



GENERAL MOTORS - Orion Assembly

Vital Statistics

**Clean Corporate Citizen
Since
September 3, 2002**

**Operation:
Automotive Assembly**

Address:

**4555 Giddings Road
Orion Township, MI
48359
Oakland County**

“Our Clean Corporate Citizen designation acknowledges our long-term commitment to continuously improve environmental performance for the benefit of our employees, neighbors, and community. The team at Orion Assembly continues to examine the methods and materials used to manufacture quality vehicles while minimizing the impact of our operations on our natural resources.”

- Steve Brock, Orion Assembly Plant Manager

Orion Assembly takes great pride in building two vehicles for General Motors, launching production for both the Chevrolet Sonic and the Buick Verano in 2011. The Sonic holds the unique distinction of being the only sub-compact car built in the United States. Recognition for Orion's products have been numerous and include: The Chevrolet Sonic won the sub-compact segment in the JD Power Automotive Performance, Execution and Layout (APEAL) study in 2012 and 2013 and was identified as a “Recommended Buy” by Consumer's Report. The Buick Verano achieved a 5-star Overall Vehicle Score for safety from the National Highway Traffic Safety Administration and was recognized by Kelley Blue Book as the least expensive entry-level luxury car to own over five years. Both vehicles are built in a 4.3 million square foot assembly plant located on approximately 433 acres in northern Oakland County.

The new paint shop at Orion Assembly integrates several energy improvements. The plant utilizes a thin film pretreatment process which uses 25% less energy, 20% less water and produces 80-90% less solid waste compared to the previous zinc phosphate process. The paint shop also implemented a three wet topcoat technology, where all three paint layers are applied to the body before it enters the oven curing stage. The change greatly reduced the overall oven time in the paint shop, and subsequently natural gas usage. The paint shop also utilizes radiant tube ovens which are a GM patented design that uses 20% less natural gas and 30% less electricity. The paint shop, as designed, has maintained the lowest use of energy per vehicle of all GM U.S. and Canadian plants.

Orion Assembly utilizes landfill gas from two neighboring landfills as fuel in the boilers to generate steam for heating and cooling the facility. Landfill gas accounts for approximately 40% of Orion Assembly's total gas consumption, and saves GM over \$1 million dollars annually. The use of landfill gas instead of natural gas also reduces overall greenhouse gas emissions.

Through the Global Rivers Environmental Education Network Program (GREEN), GM partners with Earth Force, a nonprofit organization, to educate students regarding the health of local waterways. Orion Assembly partners with three Lake Orion Middle Schools to mentor over 250 eighth grade students each year. The students perform testing to evaluate the physical, chemical and biological health of branches of the Clinton River Watershed.

General Motors and DTE Energy partnered to build a 350kW Photovoltaic (PV) solar array at Orion Assembly. The solar array became operational in November 2012. The 2.1 acre solar array is providing electricity back to the power grid. The solar array is providing the energy equivalent of 165 homes back to the grid.

GM Orion Assembly donated 250 shipping containers to the Ideal Group located in Detroit, MI in the spring of 2012. The containers were repurposed to create raised vegetable beds for residents in Southwest Detroit. The Ideal Group collaborated with many local stakeholders to create and care for the urban gardens, which ultimately provided vegetables, herbs and flowers to the community.

In observance of Earth Day, Orion Assembly hosts an annual electronics waste collection at the plant to encourage proper recycling of consumer electronics. The collection is open to employees as well as the public, and is held in the parking lot at the plant. Participants are also encouraged to donate household items that are then provided to Goodwill Industries.

