



# Diesel Emission Reduction Projects

Below is a description of the types of diesel emission reduction projects that the Allegheny County Health Department has been involved in since 2005. These projects vary in size, scope, and funding source. On the following pages – estimated emission reductions for each project are provided along with other non-ACHD diesel reduction projects and local regulations concerning diesel emissions.

Year	Project	Equipment Replaced or Retrofitted	Funding Source	Funding Amount
2024	Municipal Fleet Electrification – Swissvale Borough	Replace a diesel powered street sweeper with an electric model	ACHD Clean Air Fund	\$800,000
2024	Municipal Fleet Electrification – Munhall Borough	Support the replacement of three diesel refuse trucks with electric models and charging infrastructure	ACHD Clean Air Fund	\$186,789
2023	Fleet Electrification – West Mifflin Borough	Decommission diesel refuse hauler and replace with electric garbage packer and installation of electric charging station	ACHD Clean Air Fund	\$748,339
2023	Mon Valley Municipal Fleet Electrification – Steel Rivers Council of Governments	Replace diesel powered street sweeper and purchase of an equivalent electric street sweeper and installation of electric vehicle charging station	ACHD Clean Air Fund	\$750,000
2023	Mon Valley Municipal Fleet Electrification – Borough of Swissvale	Replace diesel powered garbage truck and recycling truck and purchase of an equivalent electric garbage truck and recycling truck and installation of electric vehicle charging station	ACHD Clean Air Fund	\$700,000
2022	Pittsburgh Regional Transit	6 new zero-emission buses	EPA Targeted Airshed Grant	\$10,000,000
2021	City of Pittsburgh	5 new electric refuse trucks, 2 charging stations	EPA Targeted Airshed Grant	\$2,800,000
2021	Baldwin-Whitehall School District	Replace 2 old diesel school buses with two battery-electric school buses	EPA Targeted Airshed Grant	\$840,000
2019	Pittsburgh Regional Transit	7 new zero-emission buses and 1 charging station	EPA Targeted Airshed Grant	\$5,666,950
2014	University of Pittsburgh Graduate School of Public Health	Downtown Diesel Particulate Matter Study	ACHD Clean Air Fund	\$865,000
2014	Neville Island Clean Diesel	On-road, off-road, and stationary diesel equipment operating in and around Neville Island. 26 pieces of off-road equipment were retrofitted with DPFs.	ACHD Clean Air Fund	\$616,000

2011	"Build it with Clean Diesel" fund - <i>Managed by MARAMA</i>	Construction equipment owned and operated by small businesses in Allegheny County. Four retrofits and 2 engine upgrades.	ACHD Clean Air Fund	\$375,000
2009	Port Authority of Allegheny County	9 Transit Bus repowers; 2 Hybrid Buses	EPA ARRA Stimulus	\$1,007,500
2009	CSXT Transportation	1 Repowered switcher locomotive	EPA ARRA Stimulus	\$8,750,000
2009	Constructors Association of Western PA	40 Construction Vehicles	EPA ARRA Stimulus	\$1,231,939
2009	Multi Serv Inc.	8 Dump Trucks retrofitted with active DPFs	EPA ARRA Stimulus	\$214,000
2009	City of Pittsburgh	33 Refuse Trucks retrofitted with passive DPFs	EPA ARRA Stimulus	\$311,000
2008	City of Clairton	11 Municipal Vehicles; DOCs	ACHD Clean Air Fund	\$40,000
2006	Deer Lakes School District	10 School Buses; DOCs	ACHD Clean Air Fund	\$10,650
2005	Penn Hills School District	75 School Buses retrofitted with Diesel Oxidation Catalysts	ACHD Clean Air Fund	\$185,000
			<b>Total</b>	<b>\$36,098,167</b>

Below are the estimated emission reductions for common pollutants associated with diesel fuel exhaust in tons per year (TPY) for each project described in the previous table.

Year	Project Partner	PM Reduced (tpy)	CO Reduced (tpy)	HC Reduced (tpy)	NOx Reduced (tpy)
2024	Swissvale Borough - Municipal Fleet Electrification	0.0001	0.006	0.001	0.112
2024	Munhall Borough - Municipal Fleet Electrification	0.011	0.050	0.012	0.186
2023	West Mifflin Borough - Fleet Electrification	0.0003	0.010	0.002	0.081
2023	Steel Rivers Council of Governments - Mon Valley Municipal Fleet Electrification	0.003	0.023	0.006	0.046

2023	Borough of Swissvale - Mon Valley Municipal Fleet Electrification	0.000	0.044	0.002	0.094
2022	Pittsburgh Regional Transit	0.001	0.588	0.027	0.831
2021	City of Pittsburgh	0.0054	0.0926	0.021	0.3528
2021	Baldwin-Whitehall School District	0.0016	0.041	0.0028	0.094
2019	Pittsburgh Regional Transit	0.0082	0.1002	0.0253	0.475
2014	Neville Island Clean Diesel	3.9	13.9	1.8	NA
2011	Small Business Contractors Retrofit Project (w/MARAMA)	0.17	0.9	0.4	1.3
2009	Port Authority of Allegheny County*	0.1	1.5	0	4.8
2009	CSXT Transportation	0.5			16.6
2009	Constructors Association of Western PA	9.4	72	11.3	69
2009	Multi Serv Inc.	0.02	0.2	0.03	NA
2009	City of Pittsburgh	0.09	0.4	0.1	NA
2008	City of Clairton	0.01	0.02	0.01	NA
2006	Dear Lakes School District	0.04	0.65	0.19	NA
2005	Penn Hills School District	0.04	0.5	0.22	NA
<b>Total</b>		<b>14.30</b>	<b>91.02</b>	<b>14.15</b>	<b>93.97</b>

\*Currently known as Pittsburgh Regional Transit

## Non-ACHD Diesel Emission Reduction Projects

Project	Project Manager	Equipment Retrofitted	Funding Source	Funding Amount	Year
Pittsburgh Healthy Schools	Group Against Smog and Pollution (GASP), Clean Water Action (CWA)	55 school buses with DPFs and CCVFs	Heinz Endowments, DEP	\$600,000	2004
City of Pittsburgh Waste Haulers	GASP, CWA	15% of City of Pittsburgh waste haulers (remainder completed by ACHD)	EPA	\$100,000	2008

## Local Regulations

- **2010:** Off-Road Idling Regulation *Article XXI §2105.93*
- **2005:** On-Road Idling Regulation *Article XXI §2105.92*
- **2004:** School Bus Idling Regulation *Article XXI §2105.91*

## Clean Construction

- Allegheny County's Article 914 "Clean Construction" Ordinance (No. 16-20-OR)
- City of Pittsburgh Clean Air Act of 2011: Publicly funded projects budgeted at \$2,500,000 or more must utilize equipment with pollution controls installed
- UPMC: Language adopted in 2011 for bid specifications, requiring clean construction equipment on site.