

Middleboro Recycling redesigned scrap yard making it a leader in the industry

September 18, 2008 - Green Buildings

Although automobile scrap yards do not initially come to mind when thinking of the environmental industry, these businesses perform vital recycling functions-with some using surprisingly sophisticated technology. In fact, when properly designed and operated, today's scrap yards recover 100% of a junked car, including fluids and other potentially hazardous waste, while protecting the environment.

Historically, the environmental track record of auto scrap yards has been less than stellar, particularly regarding fluids recovery. In recent years the Mass. Department of Environmental Protection (MADEP) began to focus monitoring and enforcement activity on automobile recycling companies to improve regulatory compliance. In that climate, Middleboro Recycling redesigned its yard and revamped its operations making it a leader in the industry. The results are not only improved environmental stewardship, but also more efficient and safer operations, lower insurance costs, and better preservation of the long-term value of the property.

Three elements, in particular, were keys to the project. A rack system designed to hold vehicles and rotate them so that fluids can be completely drained before they are crushed or shredded. In concert with the drain system, a fluid recovery and separation system was installed to capture motor oil, brake and transmission fluid, and antifreeze for reuse or recycling. Windshield washer fluid, mercury-containing switches, catalytic converts, tires and batteries are also removed and recycled. The project also incorporated storm water management infrastructure improvements, including hard surfaces for improved drainage and treatment, prior to release.

Middleboro Recycling hired environmental and engineering consulting firm Resource Control Associates, Inc. for help in redesigning and upgrading its facility and to assess the condition of soil and ground water at the site. Middleboro Recycling had to invest significantly to rebuild its operations, but it was necessary and worthwhile step from which other businesses can learn.

"Any business that handles or uses oils and hazardous waste should consider constructing systems to guard against spills or accidents that could contaminate the property," said Robert Atwood, president, Resource Controls. "Depending upon the nature of the business and the property, implementing well planned and professionally engineered management programs will ensure regulatory compliance and help protect a major asset, the business's land, as contaminated property can become virtually worthless. It is always more cost effective to prevent a spill then it is to clean it up."

In 2007 Middleboro Recycling recycled:

- *Vehicles per year: 9,472.
- *Operations averaged 305 days per year.
- *Average vehicles per day: 31.
- *Outgoing Steel: 22,093 tons per year.
- *Liquids: Motor oil, transmission fluid and brake fluid mixture: 16,605 gallons.
- *Antifreeze: 2,306 gallons.
- *Gasoline: All gasoline is recovered prior to crushing vehicles, and then transferred to a tote bin and dispensed to customers. Product recovered is not metered.
- *Tires shipped off site: 212 tons.
- *Batteries from cars crushed & units bought & sold: 717 tons.
- *Mercury Switches 3 to 5-gallon buckets: 1,350 pieces.
- *Catalytic converters from cars crushed and units bought and sold: 15,302 units.

New England Real Estate Journal - 17 Accord Park Drive #207, Norwell MA 02061 - (781) 878-4540