Local Project Reduces Diesel Emissions from Idling Trains

BNSF Railway, in partnership with Spokane Regional Clean Air Agency (Spokane Clean Air) and HOTSTART is retrofitting 11 locomotives with HOTSTART idle reduction technology to reduce emissions and conserve fuel in Washington. The pool of locomotives will operate out of the BNSF rail yards in Spokane and Pasco Washington.

To lower diesel emissions at its rail yards, BNSF is installing HOTSTART Auxiliary Power Units (APUs) to reduce idling during cold weather. The APU idle reduction technology keeps the engine warm and ready to restart. Shutting down an idling locomotive reduces fuel consumption, oil consumption, emissions, noise and engine wear.

In addition to the APUs, BNSF has installed Automatic Engine Start-Stop systems (AESS) that can be used in conjunction with the APU to shut down the locomotive when not needed. The combination of APUs and AESS can potentially eliminate most locomotive engine idling and significantly reduce emissions. Remote data logging systems will be installed onboard each locomotive to monitor and track data for each of the 11 APU systems.

“HOTSTART is proud to support BNSF in its efforts to reduce locomotive idling,” said Terry Judge, CEO of HOTSTART. “We’re thrilled that our technology, developed and built right here in Spokane, will help BNSF save fuel and reduce emissions right in our own backyard.”

Spokane Clean Air, with technical assistance from Washington State Department of Ecology, facilitated the partnership between BNSF and HOTSTART to purchase the APU idle reduction technology. The project is expected to result in a 22 ton emissions reduction during the six-month “cooler weather” period when the APUs operate.

“This project is an excellent example of how technology can be used to reduce air pollution while saving a company money through significant fuel savings. It is a win-win and we hope to see additional diesel engines retrofitted with idle reduction technology throughout our area,” said Julie Oliver, Director of Spokane Clean Air.

BNSF has already equipped more than 90 percent of its more than 7,500 locomotives with the AESS idle-control technology. All of BNSF’s new locomotives are also equipped with this technology.

EPA Proposes New Ozone Standard

In late November, EPA proposed to strengthen the national ambient air quality standards for ground-level ozone, based on extensive scientific evidence about ozone’s effects on public health and welfare. The proposed standard is a range of 0.065-0.070 parts per million. The current standard is 0.075.

The Clean Air Scientific Advisory Committee and EPA says a revised standard will improve public health protection, particularly for children, the elderly and people of all ages who have lung diseases such as asthma.

Continued on inside...
Commuters are discovering it’s Vantastic to Vanpool

Spokane-area commuters are now enjoying the benefits of vanpooling to work more than ever. According to Spokane Transit, the number of vanpool riders jumped from 150 in 1999 to nearly 900 today. There are currently about 100 vans in operation and Spokane Transit is geared up to grow the vanpool program as demand dictates.

Vanpooling removes 750 cars from regional roads every day, just one way! Double that on the trip home and it’s really 1,500 daily car trips not driven on our roads. Not only does this reduce traffic, it helps lessen road maintenance costs and impacts from air pollution.

What people may not know is that vanpool vans can travel any distance to or from the Spokane Transit boundary area. According to Anne Irmer, Vanpool Manager for Spokane Transit, there are vans traveling to Grand Coulee Dam and Pullman every day and 24 vans traveling from Idaho.

So, why do people love to vanpool? Irmer says that once people find vans that work with their locations and work schedules, it’s a slam dunk. “They are hooked from the first ride,” Irmer said. “Many vans have been operating with original riders for 25 years!”

Many employers support vanpooling by providing subsidies. They see value for many reasons, including reduced employee absenteeism and tardiness, improved morale and productivity and less real estate needed for parking.

Here’s what vanpoolers said when asked, “Why is your vanpool the best?”

“My vanpool is great because we all get along so well. During the commutes there is much jovial banter amongst all the riders; we even play trivia once a week. We all share the burden of driving, so nobody feels undue pressure. Thanks for the awesome program STA!”

“Our van is the greatest because we are like family...we share driving, weekend adventures, vacation and wedding pictures, upcoming community events and even huckleberry locations. Our group is the BEST.”

“I have been vanpooling for 10 years and I LOVE it because it saves me money each month and helps with our city’s air quality and road congestion. I can read my emails and Facebook, or chat with other riders. Sometimes I actually catch a little snooze!”

“I’m doing my part to keep our air cleaner. I get power naps to decompress after work and start my evening refreshed and revived for my family...not to mention the money savings!”

Since 2012, Spokane Transit has eliminated over six million passenger miles from being driven on area roads, provided 250,000 trips, equaling 1.2 million commute vehicle miles annually. This translates to many benefits for our community such as reduced road congestion, improved public safety and various associated environmental benefits of cleaner air and water.

The average commute distance is 50 miles round trip, but many vans travel anywhere from 20 miles to 180 round trip miles. The average fare for 50 miles is about $45. Most Coeur d’Alene to Spokane riders are in the $55 range. A van can operate on any schedule—3 days, 4 days, or even 7 days a week. Some vans operate everyday by combining 20 or more riders who all work different days, but share the cost of just one van.

