

December 2012

SOLICITATIONS FOR FUNDING AND AWARDS

[Brown text indicates a new entry since last month.]

ORGANIZATION	PROJECT	FUNDING	DEADLINE	WEBSITE
Bay Area Air Quality Management District (BAAQMD)	Carl Moyer Memorial Air Quality Standards Attainment Program	~\$15 million	First come, first served.	http://www.baaqmd.gov/?sc_itemid=08 F9594F-BF34-4A2A-BD38-9A3D0CCFF8F8
Alabama Department of Environmental Management	Diesel Emissions Reduction Grant Program	\$116,000	Rolling deadline until funds are awarded.	http://www.adem.alabama.gov/newsEvents/pressreleases/2012/DERAPublicServiceAnnouncement.pdf
Arkansas Department of Environmental Quality	Business Assistance Program, Environmental Loans for Small Businesses	Indeterminate	Rolling deadline until funds are awarded.	http://www.adeq.state.ar.us/poa/sba/envloans.htm
California Air Resources Board (CARB)	On-Road Heavy-Duty Vehicle Loan Program	~\$48 million for loan guarantees	Rolling deadline until funds are awarded.	http://www.arb.ca.gov/ba/loan/on- road/documents/hdvloanprogram.pdf
CALSTART	California Hybrid and Zero- Emission Truck and Bus Voucher Incentive Project (HVIP)	~\$18.7 million	Rolling deadline until funds are awarded.	http://www.californiahvip.org/
Illinois Environmental Protection Agency (EPA)	Illinois Clean Diesel Grant Program	\$294,517	Rolling deadline until funds are awarded.	http://www.illinoisgreenfleets.org/
Illinois EPA	Illinois Clean Diesel Grant Program—school buses only	\$1 million annually through 2016	Rolling deadline until funds are awarded.	http://www.illinoisgreenfleets.org/
Minnesota Pollution Control Agency	Small Business Auxiliary Power Unit (APU) Loan Program	\$110,000	Rolling deadline until funds are awarded.	http://www.pca.state.mn.us/index.php/ topics/small-business-environmental- assistance-program/small-business- ombudsman/small-business-auxiliary- power-unit-apu-loan-program.html



•

National Idling Reduction Network News

December 2012

ORGANIZATION	PROJECT	FUNDING	DEADLINE	WEBSITE
Metropolitan Washington Council of Governments (COG), in collaboration with the District Department of the Environment, the District Department of Transportation, and the Maryland Department of the Environment	Driver Recognition Program— Diesel Idle Reduction Campaign	Not applicable	Rolling deadline—the 15th of every month.	http://www.turnyourengineoff.org/campaign_recognition.html
Pennsylvania Department of Environmental Protection	Small Business Pollution Prevention Assistance Account Loan Program	\$2 million annually	Not applicable	http://www.portal.state.pa.us/portal/se rver.pt?open=514&objID=553247&mod e=2
North Carolina Division of Air Quality	2013 Mobile Source Emission Reduction Grant Program	\$759,666	January 18, 2013	http://daq.state.nc.us/motor/ms_grants/
Ohio EPA	Ohio Diesel Emissions Reduction Grant (DERG) Program	\$10 million	February 1, 2013 (extended)	http://www.epa.state.oh.us/oeef/derg.a spx
CARB	Advanced Technology Demonstration Projects: Zero- Emission Off-Road Equipment	\$1 million	February 7, 2013	http://www.arb.ca.gov/msprog/aqip/solicitations.htm
U.S. EPA Region 2	Environmental Quality Awards (nominations sought)	Not applicable	February 19, 2013	http://www.epa.gov/region2/eqa
Ohio EPA	Clean Diesel School Bus Fund Retrofit Grants Program	~\$300,000	March 1, 2013	http://www.epa.ohio.gov/oeef/schoolbus .aspx

REGULATORY NEWS

Missouri Bill Seeks To Raise APU Weight Exemption to 550 Pounds

Missouri is the first state known to seek to increase the APU weight exemption as permitted by Moving Ahead for Progress in the 21st Century (MAP-21). Missouri Senator Brian Munzlinger has prefiled a bill that would raise the APU weight exemption from 400 to 550 lb.

In 2005, the Energy Policy Act granted states the authority to enact a 400-lb exemption for the use of idling reduction technology on heavyduty vehicles. MAP-21, the provisions of which took effect on October 1, 2012, increased the permitted weight allowance to 550 lb.



