

# **ENVIRONMENTAL FEATURES**



With an decrease in fuel consumption over the previous fullsize truck, over 302 million litres of gas will be saved during the expected life of the 2007 model year production.

The 2007 Chevy Tahoe incorporates an Onboard Refueling Vapor Recovery System (ORVR). This system prevents 43 kg of hydrocarbons from being emitted into the atmosphere over the expected life of each truck. That equates to more than 5.4 million kg of hydrocarbon emissions prevented for the entire 2007 production fleet.

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Visit us at: www.gmability.com to learn more about GM's products, plants and partnerships. 3 As a result of enhanced engineering on the front and rear differentials, over 3.5 million litres of lubricant can be saved over the expected life of the 2007 model year production.

The 2007 Chevy Tahoe uses a front coil shock module that uses 11 fewer parts and weighs approximately 13.6 kg less per vehicle in comparison to the previous Full-size Utility suspension system. This results in over a 2,268 tonnes weight savings for the 2007 model year production.

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With the optional Active Fuel Management (AFM) system, a 5.6% decrease in fuel consumption has been realized. A vehicle engine equipped with AFM will monitor when the driver does not require all eight cylinders and turn off four, saving approximately 295 million litres of gas for the expected life of the 2007 model year production of the Chevy Tahoe.

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By replacing sodium azide with a heated, compressed gas technology to fill the air bag, GM will eliminate the potential exposure of approximately 45,810 kg of sodium azide for the 2007 model year production of the Chevy Tahoe.

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The lower control arms for the Chevy Tahoe were converted from cast iron to forged aluminum. This material change results in a 9.1 kg weight savings per vehicle or over 1.35 million kg weight savings for the 2007 model year production.

8 All the fasteners on the Chevy Tahoe are now free of hexavalent chromium. This equates to approximately 94 million fasteners eliminating the use of hexavalent chromium for the 2007 model year production.

The Full-size Utility program offers an optional E85-compatible powertrain. E85 is an alternative fuel that is made from renewable sources and E85 can help to reduce life-cycle greenhouse gases when compared to conventional petroleum-based gasoline.

**10** Over 31,750 tonnes of polymeric parts are now marked for recycling, making recovery of those parts easier at the vehicles end-of-life. This greatly increases the potential for landfill avoidance.

These Environmental Features apply only to the 2007 Chevrolet Tahoe.



## JANESVILLE ASSEMBLY PLANT ENVIRONMENTAL FEATURES





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#### **Our Janesville Facility**

- The Chevy Tahoe is built at the Janesville Assembly Plant.
- ISO 14001 Environmental Management System (EMS) certification was achieved in 2001 and the plant continues to maintain their certification.
- Janesville Assembly has received the following honors:
- 2004 Wisconsin Governor s award for Excellence in Environmental Performance.
  This award was presented by the Federation of Environmental Technologists for excellence in reduction of solid waste to landfill.
- 2003 Energy Star Best of the Best Award for reducing energy usage, presented by GM Energy and Utilities Services.
- 2004 Energy Star Sustained Excellence Award for energy savings, presented by GM Energy and Utilities Services.
- The plant contributes to corporate waste reduction progress reported by GM through the US EPA WasteWise Program. GM was inducted into the US EPA WasteWise Hall of Fame in 2004 in recognition of sustained progress in reducing waste.



#### Process

- Use of state-of-the-art paint application equipment greatly reduces painting emissions by efficiently transferring paint onto the vehicle and reducing overspray.
- Changes in paint colors used in Janesville Assembly reduced emissions by approximately 45,360 kilograms of hazardous air pollutants (HAPs).
- Productive material reviews are performed to assess environmental, health and safety impacts of all chemicals used, which results in additional safeguards and improvements.
- The facility formed an Energy Sufficiency Team whose efforts produced an additional 14% energy savings for 2005 when compared to the reduced 2004 levels. The plant's energy mix is based on usage of coal, natural gas and electricity.
- Operation of a newly installed cooling tower has resulted in the reduction of more than 567 million litres of water used per year.

#### We Recycle Annually

- 2,177 tonnes of paper and cardboard, saving 40,160 trees from being cut down
- 1,542 tonnes scrap metal and steel drums
- 18,170 litres of used oil
- · 625 tonnes of plastic drums and plastic
- 562 tonnes of wood
- 444 tonnes of fly ash
- 2.25 tonnes of filters
- 18 tonnes of rubber
- 18 tonnes of glass
- 91 tonnes of batteries
- 454 tonnes of paint purge solvent



- Janesville Assembly participates in a vendor parts recycling program. This program takes any unneeded parts that can be recycled and sets them aside to be returned to the vendor. The plant also sends damaged or unacceptable bumpers, headliners, door panels and other parts to a recycler. This eliminates 7.2 tonnes of materials per week from landfill.
- The plant works collaboratively with a local recycler to recycle 0.9 tonnes of shrink-wrap, 0.9 tonnes of plastic banding and 1.8 tonnes of plastic caps and plugs each week.
- The plant partners with an on-site Chemical Management services supplier to manage and control chemical use. As a plant team member, the Chemical Management supplier focuses on quality, cost, chemical usage reduction, and environmental, health and safety improvements.
- Janesville Assembly also partners with an on-site Resource Management company to focus on waste elimination, waste reduction and recycling efforts throughout the facility.



 Janesville Assembly has an environmental slogan of SOARing toward Environmental Excellence. The acronym SOAR stands for Stopping pollution, Obeying regulations, Always improving, and Reducing waste. Procedures are in place to ensure that everyone is aware of the environmental impacts of their job. This supports our ISO 14001 Environmental Management System.

### **Our People**

- One of the plant Environmental Engineers serves on the Rock County, Wisconsin Emergency Planning Committee. This committee works to prevent and safely respond to emergencies that may involve chemical spills.
- Gary Malkus, right, is the Plant Manager, and Linda Little and Mike Merrick are the Environmental Engineers at Janesville Assembly Plant. The environmental goal and objectives of the plant include protecting human health and the environment in the Janesville community. The environmental engineers work includes monitoring the emission control equipment, waste management, wastewater discharges, and reviewing construction projects to assure that environmental considerations are incorporated into plant and equipment designs.