

Maryland Green Registry Leadership Award Winner

2010



GM Baltimore Transmission Plant



10301 Philadelphia Road White Marsh, MD 21162 443-425-1500 www.gm.com

The Maryland Green Registry Leadership Awards recognize organizations that have shown a strong commitment to the implementation of sustainable practices, the demonstration of measurable results, and the continuous improvement of environmental performance. Read here how these award winners achieved their environmental successes and continue to move their organization forward along the path to sustainability.

What innovation or set of results are you most proud of?

We're most proud of achieving landfill free status. The plant has been landfill free since 2007 and it took a lot of work and coordination with vendors, suppliers, plant environmental engineers and employees to achieve. It is a plant wide initiative that involves everyone from the plant floor to joint leadership in order to achieve and to maintain landfill free status. After implementing landfill free, our non-recycled waste went from 10 tons in 2007 to 0 tons from 2008 to present.

How do you involve employees in your environmental programs and projects and keep them motivated?

Keeping everyone involved from management to the plant floor is an ongoing process. It involves meeting with management periodically to review goals and project status. We meet with management at least annually to discuss the environmental management system and compliance assurance. For day to day activities, if there are any concerns we discuss them with floor supervisors during the daily morning production meeting. They then communicate these discussions to their teams on the plant floor.

We also communicate to employees through All Employee Meetings, which occur on average quarterly.

During these meetings, we provide environmental and energy training and updates on projects and how all employees can help.

Formal and informal communication is the key to keeping everyone from leadership to the plant floor involved and motivated. Due to the effectiveness of communication, employees are self-motivated to perform their duties in an environmental and energy efficient way. For example, employees make sure equipment is shut off during nights and weekends to reduce energy use, segregate aluminum foil for recycling, make an Earth Day pledge to help the environment and protect our nesting geese habitat on the facility grounds. General Motors has promoted a culture of environmental awareness that allows employees to voice environmental concerns to leadership via organizational boards, suggestion programs and open conversation during start of shift reviews.

Leadership and employees are motivated to help with environmental and energy initiatives because they care about the environment, take great pride in their workplace and a sound environment and strong ecology is award enough for doing the right thing.



Assembly of the Hybrid 2-Model Transmission

How do you measure and ensure continuous improvement in environmental performance? What have you learned from this process?

Measuring continuous improvement can be done several ways. One way is by establishing a baseline. For example, measuring continuous improvement for energy reduction was done by establishing a baseline and monitoring measurable metrics relatable to the goal such as Megawatt Hour (MWH) per unit produced. We established our energy reduction baseline in 2003 and have steadily

improved since then. A way to ensure continuous improvement is by setting reasonable goals every year and getting everyone involved.

What we have learned from this process is to set measurable metrics that mean something -- such as how many MWH we use per month, and then keep track of those metrics on a monthly basis. Setting reasonable goals is also important to continuous improvement. If you don't set reasonable goals or goals that don't make sense, they are harder to achieve and you don't improve or you are improving, but don't notice it because you are focused on the wrong metric.

Another way to measure continuous environmental compliance improvement is through auditing. Conducting at least semi-annual audits of our Environmental Management programs let us know where we need to improve. Also, it's helpful to have a third party conduct audits of your programs as a person not familiar with day to day operations can find items that may otherwise get overlooked.

What's the first step you would recommend that someone take when starting to green their organization?

The first step recommended to anyone who wants to green their organization is by starting a green team. Start with a team of people who are interested in green initiatives and want to improve the organization. It's easier to implement projects and achieve goals with a group.

Another great tool that can be used to green an organization is an Environmental Management System. An Environmental Management System (i.e. ISO 14001) has all of the keys built into it to continuously improve. You look at significant environmental aspects, set objectives and targets, involve management, establish procedures, conduct audits and train employees involved.

What future innovations would you like to see in your industry and what is your vision for your organization?

Our future innovations are to obtain sustainable goals to reduce CO2 emissions by looking into the use of renewable energy sources. At the Baltimore Plant, we are pursuing the use of solar panels to supply at least 20% of our

electricity. This involves a third party supplier willing to install the system and provide our plant with the electricity generated at a discounted price – a win-win for everyone involved.

We also are looking into replacing low efficient lighting with newer high efficient systems like the use of fluorescent tubes in the plant and use of LED fixtures for the parking lots and road way lighting.

We are constantly reviewing methods of recycling our waste streams by either changing the method of generation or the prevention of generating wastes. One example that did show progress was a study on how to prevent leakage of automatic transmission fluids during the leak test procedure. This lowered the amount of fluid being pumped to the waste stream and allows for recirculation of the fluid into our existing system.



Recycling bins of aluminum foil and transmission casings are sent to foundries that supply General Motors.

For more information on environmental best practices at the GM Baltimore Transmission Plant, visit the Maryland Green Registry website at www.green.maryland.gov/registry and click on List of Maryland Green Registry Members to view member profiles.

The Maryland Green Registry is a voluntary program that promotes and recognizes environmentally sustainable practices in organizations of all types and sizes across the State. Visit the Maryland Green Registry website at www.green.maryland.gov/registry for tips and resources designed to help organizations set and meet their own goals on the path to sustainability.

