

US EPA ARCHIVE DOCUMENT



Project XL: IBM East Fishkill



WHAT IS PROJECT XL?



Project XL, which stands for “eXcellence and Leadership,” is a national initiative that tests innovative ways of achieving better and more cost-effective public health and environmental protection. The information and lessons learned from Project XL are being used to assist the U.S. Environmental Protection Agency (EPA) in redesigning its current regulatory and policy-setting approaches. Project XL encourages testing of cleaner, cheaper, and smarter ways to attain environmental results superior to those achieved under current regulations and policies, in conjunction with greater accountability to stakeholders. It is vital that each project tests new ideas with the potential for wide application and broad environmental benefits. As of September 2000, over thirty pilot experiments are being implemented and several additional projects are in various stages of development.

SUMMARY OF THE IBM FISHKILL PROJECT

The International Business Machines (IBM) East Fishkill facility in Hopewell Junction, New York, manufactures semiconductor and electronic computing equipment. IBM East Fishkill’s manufacturing operations produce a wastewater treatment sludge that is designated as FO06 hazardous waste under Resource Conservation and Recovery Act (RCRA) regulations. The sludge currently is disposed of in a permitted landfill approximately 350 miles away. Through Project XL, IBM East Fishkill will test an innovative method for recycling this waste stream as an ingredient in cement. The waste contains high concentrations of calcium (a necessary ingredient in cement production) and very low levels of hazardous contaminants comparable to levels found in typical raw materials used to produce cement.

The Resource Conservation and Recovery Act (RCRA) regulates the use of hazardous wastes as secondary materials when the secondary materials are used on land. Cement manufacturers, who normally would accept the sludge for recycling, decline to use it because they would be required to get RCRA permits, and because the cement produced using the sludge would be considered a hazardous waste-derived product. Thus, for IBM, the most practical option under the current regulatory system is simply to treat and dispose of the sludge, rather than realizing its recycling potential. EPA has agreed to provide site-specific regulatory flexibility to the IBM East Fishkill facility sludge in order to allow recycling. This XL project, EPA’s 45th, was signed on September 29, 2000.

SUPERIOR ENVIRONMENTAL PERFORMANCE

By implementing this XL project, IBM East Fishkill will achieve superior environmental performance by:

- Recycling hazardous waste in a commercially available product rather than transporting the waste for disposal in a landfill;
- Increasing landfill capacity to handle other wastes that cannot be recycled; and
- Reducing the amount of raw materials that must be mined and transported

to a kiln to make cement, thereby reducing the environmental impacts of surface mining.

FLEXIBILITY

For this XL project, EPA will provide a site-specific exclusion to the RCRA definition of solid waste for IBM East Fishkill's wastewater treatment sludge. EPA and IBM will set parameters for the concentrations of hazardous waste in the sludge, define management conditions to ensure that the sludge is not released to the environment, and establish a means of assessing the effectiveness and safety of using the sludge as an ingredient in cement.

STAKEHOLDER INVOLVEMENT

IBM and the EPA have involved many stakeholders in this project, including the Common Sense Initiative/Metal Finishing Subcommittee, the Atlantic States Legal Foundation, local community groups, and national environmental groups.

APPROACHES TO BE TESTED

Will excluding IBM's wastewater treatment sludge from RCRA regulations allow IBM to recycle their wastes and use them as an ingredient to produce cement in an environmentally sound manner?

CONTACTS

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FOR ELECTRONIC INFORMATION

More information about this project, or Project XL is available on the Internet at <http://www.epa.gov/ProjectXL>, or via Project XL's Information Line at 202-260-5754.