December 2012

Missouri's legislative session begins January 9. For more information, please see http://www.landlinemag.com/Story.aspx?StoryID=24506 and

http://www.senate.mo.gov/13info/pdf-bill/intro/SB43.pdf. Source: Keith Goble, State Legislative Editor, Land Line.

EPA Issues Final Rule for Revised Annual PM_{2.5} Standard

The EPA has revised its National Ambient Air Quality Standard for fine particles (i.e., particulate matter less than 2.5 micrometers [μ m] in diameter, or "PM_{2.5}"). The annual health standard will be 12 micrograms per cubic meter (μ g/m³), reduced from the 15 μ g/m³ threshold set in 1997. The agency did not revise the daily standard for PM_{2.5} or the standards for coarse particle pollution (PM₁₀).

According to the EPA, 99% of U.S. counties will likely meet the $12 \mu g/m^3$ standard by 2020 without instituting further measures. The counties expected to require new initiatives to meet the standard by 2020 are located in central-to-southern California (http://www.epa.gov/pm/2012/2020map.pdf).

PM_{2.5} is of particular concern because particles so small—1/30th the width of a human hair—may become lodged deep in lung tissue, compromising health. The EPA states that, by 2030, the reduction in PM_{2.5} associated with diesel vehicles and equipment alone will prevent as many as 40,000 premature deaths, 32,000 hospital admissions, and 4.7 million days of work lost due to illness.

For more information about the new PM $_{2.5}$ standard, please go to http://yosemite.epa.gov/opa/admpress.nsf/d0cf6618525a9efb8525735900 $\underline{3fb69d/a7446ca9e228622b85257ad400644d82!OpenDocument}$. The final rule can be found at

http://www.epa.gov/airquality/particlepollution/2012/finalrule.pdf.

AWARDS AND RECOGNITION

RECIPIENT	SOURCE OF FUNDING	PURPOSE OF GRANT	FUNDING
Idaho Department of Environmental Quality	U.S. EPA West Coast Collaborative	Purchase and installation of fuel operated heaters for 20 school buses and closed crankcase ventilation systems and diesel oxidation catalysts for 15 school buses	\$120,623
Motiv Power (Foster City, California)	California Energy Commission, Alternative and Renewable Fuel and Vehicle Technology Program	Pilot production line for powertrain components of medium- and heavy-duty electric vehicles	\$2.4 million





December 2012

REPORTS AND OTHER RESOURCES OF INTEREST

SOURCE	TITLE	WEBSITE OR CONTACT
Carbon War Room	Road Transport: Unlocking Fuel-Saving Technologies in Trucking and Fleets	http://www.grahampeacedesignmail.com/cwr/cwr2012 trucking finall download singles.pdf
EPA	Using MOVES [MOtor Vehicle Emissions Simulator] for Estimating State and Local Inventories of On-Road Greenhouse Gas Emissions and Energy Consumption: Final Report	http://www.epa.gov/otaq/stateresources/420b12068.pdf
Health Effects Institute	Potential Air Toxics Hot Spots in Truck Terminals and Cabs	http://pubs.healtheffects.org/view.php?id=393
Idaho National Laboratory	Quantifying the Effects of Idle-Stop Systems on Fuel Economy in Light-Duty Passenger Vehicles	http://www1.eere.energy.gov/vehiclesandfuels/avta/pdfs/mhv/idlestop light duty passenger vehicles.pdf
Pike Research	Advanced Lead-Acid Batteries: Enhanced Flooded, Valve-Regulated, Lead-Carbon, and UltraBatteries for Motive, Transportation, and Stationary Applications: Global Market Analysis and Forecasts	Summary and ordering information available at http://www.pikeresearch.com/research/advanced-lead-acid-batteries
Texas Commission on Environmental Quality	Texas Emissions Reduction Plan Biennial Report (2011–2012)	http://www.tceq.state.tx.us/assets/public/comm_exec/pubs/sfr/079_1 2.pdf
Trucking Social Media and AireDock	Truck Stop Electrification Survey	http://www.truckingsocialmedia.com/documents/truck-stop- electrification-survey-analysis.pdf

UPCOMING MEETINGS AND EVENTS

[Brown text indicates a new entry since last month.]

