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Title: "Efficacy of Risk-Based Corrective Action (RBCA) for Cleaning Up Fuel Releases from Leaking Federally-Regulated Underground Storage Tank Systems"

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## **ABSTRACT**

The primary purpose of the underground storage tank (UST) regulations is protection and clean up of groundwater resources used by millions of Americans as the source of their drinking water. Annual expenditures to clean up fuel releases from leaking underground storage tank (LUST) systems are in excess of \$1.5 billion, a significant portion of which is derived from public funds. Government programs have a responsibility to ensure that such funds are used effectively and efficiently for their intended purpose. One of the UST program's policy initiatives designed to promote more effective and efficient cleanups is risk-based corrective action (RBCA), first launched in 1995. Yet, to date, program impact of RBCA has not been systematically evaluated. This dissertation examines whether RBCA has been effective in meeting expectations and, whether these expectations have been met in a cost-efficient manner. With regard to the question of effectiveness, evidence suggests that some states have experienced an increase in the number of cleanups completed due to RBCA, while other states have not. With regard to the question of efficiency, there is some evidence that the cost-savings anticipated due to RBCA implementation have not been realized in all states. Weaknesses in the data available for this investigation point to the need for collection and reporting of more accurate and applicable information to more quantitatively evaluate the impact of RBCA specifically and environmental programs and policies more generally. Prior to implementation of new policies, meaningful and measurable indicators of performance should be identified and appropriate steps taken to ensure that they are collected so that efficacy of a new program or policy can be accurately evaluated. The findings of this investigation are a substantial improvement over previous reviews of UST program reported in the literature and merit consideration by policymakers.