Spokane Clean Air sponsored a Vantastic Vanpool promotion to recognize and reward commuters who vanpool to work instead of driving alone. A random drawing of registered vanpoolers was held and Kenneth Schueler won a day trip for four to Leavenworth, donated by Radio Spokane.

A second drawing was held of vanpoolers who submitted essays describing why they believe their vanpools are the best. The winning entry was submitted by Steve Selser, a vanpool rider from Fairchild Air Force Base. All the vanpool riders received gift bags donated by Radio Spokane that included gift certificates donated by Luigi’s restaurant.

A special thanks to all commuters who choose “clean air” commutes!
The proposed standards reflect strong scientific evidence regarding the harmful effects of ozone on human health and welfare (trees, plants, crops and ecosystems) including more than 1,000 new studies.

Decades of research links ozone to asthma attacks, bronchitis, heart attacks and premature death. EPA analyses show that reducing ozone can improve yields for timber and some crops, such as soybeans and winter wheat.

About Ground-Level Ozone
Ozone is the main component of smog. It is not emitted directly into the air but forms when emissions of precursors, including nitrogen oxides (NOx), volatile organic compounds (VOCs), carbon monoxide and methane “cook” in the sun. That’s why ozone levels are at their highest during the summer in most parts of the country.

In our area, VOC and NOx emissions come mostly from the transportation section (motor vehicle exhaust and gasoline vapors from refueling and evaporation) as well as chemical solvents and industrial emissions.

Can ozone be both good and bad?
Ozone can have good or bad effects, depending on where it’s located in the atmosphere.

Close to the Earth’s surface, ground-level or “bad” ozone is harmful to breathe and it damages crops, trees and other vegetation. High up in the atmosphere, stratospheric or “good” ozone protects life on Earth from the sun’s harmful ultraviolet (UV) rays.

One way to remember whether ozone is “good” or “bad” for us is, “good up high, bad nearby.”

Why did EPA release a new draft standard now?
Under the Clean Air Act passed by Congress, EPA is required to review the health and welfare standards for certain pollutants every five years.

As part of that review, they convene a group of independent scientific advisors, called CASAC (Clean Air Scientific Advisory Committee) to review the latest health information and make a recommendation. CASAC advised EPA that the current standard of 0.075 parts per million (ppm) is not fully protective of public health and recommended a new stricter standard between 0.060-0.070 ppm. The Committee also expressed concerns that setting the standard at the high end of that range (0.070 ppm) might not provide an “adequate margin of safety” as required by the Clean Air Act.

EPA is proposing the standard be set between 0.065 - 0.070 ppm and is currently holding public hearings and accepting public comments. EPA will issue the final standard by October 2015.

What are Spokane’s ozone levels?
The chart below depicts our ozone trends over the last several years. The shaded range is the proposed standard. If the standard is set on the low end, we could be facing some challenges to keep meeting the revised standard.

What can I do to help reduce ozone pollution?
We can all take steps to help reduce the chemicals that cause ozone to form. This is especially important during the peak ozone season, which is July and August in our area.

On days when the temperatures are in the 90s is when ozone will be highest. On these days, cut back on anything that uses gasoline, like driving and mowing the lawn. Sharing rides to work or taking the bus, and combining errands into fewer car trips. Refueling your gas tank in the evening hours and not topping off your tank can also help.

Where can I learn more and provide comments?
EPA’s website: www.epa.gov/air/ozonepollution/
Happy New Year!

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<tr>
<th>Date</th>
<th>Event</th>
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<tr>
<td>Feb 5</td>
<td>Spokane Clean Air Board of Directors meeting, 9:30 a.m., at SRCAA’s office. Meeting agendas are posted at SpokaneCleanAir.org</td>
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<tr>
<td>Mar 5</td>
<td>Spokane Clean Air Board of Directors meeting, details above.</td>
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340 old wood stoves scrapped; over 14 tons of soot, smoke particles reduced

Spokane’s winter air quality just got a little cleaner thanks to the 340 area residents who decided it was time to replace their pre-1995 wood stoves with something newer, cleaner and more efficient.

By upgrading old stoves, area residents were able to take advantage of state grant dollars to make the upgrades a little easier.

“It’s an investment to upgrade old devices. It certainly does help air quality which is significantly degraded by wood smoke during the heating season,” according to Lisa Woodard, grant coordinator.

Under the program, a $500 “instant rebate” was available for pre-qualified applicants switching to a new wood heating device, $700 for those upgrading to a pellet stove, and $1,000 for switching to a gas device or a mini-split, ductless heat pump. The discounts were provided at the point of sale by the retailer, who was then reimbursed upon providing the necessary paperwork, including a Certificate of Destruction signed by the recycling center.

“This program has been a win-win for our community. It has reduced air pollutants, provided an additional economic boost to our local hearth industry and has assisted many local residents in upgrading to cleaner and more efficient devices,” said Jill Spurbeck, Officer Manager for Falco’s Fireplace & Spa.

“We hope to secure future funding because there are still plenty of older stoves that need to be retired,” added Woodard.