MEETING	LOCATION	DATE	WEBSITE OR CONTACT
Transportation Research Board (TRB) 92nd Annual Meeting	Washington, D.C.	January 13–17, 2013	http://www.trb.org/AnnualMeeting2013/AnnualMeeting2013.aspx
Idle Free Fleets Conference, hosted by Utah Clean Cities and Rio Tinto's Kennecott Utah Copper	West Valley City, Utah	January 15, 2013	http://utahcleancities.org/calendar/jan-15- 2013/idle-free-fleets-conference



December 2012

MEETING	LOCATION	DATE	WEBSITE OR CONTACT	
How To Comply with CARB Diesel Regulations	Gardena, California—January 22, 2013 Diamond Bar, California—January 23, 2013 Sacramento, California—January 28, 2013 (also webcast)		http://www.arb.ca.gov/training/courses.php ?course=520	
Society of Automotive Engineers (SAE) Government/Industry Meeting (in conjunction with the Washington, D.C., Auto Show)	Washington, D.C.	January 31–February 1, 2013	http://www.sae.org/events/gim/	
Midwest Truck and Trailer Show	Peoria, Illinois	February 1–2, 2013	http://www.midwesttruckshow.com/	
Green Truck Summit	Indianapolis, Indiana	March 5–6, 2013	http://www.calstart.org/Events/CALSTART- Events/Green-Truck-Summit.aspx	
Screening of <i>Idle Threat</i>	Washington, D.C.	March 17, 2013	http://www.idlethreatmovie.com	
Mid-America Trucking Show	Louisville, Kentucky	March 21–23, 2013	http://www.truckingshow.com/	
Energy Independence Summit	Washington, D.C.	April 8–10, 2013	http://www.transportationenergypartners.org/events/eis2013	
National Association of Fleet Administrators (NAFA) Institute and Expo	Atlantic City, New Jersey	April 23–26, 2013	http://www.nafainstitute.org/	
Government Fleet Expo & Conference (GFX)	San Antonio, Texas	June 10–12, 2013	http://www.governmentfleetexpo.com/	
Alternative Clean Transportation (ACT) Expo	Washington, D.C.	June 24–27, 2013	http://www.actexpo.com/index.html	
Green Fleet Conference	Phoenix, Arizona	October 1–2, 2013	http://www.greenfleetconference.com/	

MANUFACTURERS' NEWS

Webasto and ESW Partner for Emissions Reduction Synergy

Webasto Product North America (Fenton, Michigan) and ESW Group (Montgomeryville, Pennsylvania) have announced a partnership to integrate

their respective emissions reduction technologies. According to a joint press release, Webasto's fuel-operated heaters, when used in



December 2012

combination with ESW's diesel particulate filter system, will eliminate cold starts, reduce soot production at engine start-up, and reduce the frequency of filter regeneration cycles.

The partnership will also facilitate opportunities for Diesel Emissions Reduction Act (DERA) funding. Earlier this year, the U.S. EPA announced that stand-alone idling reduction projects (except for those associated with locomotives, shore connection systems, or truck stop electrification technologies) would no longer be eligible for DERA funding. However,

projects that combine verified idle reduction technologies and verified exhaust controls, on the same vehicles, would be eligible for funding of up to 100% of the cost, including equipment and labor.

More information about the Webasto-ESW partnership is available at http://eswgroup.com/webasto-and-esw-group-form-strategic-partnership-to-assist-transportation-industry-achieve-clean-air-goals/. For more information about changes made to DERA project eligibility in 2012, please go to http://www.epa.gov/cleandiesel/documents/fy12-dera-faq.pdf.

ELECTRIFIED PARKING SPACES

More STEP Sites Launched, TRU Connections Multiply

Shorepower Technologies has announced the opening of eight new sites, five of which offer 480-V connections for transport refrigeration units (TRUs). The newest installations are in Dunnigan, California (Pilot Travel Center, 24 plug-ins and 5 TRU connections); Lamar, Colorado (Ports to Plains Travel Plaza, 20 plug-ins); Parma, Michigan (Parma Travel Center, 24 plug-ins); Springer, New Mexico (Russell's Truck and Travel, 24 plug-ins and 4 TRU connections); Canton, Texas (Dukes Travel Plaza, 24 plug-ins and 5 TRU connections); Beaver, Utah (Eagle's Landing/Flying J, 24 plug-ins and 4 TRU connections); Evansville, Wyoming (Eastgate Travel Plaza, 24 plug-

ins); and Little America, Wyoming (Little America, 36 plug-ins and 5 TRU connections).

