

Measuring the Benefits of Remediating a Hazardous Waste Site in Sydney, Nova Scotia

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Abstract

Many derelict industrial sites lie seemingly dormant across North America. However, derelict sites pose significant health risks and welfare impacts to residents living in the area. Consequently, significant attention and resources have been devoted to finding solutions for these sites. The Sydney Tar Ponds and Coke Ovens site is among the most toxic in North America.

Recently a group of citizens, government and other stakeholders forwarded an 'acceptable' plan for the clean up of the site to the Nova Scotia and Canadian Governments. Clean up is scheduled to begin in 2005 with completion between 2009 and 2012 depending on the clean up option chosen. It is generally accepted that hazardous waste sites have a negative impact on local property values and that the remediation of these sites return property values to their un-affected state. This study will evaluate the benefits that may accrue to the community in terms of property value as a result of the cleanup. A cost benefit analysis framework will be used to estimate benefits and costs. Negative impacts will be predicted using a multiple regression analysis model to estimate housing price, combined with location components to account for proximity to the site. The model will establish a value inferred in housing price for distance from the Tar Ponds site. This distance value will be summed over all homes in the affected area to provide an estimate of the benefit, in terms of property values, that will return to the community. This theoretical value will be compared to the clean up cost of the project to assess the net impact of the project on the community. Based on the current remediation proposals, this study suggests that the clean up of the Tar Ponds and Coke Ovens site will result in a net cost of \$134 million to society. However, given a different selection of remediation options, net benefit to the community can be as large as \$53.5 million dollars. This implies that the money spent on the clean up may not be fully recouped in a corresponding increase in property values.