



AEVITAS Specialty Services Corporation Closing the Loop and Sustaining the Reclamation of Industrial Lubricant Waste

HISTORIC COMMITMENT

“Last June, a new company called Aevitas Specialty Services was born in Livonia, Michigan. They provide environmental and oil recycling services to our auto supply chain.....Aevitas is in the process of relocating 25 good-paying jobs to their new Detroit plant. They've partnered with Michigan Works to fill open positions with qualified local workers here in the Detroit area.”

*Secretary of Labor, Hilda Solis,
Detroit, Michigan, 2012*

“Upcycling” or making useful products from used industrial oil has been integral to the Aevitas Specialty Services since its former entity was founded in 1962. In the fall of 2000, as General Oil Company, they became the first ISO 14001-certified oil recycling and centralized waste treatment facility in Michigan. In 2007, the company was awarded the North American International Auto Show GM Purchasing/Energy and Environment Award.

As an active member of the Suppliers Partnership for the Environment (SP), Aevitas Specialty Services CEO Adam Westerdale served as the Chairman of the SP Membership Committee from 2009-2011. This unique member partnership is designed to advance environmental sustainability and provide value throughout the automobile supply chain. Continued dedication to environmental protection, customer satisfaction, and industrial waste management in Southeast Michigan by General Oil led to a new beginning when, in June 2011, it was purchased by Aevitas, Inc., a Canadian company providing environmentally responsible and cost effective solutions for unique waste streams.

Aevitas Specialty Services in Detroit

Aevitas Specialty Services is revitalizing a once vacant Detroit processing plant, bringing green jobs and tapping local talent while promoting the recycling and reuse of industrial oils in the automotive supply chain. The company is looking to expand its services and product lines by investing in Detroit and enhancing involvement with the automotive and energy sectors. An original, historic manufacturing building and some existing equipment will be redeveloped and retrofitted into a state of the art facility, that will implement current technologies for treatment and environmental protection. The 25 member staff currently employed by Aevitas Specialty Services will relocate to the new facility when it becomes operational. An additional 6 new jobs that include both management and operations will also be created in the city.

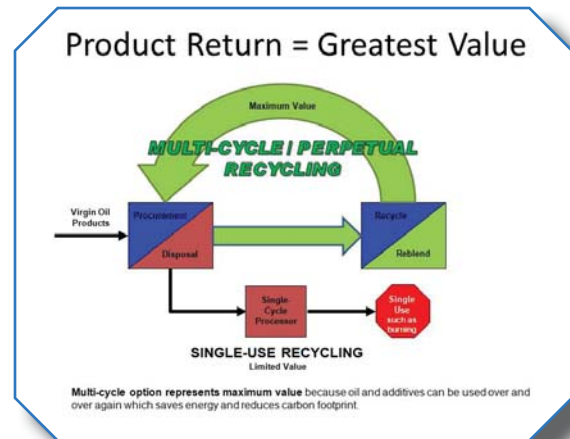


Employees of Aevitas Specialty Services.

Recycling this type of material is a complex and challenging task. As a centralized waste treatment facility, Aevitas Specialty Services is required to comply with new and revised permits containing standards that apply to air emissions and discharges to water. The company is working collaboratively with both the Air Quality Division of the Michigan Department of Environmental Quality (MDEQ) and the Detroit Water & Sewage Department to identify and address permitting requirements for air and water quality standards that will protect the environment and the local neighborhood.

The repurposed lubricating and machining products created by Aevitas Specialty Services are approved for use by the automotive industry, their suppliers, and other industries. By reducing the consumption of new extracted raw materials such as petroleum, the corresponding reductions in energy usage, air pollution, water pollution, and even greenhouse gas emissions result in environmental benefits that positively impact both their customers and the end users of their products. The services provided by Aevitas Specialty Services include industrial oil recycling, transformer recycling, transportation, waste stream characterization, waste analysis plans, and safety programs.

