

Remedy Selection

Topic: Remedy Selection

Description of the issue:

Historically, there has been ongoing debate about what the proper level of the Department's involvement should be in the selection and approval of remedies, particularly when sites are slated for sensitive future uses such as residential or educational facilities. On the one hand, there is a perception that too much Department involvement may stifle private cleanup efforts, in turn leaving sites vacant, undeveloped eyesores in our communities. On the other hand, limited authority raises the possibility that final remedies may not be protective enough for the selected end use and overtime unacceptable exposure pathways may exist. Commissioner Jackson testified before the Senate Environment committee that the Department should have a greater role in selecting remedies where there is greater probability for future exposure of the public to contamination. She recommended that the Department have a greater role in evaluating and selecting a remedy when the end use is slated for residential or educational facilities. The Department believes it should be able to overrule or more substantively influence remedy selections in certain cases. The Department should also be able to require remediating parties to implement unrestricted remedies under certain proscribed situations or at least require less contamination be left behind when engineering controls are used.

DEP's Current Authority:

The State Spill Compensation and Control Act (Spill Act) provides the underlying authority requiring dischargers to remediate contaminated sites and authorizing the Department to clean a site when others do not. For State-lead publicly funded actions, the Department also follows the expanded requirements set forth in the National Contingency Plan (NCP) to enhance cost recovery actions. At sites on the National Priorities List of Superfund sites, the Department and U.S. Environmental Protection Agency follow remedial action requirements set forth in the Comprehensive Environmental Response, Compensation and Liability Act on 1980 (CERCLA). The 1998 Brownfield and Contaminated Site Remediation Act, at N.J.S.A. 58:10B-12g(1)(Brownfield Act), requires the Department to approve a restricted use remedial action or a limited restricted use remedial action when proposed by a private party or other government entity performing remedial work if the selected remedy is protective of public health and the environment. This requirement applies to responsible parties, developers, local and county redevelopment agencies, and other private individuals and companies. The Brownfield Act also requires that a property owner must agree to place a deed notice on any land in its control when a remedy results in contamination above unrestricted use criteria remaining on site, thus restricting future use on the property. When a property owner is not the discharger, the responsible party conducting the remedial work must implement an unrestricted remedy when the property owner will not agree to a deed notice. The Department may not disapprove the use of a restricted use or limited restricted use remedial action as long as the remedial action is protective, nor may the Department require the person to investigate any alternative remedial actions. The Brownfield Act also requires a property owner with a deed notice or classification exception area, or other person responsible for such institutional controls, to submit biennial certifications to the Department documenting that the approved remedy remains protective of human health and the environment.

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Background:

New Jersey's Spill Act served as the model for the nation's Superfund program. It has been amended numerous times in the past 30 years to reflect new mandates enacted by the New Jersey Legislature as well as technical and legal changes in the environmental remediation field. Prior to 1993 and the enactment of Senate Bill 1070 (S-1070), the Department had broad authority to select remedies. However, at that time there was a perception held by many, including a number of key legislators, that the Department had a tendency to overanalyze sites, resulting in fewer sites progressing toward cleanup. The 1993 amendments included in S-1070 provided that the Department could only disallow a remedy selected by remediating parties and only if it could demonstrate that public health would not be properly protected under the selected remedy. Nonetheless, the Department could still enforce the stated preference for permanent remedies if a required cost analysis demonstrated a small difference in cost between permanent and nonpermanent remedies. This cost analysis provision, however, was deleted in 1997 with the passage of the Brownfield Act. Currently, the Department must approve a remedial action if it is found to be protective of human health and the environment. The Department may not require a comparison or investigation of any alternative remedial action as part of its review of the selected remedy.

Stakeholder Comments:

Stakeholders expressed conflicting views on the Department's authority in remedy selection and the use of permanent and non-permanent remedies at contaminated sites.

One school of thought was that the Department's existing statutory authority is sufficient to guarantee protective remedies and allows the Department the ability to require additional action if the remedy is not protective of human health or the environment. As such, these stakeholders do not believe any legislative reform is necessary. It was noted by one group of stakeholders that the Department's remedy selection process was previously reformed in 1993 because it was viewed as an impediment to the redevelopment of contaminated brownfield sites and therefore the current flexibility in the remedy selection process should be maintained. This was supported by the belief that private owners and responsible parties are in the best position to evaluate and select an appropriate remedy based on knowledge of the site from remedial investigation work performed and plans for future use at the location.

Others felt that past legislative changes had weakened the Department's statutory authority and that this authority needs to be strengthened to allow the Department to reject a proposed remedy in favor of a more stringent alternative. It was stated that one of the most significant weaknesses in the current law is the Department's limited role in remedy selection.

