Environmental Achievements

New River Valley Plant
Dublin, VA

Overview

The New River Valley (NRV) Plant, located in Dublin, Va., manufactures and assembles both MACK® and Volvo brand trucks. The facility was first certified to the ISO 14001 standard in November 2000 and recertified in 2006. Since 2000, the NRV plant has made substantial progress toward its goals of minimizing the impacts of its operations to the environment and the community, through efforts to:

- Ensure compliance with environmental regulatory requirements
- Enhance their emergency management program
- Develop and implement waste reduction programs (reuse, reduce and recycle)
- Reduce consumption of natural resources – specifically energy and water consumption

Energy Reduction and Air Emissions

NRV recognizes that its energy usage contributes to the production of greenhouse gases and ultimately to climate change. As a result, the operation has set a goal of being 50% carbon neutral in terms of energy usage and demand by 2008.

Since 2002, the facility has aggressively pursued a range of energy reduction strategies, including conservation, substitution of less-polluting fuels, and adoption of new energy technology – especially renewable energy systems.

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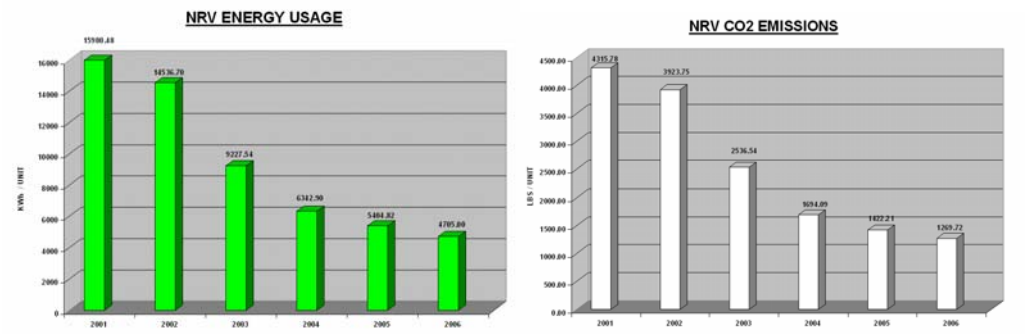
As a result, on average for the past four years, the climate change impact of NRV's **annual** reduction in energy use for electricity and natural gas is equivalent to the following:

- Not driving 5,200 passenger cars for one year, or
- Not using 2,742,000 gallons of gasoline, or
- Not using 56,000 barrels of oil, or
- Not burning 122 railcar loads of coal, or oil
- Preserving 200 acres of forest from deforestation



Under the EPA's **Climate Leaders** program, NRV has publicly committed to reducing greenhouse gas emissions by 20% by 2010 and they are projected to meet their commitment much earlier than expected. Using 2003 as the baseline year, NRV has already reduced greenhouse gas emissions by 40%.

Looking forward, NRV continues to look for improvements in energy reduction:

- A wind turbine for energy generation was installed in the summer of 2007:

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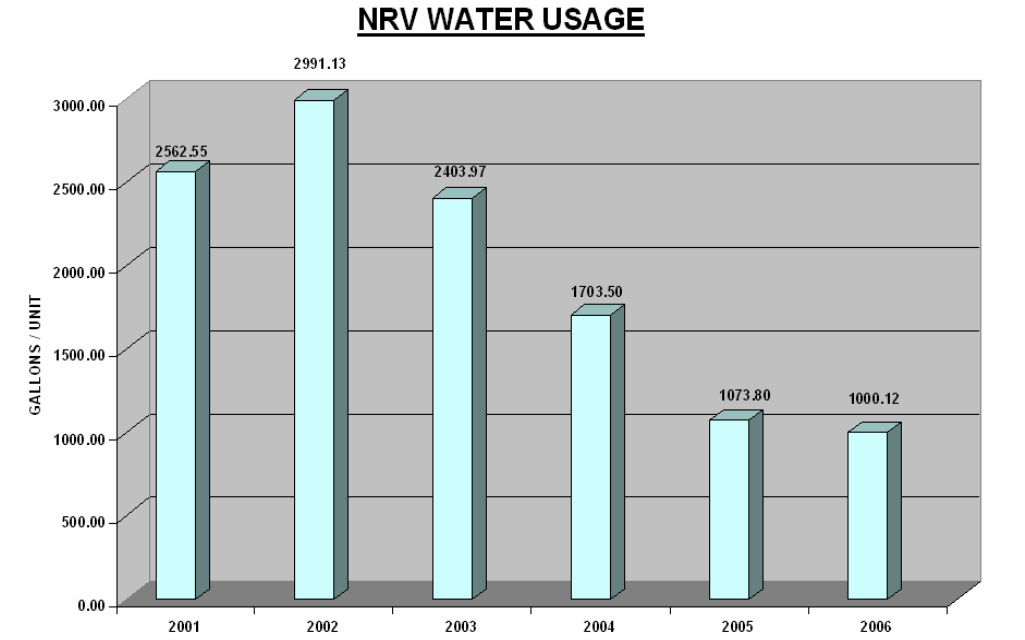
- The facility is evaluating the purchase of Renewable Energy Certificates (RECs). RECs, also known as a *green tag* or *tradable renewable certificate*, represents the environmental, social and other positive attributes of power generated by renewable energy sources. For example, RECs may represent the emissions avoided by renewable power generation compared with those of conventional sources.
- NRV is also studying the possible use of waste methane gas from landfills as a fuel source for electric generation

