

**New York State
Environmental Investment Program
Research Project Summary**

Center for Integrated Waste Management at SUNY Buffalo

Project Background

By 1996, many industries in Western New York had initiated recycling or reduced their largest waste streams. However, few had examined the potential for the remaining components of their waste streams to be used as raw materials by others, nor had they examined the potential to use waste streams generated by their neighbors in their own processes. For this project, the Center for Integrated Waste Management at SUNY Buffalo constructed a Targeted Industrial Waste Inventory (TIWI) which identified and catalogued the physical and chemical characteristics of the solid waste streams generated by key sectors in Western New York. The primary purpose of the inventory was to identify opportunities for companies within that region to make use of one another's by-products. A secondary goal was to test the inventory process as a tool for the Environmental Services Unit (ESU) to encourage recycling and reuse of industrial waste streams across all regions of the State.

Project Description

The project served the largest industrial sectors (by employment) in the Western and Finger Lakes regions of NYS. These included lumber and wood products; furniture and fixtures; rubber and miscellaneous plastics; stone, clay, glass and concrete; fabricated metal products; industrial and

commercial machinery and electronics. Fifty-five companies participated in the data collection effort.

Project Results

Several opportunities for recycling and reusing industrial by-products were identified.

CIWM assisted two of the largest producers of swarf, the grindings from metal working industries. CIWM obtained a second RD&D award from ESU through which several potential end users and technologies for preparing the material were identified. Once implemented, these solutions would save the two companies about \$100,000 per year in avoided landfill costs. CIWM also provided assistance to other companies in the stone, clay and concrete sector. Specifically, CIWM helped companies obtain a beneficial use determination from the Department of Environmental Conservation so that their dust, sludge sand and concrete waste could be used in the construction industry.

The small number of companies inventoried prevented extrapolation of the results to an entire region or state. However the approach proved to be a cost effective means to identify waste types by sector and for identifying potential recycling and exchange opportunities.

Contractor:	SUNY Buffalo CIWM	NYS EIP Investment:	\$37,099
County:	Erie	Contractor Match:	\$19,155
ESD Region:	Western New York	Total:	\$56,254
ESD Contact:	518/292-5340	Completion Date:	March, 1998