

RESEARCH BRIEF

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AT A GLANCE

- The presence of potential contamination stigmatized parcels as brownfields.
 Brownfields need to be cleaned up before they can be used or reused. However the liability regime imposed by U.S. federal and state hazardous waste programs may actually discourage the purchase and reuse of contaminated or potentially contaminated sites.
- Maryland established
 a Voluntary Cleanup
 Program (VCP) in 1997
 for properties that are
 or perceived to be
 contaminated by controlled
 hazardous substances
 or oil. Properties receive
 liability assurances
 and certification as
 either needing no clean
 up (NFRD) or that

Glance continued on page 2

Who Participates in the Voluntary Cleanup Program: Lessons from Baltimore City

If the sheer size of land endowment is an indicator of an economy's potential, then the United States is fortunate indeed. However, there exist land tracts, in urban and rural areas, which are left unused due to concerns about the presence of potential contamination. The technical jargon for industrial sites which have suffered this fate is 'brownfield'; it makes a lot of sense to clean up these brownfields and reuse them for industry or other productive activities. However, the liability regime imposed by federal and state hazardous waste programs

in the US may actually discourage the purchase and reuse of contaminated or potentially contaminated sites. Recently, policymakers have come up with a plethora of programs to offer incentives for cleanup and reuse of brownfields. Dr. Anna Alberini and graduate student Dennis Guignet examined one such program, the Voluntary Cleanup Program (VCP), and analyze the features of the sites which use this program (and the sites which are eligible but do not use it). Additionally, they also look into the redevelopment potential of the above mentioned VCP parcels.



View of Lagoon 2, facing south. Remediation was done up to the edge of the landfill.





PHOTO COURTESY: CSI.

Glance continued from page 1 clean up has been completed (COC).

- Sixty-six percent of parcels applied immediately for a NFRD implying that parcel owners are not needing to clean up these sites. These owners participate in the VCP to certify themselves as clean and protect themselves from liability. The recognition might also increase the value of their property.
- Contaminated industrial sites in industrial areas are more likely to participate in VCP; as were sites with fewer buildings and limited infrastructure. Larger properties have been enrolling more as well.

One of the two staging areas, where all the excavated material was stockpiled, prior to being characterized into hazardous or non-hazardous material.

In the United States, there is a large supply of properties where prior industrial uses have resulted in contamination of soil, surface water and/or groundwater with pollutants that are noxious to human health and ecological systems. A 1995 study estimated a nationwide total of 130,000 to 450,000 contaminated commercial and industrial sites. The states, realizing that their enforcementbased programs did not have sufficient funding to address the large number of contaminated sites needing attention, began developing an alternative approach based on voluntary cleanup programs. Program offerings and requirements vary widely across states. Many state-level voluntary cleanup programs grant liability relief in exchange for voluntary cleanup, provided that the latter is approved by the state agency, in the form of a letter of no further action, a certificate of completion, or a covenant not to sue.

The Maryland VCP was established in 1997. Any property that is or

The take away message is that the majority of VCP-eligible properties that participate are those without much contamination and want to signal they do not need remedial work (NFRD) or those sites with a limited amount of contamination going into a re-use that does not warrant cleaning it up.

perceived to be contaminated by controlled hazardous substances or oil (since October 2004) is eligible for participation, including sites on federal or state registries. Eligible applicants include property owners, commercial lenders, developers, prospective purchasers, lessees, innocent purchasers and operators. The application must contain a Phase I and Phase II environmental site assessment, a \$6,000 application fee and any other information about the property required by the agency. The applicant may



PHOTO COURTESY: CSI, 2010 RAR.

Contaminated material excavated from lagoon 4.

request a 'No Further Requirements Determination' (NFRD), which, if granted, implies no need to perform remedial work, or, upon approval of the response plan and of remediation, a 'Certification of Completion' (CoC). Both include certain liability assurances and are recorded in the Land Records. Participating parcels that are underutilized, vacant, or located in blighted areas can also obtain tax credits from the State. The liability relief offered is not absolute: so-called reopeners are possible if new contamination occurs at the property, if cleanup exacerbates the existing contamination, if undiscovered contamination is found, or if there is an imminent and substantial threat to human health.

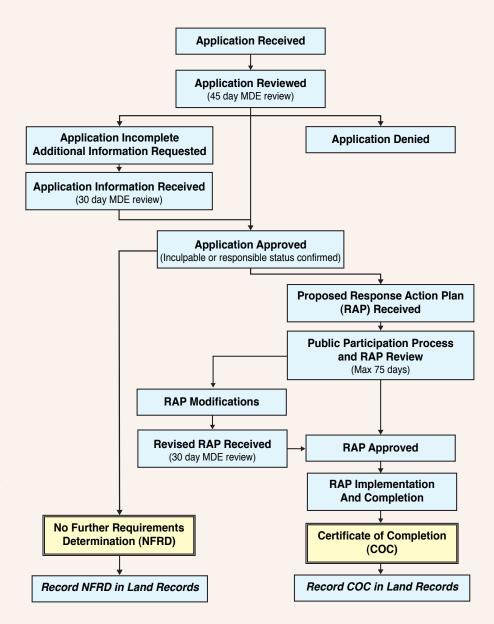
In this study the authors restricted their attention to 116 VCP sites in Baltimore city since the onset of the program up to December 20, 2006. Of these 116 sites, 37 (32%) were signed up with the goal of obtaining a CoC, which requires submitting and executing a remedial plan, 77 (66%) applied directly for a NFRD, and no information was available for the two remaining sites. These 116 parcels account for 1175 acres of contaminated land in Baltimore city.

The fact that 66% of contaminated sites apply for a NFRD points to the fact that actual cleanup is not taking place at these sites. Thus the owners of these parcels participate in the VCP to certify themselves clean and protect themselves from liability (of course, contingent on the fact that they DO get the NFRD certification). Also, such recognition can only increase the value of the property itself.

To identify what features make it more probable that a property could be enrolled in a VCP, the

Table

Voluntary Cleanup Program's Process of Receiving a "No Further Remedial Action Planned Determination" (NFRD) or a "Certificate of Completion" (COC) certificate. These Determinations are recorded in the Maryland Land Records.





Dennis Guignet

authors select a random sample of 116 properties which are eligible for the VCP but do not participate to compare to the 116 Baltimore City properties that did participate. Results show that contaminated industrial sites in industrial areas are more likely to participate; sites with higher number of buildings and pre existing infrastructure are less likely to participate. It is also interesting that larger properties have been enrolling more often in the recent years.

The take away point from this study is that the majority of VCP-eligible properties which participate in such voluntary restoration acts are those which do not have much contamination and look for recognition that implies no need to perform remedial work (NFRD); or sites have some contamination but

the levels are not severe enough to warrant cleanup given the proposed re-use of the site. In essence, a redeveloper would only cleanup if required by law or if they fear future liability. If under the VCP it is found that contamination levels are below some threshold, then developers obtain certain liability relief and so no longer have an incentive to clean up.

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For the full report see: Voluntary Cleanups and Redevelopment Potential: Lessons from Baltimore, Maryland, Cityscape, 12(3):7-36.



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