Aevitas Specialty Services produced a half million gallons of filtered oil from January to July, 2012. This product was blended and repurposed for use as lubricating, machining, and cutting oils in the manufacturing sector. Although blending this product for fuel is also considered as an end-use of recycled industrial oils, by eliminating this amount of waste from burning as a fuel source, Aevitas has impacted greenhouse gas emissions by a reduction of approximately 4,500 metric tons CO₂e during this period. Over time, this redirection of material use may continue to positively contribute to addressing the future challenges associated with climate change and our environment.



Treated industrial waste oil.



Aevitas Specialty Services employee prepares customized Gemline Series products.

The latin term "aevitas" closely translates as the "time through which something lasts." Key values of the organization such as integrity and responsibility reflect continuous commitment to sustainability and building relationships on mutual trust, ethical conduct, and respect for the environment and human health. This commitment also assures customers and clients that the collection, treatment, and disposal of these materials are carried out in an environmentally responsible manner to protect future generations and the communities in which they are located.

RESULTS ORIENTED

In August 2010, Aevitas Specialty Services participated in the E3 assessment process through the E3 pilot project in Detroit. In March 2011, the assessment recommendations were prioritized and partially implemented at the

company’s Redford facility utilizing the assistance provided by a summer intern from the Michigan Retired Engineer Technical Assistance Program (RETAP). Lessons learned from the E3 assessment process and the RETAP intern placement also served as valuable “stepping stones” in the design of the new Detroit facility, providing environmental improvements, energy usage reduction, and cost avoidance. Below are some examples:

Redford Facility Improvements – also to be implemented in Detroit:

- Adjusted the set pressure on air compressors, realizing a reduction of 10,000 Kwh electrical use/year.
- Adjusted the boiler air/fuel ratio, realizing a reduction of 1200 MMBTU/year of natural gas energy usage and a \$15,000/year cost savings.
- Removed a vending machine, saving over 1700 Kwh/year of electricity.

Detroit Facility Design:

- Installed a boiler condensate return system that will considerably reduce water usage, energy use, and associated costs.
- Designed an emission control system that eliminates the need for a chiller system significantly reducing energy and water use, as well as reducing operational costs.
- Replaced pneumatic pumps used to move waste oil with direct drive electric pumps. The water conserved by the replacement of pneumatic pumps that require hydraulic cooling is estimated to be 10-12 thousand gals/week.
- Retrofitted T-8 and T-12 lighting to reduce cost and energy use.
- Increased the compressed air storage system to reduce cost and energy usage.

Community Outreach:

Since beginning their move to Detroit, Aevitas Specialty Services has worked with a number of individuals and organizations. Neighboring businesses have provided valuable assistance to them at no charge and the company has also benefited from advice given by the Jefferson East Business Association and the Detroit Economic Growth Corporation. In addition, Aevitas Specialty Services is utilizing the MI Works Program to provide green jobs by hiring new employees.

Moving forward the company is planning to give back to the community by providing jobs and tapping the local talent pool. Aevitas Specialty Services also supports a competitive advantage for their industrial customers by reducing costs through a localized material recovery system that builds social and economic value in the community, reclaims valuable resources, and reduces environmental impacts along the supply chain.



THE FUTURE:

With the help of the E3 Program, Aevitas Specialty Services is poised to be an active participant in the revitalization of Detroit and the auto industry while providing green jobs to help grow a green economy.

* *The Michigan DEQ is currently partnering with the U.S. Environmental Protection Agency's E3 Program and others to pilot an E3 demonstration in Southeast Michigan to leverage services and funding sources to support energy optimization, economic growth, and sustainable manufacturing practices in the region. For information regarding Michigan's E3 Project, contact the Environmental Assistance Center at 800-662-8278.*

The Michigan Department of Environmental Quality (MDEQ) will not discriminate against any individual or group on the basis of race, sex, religion, age, national origin, color, marital status, disability, or political beliefs. Questions or concerns should be directed to the MDEQ Office of Human Resources, PO Box 30473, Lansing, MI 48909.