

Center for Brownfield Studies



November 2001

MISSION STATEMENT

SUNY Center for Brownfield Studies

*Provide students, industries,
and municipal governments
with expertise, disciplines,
and skills necessary for
redeveloping brownfields.*

State University of New York (SUNY) Center for Brownfield Studies

The SUNY Center for Brownfield Studies is an educational initiative aimed at environmental management and contamination cleanup coupled with redevelopment of properties. The Center will focus on three major areas:

- 1) Academic programs to deliver a holistic curriculum that encompasses skills related to remediation and redevelopment;
- 2) Community support programs to become the "go to" place for training and advice on State and Federal programs for regulation and funding, and technical assistance on remediation and real estate;
- 3) Research and development of innovative technologies for cost-effective, implementable, and protective solutions to on-site contamination.

The Center will provide undergraduate and graduate students with varied expertise, disciplines, and skills necessary for returning negatively impacted properties to productive use. Both public and private sectors will teach and learn at the Center and contribute to the research that will ultimately enhance society's ability to evaluate, remediate, and redevelop brownfields.

A permanent building for the Center will eventually be located at Harbor Point in Utica, New York.

Partners

New York State and Niagara Mohawk will initially fund the Center. Other potential funding partners

include the Federal government, corporations, and foundations. A consortium of five educational institutions that include the SUNY College of Environmental Science and Forestry, SUNY Institute of Technology, SUNY Morrisville, Mohawk Valley Community College, and Herkimer County Community College, have committed to develop and implement academic programs for the Center. As early as spring of 2002, these colleges will begin offering classes associated with brownfield remediation and redevelopment.

Background

Throughout the United States there are as many as a half million properties that could be characterized as "brownfields" or environmentally impacted industrial sites. A brownfield can be anything from an old gas station to a location that in its day housed several



manufacturing plants. Many of these sites contain hazardous waste or contaminated soil and water. These hazardous remnants of their original purpose complicate reuse of brownfields. Although government policies since the early 1990's have helped make brownfields a more attractive opportunity than they once were, there are still thousands of untouched sites in the United States today. These untapped resources could be the key to urban revitalization.

World Class Research at Harbor Point

Harbor Point, which is partly owned by Niagara Mohawk, is one of the largest contaminated manufactured gas plant (MGP) sites in the country. In 1989, Niagara Mohawk found that the only available soil treatments, such as incineration or landfilling, were very expensive and could leave the company open to long-term liabilities. Determined to find a more economical and permanent solution, Niagara Mohawk began demonstrating remediation technologies to cleanup the extensive contamination at Harbor Point.

The technology demonstration project included several private, public, and academic institutions working together to find the most cost-effective way to acceptably treat contaminated soils. It also demonstrated that manufactured gas plant soils could be made into asphalt, bricks, or concrete. The demonstration resulted in the United States Environmental Protection



Harbor Point during World War II.



Harbor Point in the early 1990s.

Agency (US EPA) and the New York State Department of Environmental Conservation (NYS DEC) accepting thermal desorption treatment for MGP soils, which is now a primary technology used nationally to remediate coal tar contaminated soils.

Why a SUNY Center for Brownfield Studies?

With the migration of much of New York State's manufacturing to the South and overseas during the last 50 years, communities continue to recover from the economic impacts. As the service age exploded, it left many urban areas like Utica with outdated buildings, high unemployment, and loss of tax revenue. The economic recovery in Utica has been difficult, but this Center at Harbor Point can be the catalyst for accelerated economic development.

Restoring the economic and environmental potential of brownfields is a complex system of community involvement, local and regional government, finance, science, and technology. While many of the disciplines needed to accomplish this task are taught through university systems, a holistic approach as proposed by the SUNY Center for Brownfield Studies, is not presently available.



Environmental job growth in this field is estimated at 12% over the next 10 years, but college enrollment for environmental sciences is very competitive. On average, less than 40% who apply to environmental graduate programs are accepted, so the Center will help more students to enter this field. Also, the 514 colleges and universities who offer degrees in environmental disciplines could potentially tap the resources of the SUNY Center for Brownfield Studies.

The Future

Since its inception in 1948, SUNY has led the way in forming innovative programs that meet the needs of communities and their economic vitality. Towards that end, the SUNY Center for Brownfield Studies was

recently created to educate the environmental professionals of tomorrow by developing comprehensive approaches to evaluate, remediate, and reuse brownfield sites.

Using the aggregate of SUNY's distinguished faculty across disciplines, students at the Center will have the opportunity to learn about cutting edge remediation technologies and their effects on community redevelopment. Through continuing education and job development programs, the Center will provide local business and industry with trained technicians. Other students will work with some of SUNY's research scientists and community planners in helping to solve some of today's most urgent environmental problems.

Some of the SUNY Center for Brownfield Studies programs will include:

Academic

Certificate programs in Brownfield Redevelopment and related skills, and eventually, degrees at the associate, bachelor, and master's level will be offered. Cooperative learning programs will be developed so students can become support staff for municipal planning, public participation, and remediation programs associated with redevelopment of brownfield sites. Even local elementary and high schools will be a part of the learning process that will take place at Harbor Point.



Community

Workshops and seminars for the private and public sector will focus on the national regulatory framework as well as the unique requirements of New York State. Community planning, funding mechanisms for property redevelopment, grantsmanship, public participation, packaging and marketing of properties, liability and risk, and other issues encountered by public and private sector professionals in the business of site remediation and reuse will be highlighted in these seminars.



Research

Research at the Center will continue to evaluate environmentally friendly and cost-effective ways of treating contaminated soils. The research will initially focus on treatment of contaminated "hot spots" and treatment of the low-level residuals remaining in the ground.



The research breakthroughs at Harbor Point coupled with the partnership combination of business, education, and community make this a perfect example of how brownfields can again become productive. The Center will be the first permanent facility to be built on the Harbor Point site. It could be the catalyst for Utica's future, while at the same time teaching others how to remediate and redevelop brownfields across the country. The ultimate outcome will be stronger and healthier communities. ♦

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