERA)

- Delaware is in the process of replacing seven (7) school buses with four (4) private transportation providers; a total of five (5) buses will be propane and two (2) buses will be replaced as clean diesel; the buses will be replaced prior to the start of school in September 2018.

## Zero Emission Vehicles (ZEV)

- Delaware fully supports the sale of zero emission vehicles but currently does not have a ZEV

## SmartWay

- Delaware is currently a SMARTWAY affiliate; however the program is yet to be developed due to staff resources.

## EPA Port Initiatives

- Delaware fully supports EPA Port Initiatives at the Port of Wilmington. Delaware has yet to formally implement a Port Initiatives program.

# State Updates – District of Columbia

## **Volkswagen Settlement**

- The District of Columbia will be receiving \$8.125 million.
- District's Draft Beneficiary Mitigation Plan (BMP) available for public review. The final BMP will be released in the coming months.
- District does not plan to use the 15% of VW Trust funds towards light-duty EV charging infrastructure projects.



## **Diesel Emissions Reduction Act (DERA)**

- Future DERA projects in the District will be funded by a combination of DERA state allocation, “DERA Option.” matching funds from the VW Trust, and EPA match incentive.

## **Zero Emission Vehicles (ZEV)**

- District fully supports the sale of zero emission vehicles but currently does not have a ZEV mandate.

## **Idling Reduction**

- Outreach/education campaigns to city wide snow removal task force.
- Increased engine idling hotspot enforcement during the summer tourist season.
- District works closely in DC metro area's efforts - diesel idle reduction campaign and driver recognition program.

# State Updates - Maine

## VW Settlement

- MaineDOT is the lead agency working in collaboration with Maine DEP and the Governors Energy Office.
- Maine has allocated \$21, 053,064 to:
  - 40% multi model projects administered by MaineDOT
  - 25% Appendix D projects solicited to the public by MaineDOT
  - 20% DERA Option
  - 15% EVSE
- Maine filed its Beneficiary Mitigation Plan ([http://www.maine.gov/mdot/vw/docs/BMP\\_final\\_2-12-18.pdf](http://www.maine.gov/mdot/vw/docs/BMP_final_2-12-18.pdf)) with the Trustee on March 20, 2018, first in the nation, along with a final Delegation of Authority and Incumbency Certificate and Exhibit A.
- Efficiency Maine Trust has been designated through an MOA, the administrator for the EVSE program and is currently drafting an RFP for a statewide program for installation of DCFC along a designated corridor.
- Maine will submit first funding requests on April 20, 2018, up to 1/3 of the total in this first year for DERA and EVSE programs.
- Maine will solicit applications for the eligible projects under Appendix D in May 2018.



## Diesel Emission Reduction Act

- Maine committed \$500,000 from the VW settlement for the state 2017 DERA workplan for a total of \$839,054. Funding has been allocated to repowering commercial fishing and excursion vessels, and tugboats.

## Aftermarket Catalytic Converter Program

- Effective June 1, 2018, all CARB certified vehicles 2001 MY and newer are required to install an aftermarket catalytic converter (AMCC) that has a CARB executive order. All federal certified vehicles may continue to install federal AMCC. The Department is allowing enforcement discretion through the end of the year to provide a successful transition to the new requirements.

# State Updates - Maryland

## **VW Settlement**

- MDE is the lead agency and worked with the Maryland Energy Administration (MEA) and Maryland Department of Transportation (MDOT) on a draft Mitigation Plan.
- A draft plan has been developed and is in the final review process by agencies and other senior management.
- MDE expects a draft will be released for public comment in April 2018 followed by public listening sessions.
- MDE has a dedicated website and email address for communicating VW updates with stakeholders.
- State is committed to utilizing the maximum 15% of Trust funds on development of EVSE.



## **Electric Vehicle/EVSE Charging**

- Clean Cars Act of 2017 extended the state's EV and EVSE incentives through 2020.
- The Act also increases the amount of funding for EVs from \$1.8 million/year to \$3 million/year and the EVSE funding from \$600,000/year to \$1.2 million/year.
- MEA, under its 2018 Alternative Fuel Infrastructure Program (AFIP), is providing funding for 16 additional DC Fast chargers at 7 locations.
- To date, AFIP has provided funding for a total of 67 DC Fast chargers at 32 locations in the state.
- Approximately 12,000 plug-in vehicles in Maryland.
- MDOT, through its EVIC communications committee, continues its outreach and education efforts.