Some stakeholders expressed concern over the use of non-permanent remedies, citing concerns about the failure of using engineering and institutional controls. Other stakeholders said it is technologically infeasible to permanently remediate many sites in the State due to a variety of factors, including historic fill. These same commentors noted that engineering and institutional controls selected as part of non-permanent remedies are effective in eliminating exposure pathways to contamination remaining on site. It was noted that if the Department improves its

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tracking and oversight of these non-permanent remedies, then such remedial actions will be more reliable over time.

A separate concern cited by some stakeholders for requiring permanent remedies such as excavation at contaminated sites involves potential impacts from increased truck traffic resulting carbon dioxide, particulate emissions, increase greenhouse emissions and overall air pollution as well as using limited landfill space.

Some stakeholders said that the public (local community) should have a role in remedy selection. They called for a formal process for community input including requiring the Department to respond to comments or objections made by the public.

One specific concern related to remedies that incorporate capping a site and leaving high levels of contaminants behind. The Department noted it may be possible to develop acute risk standards where toxicity factors have been developed so that remediation of contamination at or above acute risk standards can be required whenever practicable, even if the remedy included a cap. (See “Development of Remediation Standards Based on Short-Term or Acute Exposure Scenarios for Hot Spot Removal” regarding the issues associated with the development of acute risk standards.)

The Department also noted it could use the existing EPA Principal Threat Waste concept to help limit the amount of waste or contamination that can be left behind at a site. This concept was developed by EPA for the NCP and is applied on a site-specific basis. The concept fosters the treatment or removal of “principal threat waste” such as highly toxic or mobile contamination whenever possible. Engineering and institutional controls are used to control risks from “low-level threat waste” where treatment or removal is impracticable.

Some parties believed that the Department should be able to select the remedy if the current or future use of the site included “sensitive populations” such as an educational or residential end use. Others believed that the Department should develop specific remediation requirements (presumptive remedies) for sites slated for future residential or educational use or develop limits for maximum contaminant levels that could remain on-site. More stringent engineering and institutional controls could be specifically required for sensitive population sites. If controls are to be used at a site, the concept of stringent controls was strongly supported by public and environmental advocates. Nevertheless, the environmental advocates promoted limiting use of nonpermanent remedies overall.

Other stakeholders stressed that if the Department were to become more involved in the remedy selection process, it must develop clear presumptive remedies for certain end uses. Presumptive remedies would help in allowing parties to predict what remedial actions would be required at a site. It was noted that private entities cannot go through a due diligence process with the intention of implementing one remedy, only to have the Department change the remedy at a later date and after substantial private resources have been expended.

One discussion focused on developing specific remediation requirements (or limitations) for landfill remediations that include development. Generally, there is a higher level of uncertainty

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associated with the remediation of landfills for a number of reasons. The remediation of landfills pose unique and varied problems including the nature and extent of contamination in and around landfills, and the numerous physical risks such as gas production, risk of fire and explosion, and significant settling or compaction of landfill waste material. Even robust investigation requirements cannot ensure the safe use of some landfills for certain types of development. Residential development on landfills is an area in need of further evaluation; especially single family home development. Factors that can be evaluated when deciding to allow residential development on landfills include the age of the landfill; the type of landfill material (construction and debris vs. municipal solid waste); and leachate and methane gas generation.

Some stakeholders felt the Department should consider developing different (more stringent) remediation requirements for highly developed areas of the State, specifically urban areas and environmental justice communities, where there are numerous contaminated and/or environmentally permitted sites. These stakeholders said that sites in such areas should also be prioritized for cleanup.

Lastly, some stakeholders believe that if the Department were to be granted a stronger role in remedy selection, then it should follow a model similar to the EPA CERCLA process, which would include the development of feasibility studies and remedial alternatives and the holding of public hearings. These stakeholder expressed concerns regarding the length of time this would add to an already slow remediation process and the additional stress such a process would place on the program's strained resources.

Other States:

Based on the research conducted to date, states generally do not dictate particular remedies for voluntary remediations. Remedy selection procedures in the following states: Massachusetts, Pennsylvania, Florida and Illinois are not significantly different from New Jersey's. Remedies must be protective of human health and the environment, they may consider future use and they may require engineering and institutional controls, including monitoring and maintenance requirements. Delaware can select a remedial action (from a feasibility study-type document) for a site based on both the cost and ability of the remediation to be protective of human health and the environment.

New York has the ability under its voluntary cleanup program to choose the remedy for sites that pose a "significant threat". New York has also recently adopted a presumptive remedy policy that involves selecting remedies that have already been proven to be both feasible and cost-effective for categories of sites with similar characteristics. California may be selecting remedies for new school construction.

In Massachusetts, most remedy decisions are made by a Licensed Site Professional. There are a category of sites, however, where the state conducts direct oversight, including the review and approval of remedial decisions. The Alaska Department of Environmental Conservation will consider past and future land uses when approving a remedy proposed by a responsible party. If there is no viable responsible party or the department and responsible party cannot come to an agreement, then the department has the authority to take over the cleanup and make its own remedy selection.