The new installations are part of the Shorepower Truck Electrification Project (STEP), a program supported by the U.S. Department of Energy (DOE) through the American Recovery and Reinvestment Act (ARRA). To see a list of all Shorepower sites, please go to http://www.shorepower.com/network.html.

TSE Unplugged: Electrification Project Falls Flat at a North Carolina Travel Plaza

CabAire (Enfield, Connecticut) has removed its truck stop electrification (TSE) pedestals from the Derrick Travel Plaza in Salisbury, North Carolina. According to local news source, *The Salisbury Post*, CabAire sent the Centralina Council of Governments (COG) a letter in early December claiming that the property owner, Worsley Operating Corporation, made

the TSE provider remove its equipment in preparation for a property sale to Love's Travel Stops.

When it opened in 2010, Derrick's TSE installation had been long awaited. After more than 5 years of multi-agency planning and coordination, the



December 2012

travel plaza launched the CabAire TSE system, which provides heat, air conditioning, Internet, cable access, and electrical power to truck drivers during rest periods. The project cost was \$760,000, \$400,000 of which came from a Congestion Mitigation and Air Quality (CMAQ) grant obtained by the Centralina COG.

The terms of the agreement require at least 7 years of TSE service. Copies of contracts obtained by *The Salisbury Post* indicate that if the project is terminated within 3 years, the CMAQ grant must be repaid in full. According to the newspaper, the Centralina COG maintains that CabAire did not take

proper steps to save the project and has given CabAire until February 4 to reimburse the \$400,000 CMAQ grant it received.

The Derrick Travel Plaza is in Rowan County, which is in nonattainment for ground-level ozone. Much more information is available at http://www.salisburypost.com/article/20130102/SP01/130109962/1014/SP010 and

http://www.salisburypost.com/article/20121215/SP01/121219836/1023/many-questions-few-answers-about-removed-truck-stop-towers.

RAILROADS

Alaska Railroad Reduces Idling with a Low-Tech Solution

Alaska Railroad's employee suggestion program has yielded a change that supports both fuel savings and improved air quality. Rather than idling inactive locomotives in a rail yard to keep the engines from freezing, the company now moves the locomotives indoors where the engines can be shut down without risk of freezing. According to the Alaska Railroad, the company saved nearly \$80,000 in fuel costs in the first 3 weeks alone.

The next phase of the project, according to David Greenhalgh, the railroad's Director of Crew Management and Transportation Services, will be to track

the positive environmental impact of producing fewer emissions. In 2009, the EPA determined that portions of the Fairbanks North Star Borough were in nonattainment for $PM_{2.5}$. Fairbanks is surrounded by hills on three sides, making it susceptible to temperature inversions, which can trap pollutants near the ground.

More information about the railroad's idling reduction project is available at https://www.alaskarailroad.com/Portals/6/pdf/pr/2012 11 27 Rls Fbks Emiss ions PR.pdf.

OTHER NEWS OF INTEREST

Idle, or Stop and Restart? Argonne Studies the Impacts of Brief Passenger-Car Stops

As towns and cities—especially those in EPA National Ambient Air Quality Standards (NAAQS) nonattainment areas—seek ways to improve air quality,

officials have taken a harder look at emissions associated with drive-through businesses. Some have called for a ban on the construction of new drive-



December 2012

through restaurants, or even reducing the number of existing drivethroughs. In response, a few business owners have claimed that the use of drive-throughs is actually "greener" than stopping, turning off the engine, and exiting the vehicle to enter the business, because it reduces the number of engine starts.

To tackle the question of how long one can idle in queue before the emissions and fuel-use impacts are greater than they are for restarting test this statement, Argonne National Laboratory investigators took measurements using a 2011 Ford Fusion and a dynamometer at Argonne's Advanced Powertrain Research Facility. The measurements showed that for short stops—even those as brief as 10 seconds—turning off the engine saves fuel. The study also found that shutting down the engine reduces carbon dioxide emissions. The findings suggest that at temperatures around 70°F, a driver may park, shut down the vehicle engine, and conduct a transaction in a bank or fast-food restaurant without risk of the engine's catalytic converter cooling to below operating, or "light-off," temperature. (A cooled catalyst would allow for higher, cold-start emissions.) The study also found that idling is an inefficient way to warm up a car.