## **Diesel Emission Reduction Act (DERA)**

- The dray truck replacement program at the Port of Baltimore is continuing with MDE's state DERA grand funds.
- Through a separate DERA award, the Port is funding start/stop technology for locomotives and a grant program for replacement of cargo handling equipment.
- Collaborating with Port on additional projects for funding through the EPA National Clean Diesel Funding Assistance Program.

# State Updates - Massachusetts

## **VW Settlement**

- MassDEP is the designated beneficiary.
- Held 10 stakeholder across the state to provide information on eligible projects and to solicit input.
- Will release a Request for Information in April timeframe.
- Expect to file beneficiary mitigation plan in summer/early fall.
- Interested in using 15% allocation for EVSE and projects that electrify the transportation sector.



## **Electric Vehicles/EVSE Charging**

- Consumer rebate in place offering up to \$2500 per vehicle for plug-in and hydrogen-fueled vehicles (over 7000 rebates to date).
- Providing incentives for public fleets and vehicles (258 vehicles and 85 charging stations to date) and for workplace charging (843 charging ports to date).
- Working with MassDOT and DOER on DCFC network.
- Currently 538 charging stations and 1,408 publicly accessible ports in MA.

## **Diesel Emission Reduction Act (DERA)**

- MassDEP has participated in the DERA state allocation option for many years.
- Recent focus has been on replacing diesel Transportation Refrigeration Units (TRUs) with electric TRUs at markets and perishable goods storage locations.

## **SmartWay**

- Four affiliates and 37 partners are headquartered in MA working on improving freight efficiency and environmental performance across their supply chain.

# State Updates – New Hampshire

## **VW Settlement**

- Collaborating with the Lead Agency for the state on a Draft Mitigation Plan.
- Plan should be released during the spring of 2018, which will be followed by public informational meetings.
- Committed to utilizing the maximum 15% of Environmental Mitigation Trust funds on development of EVSE.



## **Electric Vehicle/EVSE Charging**

- Working with the Department of Administrative Services to provide workplace charging at state offices with > 50 employees.
- Took possession of two Toyota Prius Prime Plug-In Hybrids in August 2017 and a Level 2 charger was installed to accommodate these vehicles.
- Will receive a third Toyota Prius Prime Plug-In Hybrid in the spring of 2018 and an additional Level 2 charger is planned.

## **Diesel Emission Reduction Act (DERA)**

- Will be funding three replacement projects through its DERA State Clean Diesel program.
  1. Front-end loader for the Town of Farmington, NH;
  2. Drayage truck for S & J Transportation Services of Lee, NH; and
  3. A crane truck and a tractor trailer for New Hampshire Department of Transportation (NHDOT).
- Collaborating on an additional DERA project awarded to NHDOT through the EPA National Clean Diesel Funding Assistance Program.

## **SmartWay - Granite State Clean Cities Coalition**

- Planning for the 2018 edition of Green Your Fleet! at the New Hampshire Motor Speedway, which will highlight the latest in alternative fuels, advanced vehicles and technology trends.

# State Updates – New Jersey

## VW Settlement

- NJDEP is the lead agency for NJ's \$72.2 M.
- NJDEP is currently with the Governor's Office on next steps.
- NJ intends to utilize the maximum 15% of Environmental Mitigation Trust funds on development of EVSE.



