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Lead by Example: Government Agencies at Work Reducing Air Emissions in the Treasure Valley

Vehicle Fleets

In 2002, state agencies purchased or leased 382 vehicles and managed a fleet of over 4,000 vehicles. State fleets travel approximately 45 million miles per year, emitting approximately 1,250 tons of air pollution and 18,000 tons of greenhouse gases. Agencies can minimize air pollution through careful purchasing practices and proper vehicle maintenance. A side benefit is the cost savings from lower fuel purchases.

Vehicle Purchasing

- Evaluate agency needs and match type of vehicle purchased to intended use.
- Purchase the most fuel-efficient vehicle in class. Save between \$300-\$500 per year in fuel costs.
- Consider new hybrid technologies. Currently available hybrid vehicles get over 50/mpi and generally reduce annual fuel costs by up to 50%. Vehicles run on regular unleaded gasoline and require no modifications in fueling process or driving style.
- Consider purchasing vehicles that can be alternatively fueled. Flexible-fueled vehicles have one fuel tank that can run on traditional gasoline and an alcohol blend such as ethanol. Bi-fuel vehicles have two fueling systems and can run on traditional fuels or an alternative fuel such as compressed natural gas (CNG), propane, or ethanol. Many manufacturers sell flexible- or bi-fueled models of common vehicles.

Resources

Visit U.S. Environmental Protection Agency's (EPA) Web site at www.fueleconomy.gov to compare emission factors and fuel economies of vehicles or print a list of vehicle classes by fuel efficiency. This site also has information on alternatively fueled vehicles and hybrids.

EPA's Green Vehicle Guide ranks classes of vehicles by fuel economy. Download this publication at <http://www.epa.gov/greenvehicles/>.

Maintenance

Ensuring vehicles are properly maintained can improve fuel economy and minimize emissions. Fixing a car that is noticeably out of tune can improve gas mileage by about 4%.

- Develop a maintenance plan for fleet vehicles.
- Schedule regular tune-ups. Vehicles with worn spark plugs or clogged fuel or air filters do not run efficiently and emit more pollution. Replacing a clogged air filter can improve gas mileage by as much as 10%.
- Keep tires properly inflated and wheels aligned to reduce tire drag on the road. Gas mileage drops 1% for every pound of tire pressure below the recommended level. Check the owner's manual or vehicle certification label (often located on the driver-side door) for recommended tire pressures.

- ❑ Ensure vehicles are using the manufacturer-recommended grade of motor oil specified in the owner's manual. This can reduce fuel costs by 3-5¢/gallon.
- ❑ If possible, ensure all vehicles are emissions-tested once per year regardless of fleet location. Stations throughout Ada County provide this service.

Scheduling and Use

Through planning and organization, agencies can ensure fleet vehicles are used efficiently.

- ❑ Develop a scheduling and monitoring process to track vehicle usage.
- ❑ Look for carpooling opportunities. Encourage employees attending the same meeting or traveling to the same city to share a vehicle.
- ❑ Schedule the type of vehicle according to use. Trucks work great off-road or for carrying heavy loads, but for across town travel or highway driving, use lower-emissions cars.
- ❑ Consider alternative fuels. For example, biodiesel blends (B20) can be used as a diesel substitute, and a public fueling station is available in the Treasure Valley. Carefully research options as not all alternative fuel blends reduce emissions. Some actually may cause an increase in certain air pollutants.
- ❑ Fuel agency vehicles at stations that employ vapor recovery measures.
- ❑ Instruct employees not to top off the gas tank. Topping off allows harmful chemicals to escape into the air.
- ❑ Explore options for teleconferencing as an alternative to on-site meetings.
- ❑ Reduce idling time. A typical heavy-duty truck can burn one gallon of fuel for every hour it idles, emitting significant amounts of air pollution and wasting fuel.

Resources

Idaho Department of Water Resources (IDWR) runs an alternative fuels and biodiesel program. Visit its Web site at www.idwr.idaho.gov or call (208) 327-7900.

U.S. Department of Energy (DOE) provides a list of alternative fueling stations in Idaho and nationwide at <http://www.afdc.doe.gov/refueling.html>.

The Air Quality Board oversees the emissions testing program for Ada County. Visit its Web site at <http://www.emissionstest.org>.

Employee Commuting

The State has approximately 11,000 employees in the Treasure Valley. Assuming the average commute is approximately 15 miles roundtrip, that's over 80 tons of pollution each day or 20,000 tons of pollutants each year emitted from state employee vehicles. Now, if every employee took an alternative form of transportation just one day a month, we could reduce air pollution by 960 tons a year. If 10% of state employees used alternative transportation daily, we could reduce air pollutants by 2,000 tons per year. Every action helps!