Dr. Linda Gaines, a member of the team, says that while the findings provide a sound, preliminary basis for minimizing environmental impact during brief passenger-car stops, additional work simulating other conditions (e.g., different ambient temperatures) is needed. Dr. Gaines also warns that while these findings demonstrate the fuel waste and emissions associated with even very brief episodes of passenger car idling, they should not be taken as guidance to turn off one's engine in traffic jams. Because other drivers

expect that all drivers will respond immediately to traffic movement, shutting down the engine could lead to collisions.

To read the study, please go to

http://www.transportation.anl.gov/engines/idling_publications.html and click on, "Which is Greener: Idle, or Stop and Restart? Comparing Fuel Use and Emissions for Short Passenger-Car Stops." (Photo: Ford Fusion instrumented for study at Argonne's Advanced Powertrain Research Facility. Courtesy of Argonne National Laboratory)





December 2012

RECURRING FEATURES

Currently Available Idling Reduction Equipment

The Alternative Fuels Data Center (AFDC) of the U.S. DOE's Office of Energy Efficiency and Renewable Energy (EERE) identifies manufacturers of idling reduction equipment and provides links to their websites. More information is available at

http://www.afdc.energy.gov/afdc/vehicles/idle_reduction_equipment.html. For EPA-verified idling reduction technologies in eight categories, please visit EPA's SmartWay Transport website at http://www.epa.gov/smartway/technology/idling.htm.

Status of the Weight Exemption for Idling Reduction Devices

[Ed. note: The Energy Policy Act of 2005 allowed for a national 400-pound exemption for the additional weight of idling reduction technology on heavy-duty vehicles. On October 1, 2012, Moving Ahead for Progress in the 21st Century (MAP-21) became law, increasing this weight allowance from 400 lb to 550 lb. Each state can adopt this exemption, at its own discretion. We are not aware of any states that have yet increased the weight allowance to 550 lb. If you have information about planned or enacted

changes, please send a message to idlingreduction@anl.gov so that we may share the news with our readers.]

The following table is updated as we become aware of changes. As time permits, we will provide URLs so that interested parties, such as trucking companies, can work with their state trucking associations to be sure that enforcement officials are aware of changes in the laws.

State Recognition of the 400-Pound Auxiliary Power Unit Exemption to GVW Limit: 23 CFR 658.17(n)						
Alabama	District of Columbia	Kansas	Mississippi*	New York	South Carolina	West Virginia
Alaska	Florida	Kentucky	Missouri	North Carolina	South Dakota*	Wisconsin
Arizona	Georgia	Louisiana*	Montana*	North Dakota	Tennessee	Wyoming*
Arkansas*	Hawaii	Maine	Nebraska	Ohio*	Texas	
California	Idaho*	Maryland	Nevada*	Oklahoma	Utah*	
Colorado	Illinois	Massachusetts*	New Hampshire	Oregon	Vermont*	
Connecticut	Indiana	Michigan*	New Jersey*	Pennsylvania	Virginia	
Delaware	lowa*	Minnesota	New Mexico	Rhode Island	Washington	

States in **black** allow the 400-lb weight exemption (asterisk means that the allowance is granted by enforcement policy rather than by state law); states in *gray* do not permit the exemption; and states in **brown** have legislation in process.



December 2012

Summary of State and Municipal Idling Regulations

The most current information about idling regulations, for both states and municipalities, is available at http://atri-online.org/2012/07/20/idling-regulations-compendium/ and http://www.afdc.energy.gov/laws/matrix/tech.

If information for your state or municipality is outdated or erroneous, please let us know. This newsletter is also a place to let people know about possible changes in laws or regulations or the solicitation of comments related to such.

Incentives and Funding Opportunities for Idling Reduction Projects

The DOE Clean Cities initiative provides a listing of federal and state programs that offer incentives and funding for idling reduction projects. Information can be found at http://www.afdc.energy.gov/laws/. Let us know if any information needs to be changed or updated. Additionally, the EPA Diesel Collaboratives offer news of available grant and loan programs. For the Northeast Diesel Collaborative (Regions 1 and 2), see http://northeastdiesel.org/funding.html; Mid-Atlantic Diesel Collaborative (Region 3), http://www.dieselmidatlantic.org/diesel/funding.htm; Southeast Diesel Collaborative (Region 4),

http://www.southeastdiesel.org/funding.html; Midwest Clean Diesel Initiative (Region 5), http://www.epa.gov/midwestcleandiesel/grants/index.html; Blue Skyways Collaborative (Regions 6 and 7 plus Minnesota), http://www.blueskyways.org/funding/index.html; Rocky Mountain Clean Diesel Collaborative (EPA Region 8), http://www.epa.gov/region8/air/rmcdc/; and West Coast Collaborative (EPA Regions 9 and 10 plus Canada and Mexico), http://www.westcoastcollaborative.org/funding-opportunities.htm.

