Somerset County, New Jersey’s center-based brownfields pilot

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Abstract

As environmental and infrastructure constraints have made conventional suburban development more difficult and expensive, urban municipalities are turning progressively more toward brownfields redevelopment as a viable alternative to suburban sprawl. The Somerset County Center-Based Brownfields Pilot was initiated by Somerset County and the Business Partnership of Somerset County. Together, they are working with their consultant, Schoor DePalma Inc., under the guidance of the United States Environmental Protection Agency to establish a unified, cost-effective methodology for targeting brownfields for redevelopment in six of the county’s more urban municipalities. The aim of the program is to select a specific brownfield site to benefit from environmental response analysis and end-use planning as a model by which all brownfields in the area can be redeveloped.

1 Introduction

Somerset County, New Jersey has been a growing industrial force since it was established in 1688 as an agricultural community, processing and transporting grain and other commodities. As Somerset became a more popular place to live, it became host to lumber mills, quarries, and other industry to satisfy the demand for homes and transportation. The Industrial Age brought textile mills to the region, which were replaced by chemical and pharmaceutical interests in the 1900’s. All of this growth through the past three centuries in Somerset County has contributed to the creation of nearly 200,000 acres of brownfields sites throughout the county. In March 2001, Somerset County undertook an ambitious initiative to participate in the United States Environmental Protection
Agency’s (USEPA) Brownfield Assessment Demonstration Pilot, a program that awards a competitive $200,000 grant to allow a county or municipal group to rank and inventory brownfields, target selected sites for assessment, and eventually propose plans for remediation and reuse of one or more sites. The pilot serves the long-term goal of its parent program, the EPA Brownfield Redevelopment Economic Initiative, which is to encourage the development of one proven, unified method of brownfields assessment, clean up and redevelopment.

2. The project

Somerset County’s Center-Based Brownfields Pilot Project is now nearing the end of the site selection phase. The county’s consultant for this initiative, Schoor DePalma Inc., one of the region’s leading engineering and design firms, has been working over the past few months to complete the first phase of the project: updating the county’s brownfield site inventory for Somerville, Manville, North Plainfield, Bound Brook, Raritan and South Bound Brook to include new sites from the New Jersey Department of Environmental Protection’s (NJDEP) Known Contaminated Sites List. This process included interviews with leaders from each of the six municipalities and reviewing the lists of sites and the aerial photomaps, and prioritizing brownfield sites based on the likelihood of selection under EPA eligibility criteria.

The Somerset County Brownfields Pilot Steering Committee, upon review of recommendations made by its Site Selection Subcommittee this past winter, has short listed five sites for consideration as pilots and they are currently under review by the EPA for eligibility under the program. These sites will undergo further review until three sites are recommended by the Steering Committee for selection as pilot sites. Once qualified, Schoor DePalma will conduct preliminary assessments and site investigations for each of the three sites, then evaluate the results and generate outlines of appropriate environmental responses. One of the three sites will then be selected as the final pilot site. Schoor DePalma will undertake end-use concept planning for that site, using publicly held meetings within the host community to factor public opinion into the final end-use plan for the site.

2.1 What is a “brownfield”?

What is a “brownfield” and what does it have to do with redevelopment? The term originated from the USEPA’s Brownfield Pilot Program a number of years ago and generally refers to contaminated commercial or industrial sites. The official definition, taken from the NJDEP Brownfield and Contaminated Site Remediation Act is: “any former or current commercial or industrial site that is currently vacant or underutilized and on which there has been, or there is suspected to have been, a discharge of contamination.”

Contamination that is hazardous to the public’s safety and requires remediation in order to create useful property is an impediment to the economic
viability of any area. Such contamination can occur in a number of forms, at a variety of locations: from asbestos in old buildings to oil spills; from buried rubble containing hazardous materials to historic industrial hazardous waste discharge. While old, heavy industrial sites such as chemical plants and oil refineries are prototypical brownfields, brownfields can occur much closer to home than one might expect. For example, many municipalities have landfills that have ceased operation, sometimes by order of state environmental regulatory officials, but have not been officially closed because the necessary remediation action plan has not yet been prepared, approved or implemented. There may be a gasoline station on a highway near one’s home that has a neglected underground storage tank that has leaked petroleum-based contaminants into the surrounding soil and groundwater. Indeed, brownfields are a common problem faced by many municipalities.

