

Wasteful Disposal System Foiled at Aluminum Plant.

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To most businesses, recycling means sending waste products like cardboard, paper, or C&D debris to a waste recovery plant for subsequent sale to a remanufacturer. However, with the right expertise and supervision, some industrial waste products can be returned directly to the manufacturer without ever leaving the site.

Alcoa is the world's largest producer of primary and fabricated aluminum products. The company serves the aerospace, automotive and construction industries as well as producing well-known consumer products such as Reynolds Wrap. The company operates dozens of manufacturing plants in 41 countries, including two major manufacturing facilities in Massena, New York.

"I want to congratulate everyone on the effort they have put in on making this project such a success. Since we began this partnership with Waste Management, we have seen tremendous savings both in dollars and in process."

Marie Perry
Senior Buyer
Alcoa Massena Operations

In July 2003, Alcoa awarded Waste Management's In-Plant Services (IPS) division a Total Waste Management contract for its two East and West Massena factories. At this time, the largest non-hazardous waste stream from its east plant was being taken to a nearby landfill for permanent disposal. Seventy-five percent of this stream

consisted of alumina (aluminum oxide), a key component in the aluminum production process. Alcoa understood the value of recovering and reusing this material but had yet to devise a way to safely return the fine, powdery substance to the factory's receiving station.

Waste Management's IPS team eagerly took up the challenge.



Working closely with Alcoa, the IPS team arranged to retrofit a 30-yard roll-off box with a chute fitted into its rear door.

As a test, this new customized container was top-loaded with alumina waste and a tarp was placed over the container to prevent dusting. The container was rolled onto a truck, taken to the factory's receiving station, at which point the chute was extended and fit into the material input dock. The container was elevated at one end and gravity did the rest, allowing the fine alumina to flow back to the plant. A tarp placed over the chute again prevented dust from escaping.

Together, Waste Management and Alcoa tested the system for effectiveness and proved that, operating at full capacity, they could effectively re-introduce 20 to 25-tons of alumina per week, saving the company an estimated \$500,000 annually in landfill and raw materials costs.

Alcoa enthusiastically approved Waste Management's alumina-recycling system, and it became operational in spring 2004.

When it comes to "a-luminating" concepts, no company shines brighter than Waste Management.

From everyday collection to environmental protection, Think Green. Think Waste Management.