Water usage

Recognizing that water is a valuable resource, the NRV Plant strives to reduce water consumption throughout the facility – with the goal of recycling 100% of all process wastewater generated at the facility. For example, with the installation of a wastewater treatment system, water used in the truck painting process can be reused in the plant's cooling towers, air supply houses, paint booths as overspray water, and the cab parts washer process. As a result of these improvements:

- In May 2007, the plant recycled and reused approximately 337,000 gallons of water, or 67% of the process water used during this period.
- From January to May 2007, the NRV plant has recycled approximately 1.7M gallons of water for reuse in the plant
- Plant-wide water usage per truck decreased from 2250 gallons per truck in early 2004 to approximately 1000 gallons per truck in 2006 for a 44% reduction in water consumption for the NRV plant
- Since 2004, the plant has reduced water usage by approximately 10 million gallons per year.



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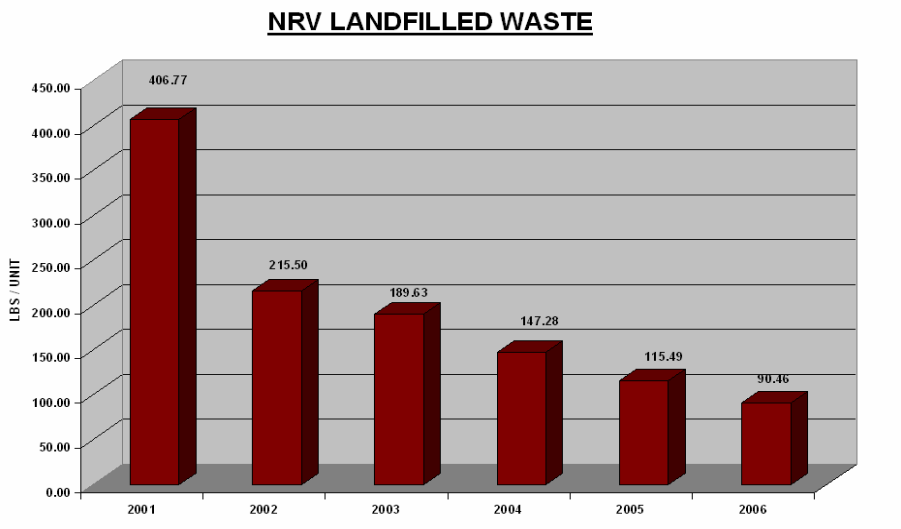
Waste management

The NRV plant currently has programs to ensure that the following materials are recycled or used for waste-to-energy programs: paper, cardboard, wood, plastic, steel, small appliances, batteries, light bulbs, paint sludge and waste paint solvent. As a result of the Plant's aggressive recycling programs, the amount of waste disposed of in landfills has significantly decreased. For example, in 2002, the amount of waste avoiding landfill or recycled was 39% and as of 2006, 72.4% of the waste was recycled. As of mid-2007, NRV plans to recycle (as waste-to-energy) all the remaining non-food waste in the plant. Overall, by early 2008 the NRV operations will be recycling greater than 95% of the waste generated in the plant.



Public recognition for environmental efforts

- Designated as an Exemplary Environmental Enterprise (E3) in 2005 Exemplary Environmental Enterprise Award from the Virginia Department of Environmental Quality(VaDEQ)
- Recipient of the 2006 Volvo Group Environmental Award
- 2005 Virginia Governor's Environmental Excellence Award – Gold Level (Click **Here** to learn more).

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