Levels of remediation for brownfield sites vary depending on the planned ultimate use. The New Jersey Industrial Site Recovery Act governs the standards for remediation, and, basically, there are two levels of remediation: residential and nonresidential. Both standards are measured in terms of parts-per-million (ppm) for each of the known hazardous substances. Residential standards are far more stringent than nonresidential standards and, as a result, the cost of cleaning up a site to residential standards is substantial and may affect the economic feasibility of redeveloping the site for residential use.

3 Criteria for Selection

The county’s brownfields inventory contains 844 sites, an overwhelming number to say the least. Indeed, the municipalities targeted comprise only 4% of the land in Somerset County while containing 25% of the county’s brownfield sites.

3.1

The pilot program contains a number of provisions that help to quickly rule out many of the properties:

3.1.1

The majority of the 844 brownfield sites identified in the updated inventory are petroleum-related contamination sites, presenting with underground storage tanks, which are not eligible for consideration in this initiative because funding for abating underground storage tanks is available under other programs;

3.1.2

Municipal landfill sites are eligible for selection only if they are not already covered under the Resource Conservation and Reclamation Act and they meet other EPA restrictions;

3.1.3

Privately owned brownfield sites are eligible for selection under the program
only if there would be a significant public benefit for using federal funds for environmental response assistance. The county must be prepared to answer these questions if they choose to select a privately owned site for the pilot: Is there a legitimate reason why the property owner cannot redevelop the site without the assistance of public funding? Would the redevelopment of the site create a positive impact beyond the property lines of the site itself? And, what benefits would the community gain by the redevelopment of the site?

3.2

Given the USEPA qualifications for selection of the three pilot sites, and in the interest of adding as much value to Somerset County’s brownfields program as possible, Schoor DePalma recommended that the criteria used to select the pilots be designed to yield sites that can be used as models for other sites in the county after the current project is over. The search is on for sites that match one of these three descriptions:

3.2.1
A site that is likely to have very little actual contamination. A Preliminary Assessment might be performed and would indicate that the contamination was more perceived than real. Limited (or no) sampling would be necessary to carry forward with end-use planning. This would demonstrate a means by which communities could quickly eliminate the stigma often associated with abandoned properties;

3.2.2
A site that is known to have contamination and has undergone some level of remedial activity. A preliminary assessment would summarize the existing environmental studies and only a limited site investigation would be necessary to confirm existing data and/or support potential remedial actions (deed notices, classification exception areas);

3.2.3
A site that is known to have contamination and has undergone little or no remedial activity. A preliminary assessment for this site would identify areas of concern that would then be fully investigated in a site investigation.

4 End use planning

At this point, three sites will have been selected and studied to determine the appropriate environmental response. Now, several questions pop up: How will the final pilot site be selected? How will the end-use planning be conducted? What will the final product be? How will it benefit brownfields redevelopment in Somerset County?

The county, based on recommendations by the Brownfields Pilot Steering Committee, will select the final pilot site, which will, in turn, receive a
recommendation from the Pilot Site Selection Subcommittee. The end-use planning process (Figure 1) begins when the results of the environmental response options are analyzed to generate a list of potential uses. The next step will be to evaluate the economic feasibility of the proposed uses, given the cost of cleaning the site to appropriate remediation standards (residential or nonresidential).

Once the feasibility of potential land uses is determined, several different concept plans for the site will be developed. These alternative concept plans will be presented to the host community through a series of public forums and meetings with stakeholders (the property owner, neighbors, town officials, etc.). A consensus on the best alternative concept plan for redevelopment of the site will be developed and a final concept plan, including illustrations, will be presented and submitted to the USEPA.

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**Figure 1: End-use planning process flow chart**

5 **How will this project benefit Somerset County?**

At first glance, the math suggests that, if only three sites of six towns will receive the benefit of a preliminary assessment and site investigation, and only one of those three will receive end-use planning, there is limited benefit to the county as a whole. The benefit of this project, though, lies not in the immediate result, but in the legacy it will leave.

The continued commitment of both the county and the Business Partnership of Somerset County to the economic redevelopment of all underused brownfield sites has led Schoor DePalma to work with them to develop a Brownfields Pilot Website (Figure 2) that will inform the public of the status of site selection, provide opportunities for public involvement in the end-use planning process, offer profiles of the pilot sites, and hold the county’s brownfields inventory. The website will be linked to the county’s main site and, ultimately, be maintained by the Business Partnership of Somerset County, who will incorporate the website into ongoing efforts to encourage brownfields redevelopment in Somerset County.
Figure 2: Somerset County brownfields website schematic