



Department of
**Environment &
Conservation**



Akebono Brake Corporation

Akebono Brake, a subsidiary of Tokyo-based Akebono Brake Industry Co., Ltd., is a global provider of advanced noise, vibration and harshness braking solutions to the world's automotive industry. The Akebono Clarksville plant manufactures many foundation brake components including hubs, rotors, drums, calipers, and corner module assemblies.

Akebono Brake Corporation actively promotes waste elimination and protection of the global environment. The Akebono Clarksville plant has implemented many waste elimination measures in support of these values.

The segregation and recycling of metal scrap and machining chips is a cash-positive proposition for Akebono, as well as other basic recycling initiatives for paper and cardboard. They are a given for a modern industry operating with sustainability in mind. Where Akebono stands out is with their waste streams that are not so easy to eliminate or reuse.

Many brake components require basic electroplating involving acids, chrome and zinc. These processes ensure that a certain amount of hazardous wastes will accumulate and need to be treated off-site. A high quality metals plating process also uses quite a bit of water which becomes contaminated with acids and trace metals. "We just weren't comfortable with all the hazardous waste that was being shipped out," said Annette Reese, Environmental Engineer with Akebono in Clarksville. "We made the decision to work with our vendors and the City of Clarksville for a more sustainable solution."

The Akebono logo, featuring the word 'akebono' in a stylized, white, sans-serif font with a red underline, set against a blue background.

- **Member 2017**
- **Employs +600**
- **Established in 2010**





That solution resulted in not just the reduction of wastes, but repurpose of it as well for the benefit of another user. Akebono Brake generates almost 8,000 gallons per month of spent acid, from the plating process, that was shipped off-site as hazardous waste.

Pettit Environmental, was able to arrange an agreement to use the spent acid in the City of Indianapolis's waste water facility as a neutralizing agent.

A similar amount of spent alkaline bath, from the plating process, is now being treated to a level that can be discharged to the City of Clarksville's waste water system. "The water that is sent back to the city is actually cleaner than the water we receive," commented Reese. The project was a tremendous success. Akebono will be submitting the project for consideration for the Governor's Environmental Stewardship Awards.

Future plans include recycling treated waste water to use as plating process water. This will not only reduce the amount of water used, it will greatly decrease the amount of water purchased.

Akebono also recently joined the [Tennessee Materials Marketplace](#) the interactive online platform which is a collaboration between the Tennessee Department of Environment and Conservation and the United States Business Council for Sustainable Development to facilitate the reuse, recycling and repurposing of discarded materials.

The [Tennessee Green Star Partnership](#) is a voluntary environmental leadership program designed to recognize industries in the state that are committed to sustainable practices. If you are interested in joining Akebono Brake Corporation and other sustainable industries in Tennessee by becoming a member, please contact us.