- ❑ Designate an Employee Transportation Coordinator to assist employees in finding alternative transportation programs and services.
- ❑ Include information on alternative commuting in new-employee orientation.

- ❑ Participate in transportation workgroups such as the Capitol Mall Transportation Committee.
- ❑ Participate in valley-wide commuter challenges.
- ❑ Invite Ada County Commuteride to address employees at least once per year.
- ❑ Provide shower/locker facilities for employees.
- ❑ Offer flexible work schedules to accommodate bus and vanpool schedules.
- ❑ Provide bicycle lock up options (bike racks, bike lockers, etc.)
- ❑ Create incentives for employees to take alternative transportation. Examples may include designated parking spaces for carpool/vanpool vehicles, free bike locks, and discounts toward vanpool or bus passes.
- ❑ Track employee efforts and report alternative transportation successes to employees. For example, in 2003, by making alternative transportation choices, DEQ employees reduced vehicle miles traveled by more than 150,000 miles, avoiding generation of over 70 tons of air pollution.

Resources

Ada County Commuteride offers assistance to employers in setting up alternative commuting programs and works with employees to find commuting alternatives. Services include discounted bus passes for new users and guaranteed ride home programs. Visit its Web site at www.commuterride.com or call (208) 345-POOL.

The Idaho Capitol Mall Transportation Committee is a group of state agency representatives committed to alternative transportation. Visit its Web site at www.icmtc.com.

Building Operations and Maintenance

Common maintenance activities can contribute to air pollution.

Lawn Care

Small engines used to power lawn mowers and other garden equipment create air pollution.

- ❑ Avoid using gas-powered tools. Operating a gas-powered lawn mower for one hour produces as much pollution as driving a car 50 miles. Specify efficient or electric lawn mowers, if possible, in maintenance contracts.
- ❑ Reduce lawn mowing and power-equipment activities during high ozone days. Allow flexibility in maintenance contracts to minimize or delay mowing on ozone action days.
- ❑ Reduce maintenance and save money on watering bills by replacing grass lawn areas with xeriscape gardens using native vegetation. University extension offices offer information on native landscaping through Master Gardener Programs.
- ❑ Plant slow-growing grasses in lawn areas to reduce mowing time and frequency.

Resources

Idaho Master Gardener program provides information and links on gardening and landscaping in Idaho. Visit its Web site at <http://www.ag.uidaho.edu/mg/>.

Building Maintenance

Paints, adhesives and solvents contain Volatile Organic Compounds (VOCs) that contribute to ozone formation.

- ❑ Specify no- or low-VOC products when contracting interior and exterior painting.
- ❑ Schedule painting and remodels that may emit VOCs during times when air pollution levels are likely to be low. The Treasure Valley experiences winter inversion and summertime ozone seasons during which concentrations of pollutants are likely to be highest.
- ❑ Traditional carpet with adhesives off-gas VOCs and other indoor air pollutants. Choose carpet tiles with ready-strip backings. Carpet tiles allow for replacement of single tiles in case of wear or spills. Ready-strip backings reduce installation time and worker exposure to pollutants from traditional chemical adhesives.

Other Activities

Other Operations and Services

Other activities, such as printing, construction, wood manufacturing, vehicle repair, and painting emit air pollutants. If your agency contracts or conducts a service that creates air pollution:

- ❑ Ensure all operations are permitted according to state and federal rules.
- ❑ Follow best management practices for each specific operation.
- ❑ Work with contractors/service providers to ensure work minimizes air quality impacts.
Example: Ensure contracted construction projects follow best management practices to minimize fugitive dust.
Example: Ensure shop that performs vehicle servicing or repair utilizes best management practices to reduce air emissions from solvents or painting operations.

Resources

Idaho Department of Environmental Quality offers assistance in permitting and pollution prevention. Contact DEQ at (208) 373-0502 or visit our Web site at www.deq.idaho.gov.

Get Recognized

There are many programs that recognize pollution prevention achievements.

- ❑ Idaho GEMStars. Initiated in 1999 by Governor Dirk Kempthorne, Idaho GEMStars, is a statewide pollution prevention (P2) excellence and recognition program. This program provides pollution prevention education and public recognition to businesses, agricultural operations, governmental agencies, school districts and others. Visit the Idaho GEMStars Web site at www.idahogemstars.org
- ❑ EPA's *Best Workplaces for Commuters*, formerly *Commuter Choice Leadership Initiative*, is a recognition program for businesses and organizations who make a commitment to alternative commuting practices. Visit www.bwc.gov for more information.