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List of Acronyms

| | |
|--------------------------|---|
| $\mu\text{g}/\text{m}^3$ | micrograms per cubic meter |
| A/F | air to fuel ratio |
| ANPRM | Advance Notice of Proposed Rulemaking |
| API | American Petroleum Institute |
| ASTM | American Society for Testing and Materials |
| bbI | barrel |
| BTU | British Thermal Unit |
| CAA or the Act | Clean Air Act |
| CARB | California Air Resources Board |
| CASAC | Clean Air Scientific Advisory Committee |
| CMB | chemical mass balance |
| CNMI | Commonwealth of Northern Mariana Islands |
| CO | carbon monoxide |
| CSMAs | consolidated metropolitan statistical areas |
| DECSE | Diesel Emission Control Sulfur Effects |
| DOC | diesel oxidation catalyst |
| EGR | exhaust gas recirculation |
| EHC | electrically heated catalyst |
| EIA | Energy Information Administration |
| EPA or the Agency | U.S. Environmental Protection Agency |
| FCC | fluidized catalytic cracker |
| FTP | federal test procedure |
| g/bhp-hr | grams per brake-horsepower-hour |
| GVWR | gross vehicle weight rating |
| HC | hydrocarbon |
| HD-FTP | heavy-duty federal test procedure |
| HDE | heavy-duty engine |
| HDV | heavy-duty vehicle |
| HLDT | heavy light-duty truck |
| I/M | inspection/maintenance |
| IARC | International Agency for Research on Cancer |

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| | |
|-----------------|--|
| IRFA | initial regulatory flexibility analysis |
| LCO | light cycle oil |
| LDT | light-duty truck |
| LDV | light-duty vehicle |
| LEV | low emission vehicle |
| LLDT | light light-duty truck |
| LPG | liquid petroleum gas |
| MDPV | medium-duty passenger vehicle |
| MECA | Manufacturers of Emission Controls Association |
| MECA | Manufacturers of Emission Controls Association |
| MSAs | metropolitan statistical areas |
| MSCF | thousand standard cubic feet |
| MY | model year |
| NAAQS | National Ambient Air Quality Standards |
| NAICS | North American Industry Classification System |
| NCPs | non-conformance penalties |
| NMHC | non-methane hydrocarbons |
| NMOG | non-methane organic gases |
| NO ₂ | nitrogen dioxide |
| NO _x | oxides of nitrogen |
| NPC | National Petroleum Council |
| NPRA | National Petrochemical & Refiners Association |
| NPRM | Notice of Proposed Rulemaking |
| NPV | net present value |
| NRC | National Research Council |
| NSR | New Source Review |
| NSWS | National Surface Water Survey |
| NTE | not-to-exceed |
| OAQPS | Office of Air Quality Planning and Standards |
| OBD | on-board diagnostics |
| OMB | Office of Management and Budget |
| OMS | Office of Mobile Sources |
| PADD | Petroleum Administrative Districts for Defense |

List of Acronyms

| | |
|--------------------|--|
| Pd | palladium |
| PM | particulate matter |
| POM | polycyclic organic matter |
| ppm | part per million |
| Pt | platinum |
| R&D | research and development |
| RFA | Regulatory Flexibility Act |
| RfC | reference concentration |
| Rh | rhodium |
| RIA | Regulatory Impact Analysis |
| ROI | return on investment |
| SBA | U.S. Small Business Administration |
| SBARP or the Panel | Small Business Advocacy Review Panel |
| SBREFA | Small Business Regulatory Enforcement Fairness Act |
| SCR | selective catalytic reduction |
| SER | Small Entity Representative |
| SFTP | supplemental federal test procedure |
| SIC | Standard Industrial Classification |
| SIGMA | Society of Independent Gasoline Marketers of America |
| SIP | State Implementation Plan |
| SO ₂ | sulfur dioxide |
| SOF | soluble organic fraction |
| SO _x | oxides of sulfur |
| TAC | toxic air contaminant |
| TOG | total organic gases |
| TW | test weight |
| UDDS | urban dynamometer driving schedule |
| ULEV | ultra-low emission vehicles |
| VMT | vehicle miles traveled |
| VOC | volatile organic compound |

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