## Electric Vehicles and Charging Infrastructure

- NJDEP's *It Pay\$ to Plug In* workplace charging program has disbursed ~\$400,000 for 88 Level 2 chargers.
- *It Pay\$ to Plug In* workplace charging program currently has a 25 applications for 77 chargers totaling ~\$385,000 on waitlist.
- NJDEP plans on hosting at least one electric vehicle Ride and Drive Event in 2018.
- NJ will join 8 other states when Governor Murphy signs a multi-state agreement on Clean Vehicles to support the deployment of ZEVs
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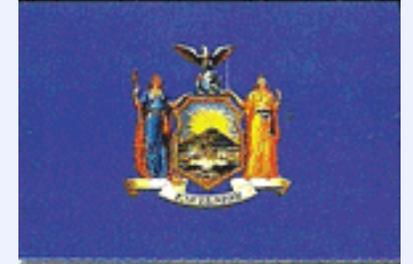
## Diesel Emission Reduction Act (DERA)

- NJDEP currently is funding up to 25% (not to exceed \$100,000) of the cost of off-road equipment replacements through its Clean Construction program.
- DERA Ports Competition Grant - Completion of a passenger ferry repower in 2017. Lifetime NOx and PM benefits are 1,392 and 37 tons.

# State Updates – New York

## **VW Settlement**

- Draft Mitigation Plan under review. Plan should be released during the spring of 2018.
- Plan will likely include the maximum 15% of allocation (= \$19.2M) devoted to light-duty EVSE.
- Governor stated transformation to electrified transportation as a goal.



## **Electric Vehicle/EVSE Charging**

- NYSERDA's Drive Clean Consumer Rebate program: 6,000 rebates in the initial year, +/- 500 dealerships participating.
- DEC's Municipal Vehicle and EVSE Infrastructure grants, Year 1: 194 Level 2 ports; 79 PEVs; 1 hydrogen station upgrade. Round 2 open until May 31, 2018.
- Municipal/State aggregate purchase planned (Summer 2018).
- State Workplace Charging (EVSE) Pilot being implemented.

## **Diesel Emission Reduction Act (DERA)**

- Replacement of State DOT heavy duty diesel trucks.
- Anti-idling pedestals for FDNY diesel-powered ambulances.

## **AMCC Regulations**

- Proposed revisions to 6NYCRR Part 218-7: general prohibition of federal AMCCs; clarify requirements for California AMCC installation, recordkeeping, and reporting.

# State Updates - Rhode Island

## VW Settlement

- Focus of \$13.5 M in Appendix D funding on Electrifying Public Transit Buses & LD EVSE Infrastructure.

## Diesel Emission Reduction Act (DERA)

- FY17 State DERA allocation of ~\$225,000.
- Working with grantees to replace:
  - 1 Marine engine;
  - 8 public school buses; and
  - 1 RIDOT truck.

## Other

- Transportation Listening Sessions held on April 2018.
- RI Clean Diesel Fund (~\$200,000):
  - Passed during the 2016 legislative session.
  - Program was designed with the purpose of reducing emissions from HD diesel engines operating on state roads & helping companies improve supply chain efficiency as described in the U.S EPA's SmartWay Program.
  - Q2-2018- Distributing state funds to grantees .



# State Updates - Virginia



## **VW Settlement**

- Virginia's Trust allocation is ~\$93.6 million.
- Department of Environmental Quality (DEQ) is the Lead Agency.
- Former Secretary of Natural Resources (SNR) formed a working group to develop a proposed state mitigation plan.
- Proposed mitigation plan allows for the selection of projects in all 10 categories of eligible mitigation projects including using up to 15% (maximum allowed under the Trust) on electric vehicle charging infrastructure.
  - DEQ conducted a public comment period on the proposed plan in fall 2016. Received ~150 comments to date.
  - DEQ issued a request for information (RFI) in 2017 seeking project ideas and additional input to inform the final plan. Received 39 proposed project ideas totaling ~\$600,000,000.
  - Proposed mitigation plan and RFI are available at: <http://deq.state.va.us/Programs/Air/VWMitigation.aspx>.
- Issued a request for proposals (RFP) in October 2017 seeking proposals from qualified sources to establish a statewide public electric vehicle charging network. Plan to award a contract late spring 2018.
- Coordinating with the new SNR to set funding priorities for the other eligible mitigation actions and finalize the state mitigation plan.

## **Diesel Emission Reduction Act (DERA)**

- FY17 State DERA allocation of ~\$255,000.
- Working with MARAMA to replace 9 old dray trucks to reduce emissions from carriers registered with the Virginia Port Authority.

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