Tools Available To Calculate the Cost of Idling Reduction Equipment

There are a number of tools available to workplace and truck fleet managers, owner-operators, and locomotive engineers to help determine the costs and benefits of paying for and installing idling reduction equipment. A site from Canada that quantifies the costs of workplace idling

- Argonne National Laboratory
 (http://www.transportation.anl.gov/engines/idling.html—choose a calculator from the right side of the Web page)
- Autotherm (http://autothermusa.com/wordpress/calculate-idling-costs-savings/)
- Bergstrom (<u>http://us.bergstrominc.com/nite-calculate-savings/</u>)

is also included. The calculators are provided as tools of possible benefit; their accuracy has not been verified. Any new entry this month is shown in brown. If you are aware of other sources of information that may be of possible interest to newsletter readers, please let us know.

- DOE Clean Cities program (https://www.afdc.energy.gov/afdc/prep/)
- Energy Xtreme (http://www.energyxtreme.net/resources/calculator)
- Espar (http://www.espar.com/html/service/calculator/calculator.html)
- Fraser Basin Council
 (http://web.memberclicks.com/mc/page.do;jsessionid=d0301a9d9869f
 a88bfd51e50592a377d5d48?sitePageId=40919&orgId=clcc)
- Hodyon (http://www.hodyon.com/calculator.aspx)



December 2012

- Hotstart (http://www.hotstart.com/fuel-consumption-calculator/)
- Idle Free Systems (http://idlefreesystems.com/no-idle-elimination-solutions-for-sleepers.html)
- Kenworth (http://www.kenworth.com)
- Kohler Power Systems
 (http://www.kohlerpower.com/mobile/solutions/apucalculator.htm?se
 ctionNumber=13361&nodeNumber=1&contentNumber=102)
- LifeForce (http://lifeforceapu.com/files/LifeforceCalculator.xls)

- Natural Resources Canada (http://oee.nrcan.gc.ca/transportation/tools/calculators/Idling/idlingimpact-workplace.cfm?attr=16)
- Odyssey Battery (http://www.odysseybattery.com/fleet.html)
- Thermo King (http://www.thermoking.com/tripac/)
- Webasto
 (http://www.techwebasto.com/calculators/heater/heater fuel_calculator_us.htm)

Locations of Electrified Parking Spaces

In collaboration with the U.S. Department of Transportation (DOT), the DOE Clean Cities initiative offers a website showing the locations of public truck stops that have idling reduction facilities for heavy-duty trucks. These facilities are currently available in at least 23 states. AireDock, CabAire, EnviroDock, IdleAir, and Shorepower Technologies installations are listed at http://www.afdc.energy.gov/afdc/locator/tse. Another resource is the EPA SmartWay Interactive Activity Map, which features data from SmartWay Partners, National Transportation Idle-Free Corridors, National Clean Diesel

Campaign Retrofit projects, Clean School Bus USA projects, ethanol (E-85) and biodiesel fueling station projects, and other related sources. The maps enable visualization of the locations of specific fuel consumption and pollution reduction projects. The maps also help users locate the nearest electrified truck stop and the nearest public alternative-fuel filling station. For more information, please go to

http://www.afdc.energy.gov/afdc/locator/tse/.

How To Find Back Issues of National Idling Reduction Network News

All issues of *National Idling Reduction Network News* may be found at http://www.eere.energy.gov/vehiclesandfuels/resources/fcvt_national_idling.httml. Additionally, a compendium of all previous issues is available on the site; this PDF file is especially useful for conducting searches of all issues of the newsletter.

Please be mindful that Web links may expire or move over time and that some sources require registration. If you have trouble opening a link, try copying and pasting it, or retyping the URL, in your browser window.



December 2012

Editor

Terry Levinson, Energetics, Inc., (202) 595-4641, tlevinson@energetics.com

Writer

Patricia Weikersheimer, Argonne National Laboratory, (630) 252-3124, idlingreduction@anl.gov

Disclaimer

This newsletter was prepared as an account of work sponsored by an agency of the United States Government. Neither the United States Government nor any agency thereof, nor UChicago Argonne, LLC, nor any of their employees or officers, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its

use would not infringe privately owned rights. Reference herein to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government or any agency thereof.

