

Summary of November 2007 SIRB Presumptive Remedy Policy

On November 16, 2007, DNREC SIRB adopted a policy providing guidance for the application of a presumptive remedy at limited subset of Certified Brownfield Sites. The presumptive approach provides a desirable mechanism for streamlining the process of redevelopment by applying a standardized instigative template to sites meeting certain identified criteria.¹ A presumptive approach has been successfully utilized by the U.S. EPA to accelerate cleanups at sites with similar characteristics. The foundation for a presumptive approach is the application of existing knowledge at a particular site or a sufficient knowledge from neighboring and similarly situated sites.

In order to implement a presumptive approach at a site, numerous criteria must be demonstrated to the satisfaction of the Department. These criteria include utilization of the site only for restricted uses, DNREC screening of samples, demonstration that there are no exceedances of URs for the protection of human health, and a demonstration of low risk thresholds for identified constituents. It is important to note that the public input component of the Brownfields process has not been removed in the presumptive process, it has been moved earlier in the process. In the presumptive process, the public is able to comment on the predicted remedy, which will only be applied as long as the investigation results confirm the anticipated results. *It is important to emphasize that only if the investigation confirms the anticipated environmental conditions at the site will the presumptive remedy be applied.*

The presumptive approach is being implemented on a pilot basis and will be evaluated before it is implemented on a statewide basis. The pilot program will limit the application of the presumptive approach to sites within the City of Wilmington due to: (1) the relative consistency of environmental receptors, contaminants and impacts in the City; (2) the volume of existing data for sites in and around the City; and (3) the desirability to quickly address, remediate and redevelop sites within the City.

¹ A comparison of the process flowcharts for the pre- and post-presumptive remedy approach is attached to the November 2007 Policy.

**POLICY ON ADMINISTRATIVE AND MODEL CRITERIA
REQUIREMENTS FOR PRESUMPTIVE REMEDY APPROACH TO
CERTIFIED BROWNFIELD SITES**

Division: Air & Waste Management **Date:** November 16, 2007
Section: Waste Management **Tracking Number:** _____
Branch: SIRB **Contact:** Kathy Stiller-Banning *KSB*

I. Policy Statement: The Department of Natural Resources and Environmental Control Division – Site Investigation and Restoration Branch (DNREC-SIRB) adopts this policy to provide guidance and consistency in the use of determining presumptive remedies for brownfield sites meeting select criteria (e.g. within the City of Wilmington). The presumptive remedy policy consists of both the administrative and model criteria requirements for a given certified brownfield site. The given brownfield site **MUST** meet the environmental “model criteria,” set forth within this policy document to be eligible for the presumptive remedy process.

Initially, this policy is intended to serve as a “pilot project”, for use solely for eligible certified brownfield sites within the City of Wilmington. The success of this “pilot project” will be further evaluated by the DNREC for use statewide. The policy may also involve additional “model criteria” being established in the future to be used statewide on certified brownfield sites.

II. Purpose and Background: The purpose of this policy is to establish the consistent use of a presumptive remedy administrative and model criteria approach in order to expedite the management of certified Brownfield sites, within the City of Wilmington. The current Regulations Governing Hazardous Substance Cleanup (Regulations) establish requirements on conducting Feasibility Studies to identify and compare remedial alternatives at a facility (state Hazardous Substance Cleanup Act or HSCA and brownfield sites) where remedial action is to be undertaken, based on the results of an environmental investigation.

The USEPA has found that certain types of sites have similar characteristics, such as the kinds of contaminants present, their impacts on environmental media and endpoint receptors, and in the identification and evaluation of the most appropriate remedy in the Feasibility Study process. Based upon information acquired over years of evaluation and remedy selection at National Priorities List (NPL) sites, USEPA undertook an initiative to develop “Presumptive Remedies” to accelerate cleanups at these types of sites. Presumptive remedies are preferred remedial technologies for common categories of sites based on historical patterns of remedy selection and the scientific/engineering evaluation of performance data on technology implementation.

Many of the projects conducted and reviewed by DNREC-SIRB under Delaware’s Brownfields Program (Subchapter II of HSCA) share a common setting and industrial history, and data gathered from the investigations has shown that many of these sites

have contaminants of concern that are primarily limited to semi volatile PAHs and metals. Much of the data that has been collected has come from sites that lie within the City of Wilmington limits, which DNREC has already designated as a Groundwater Management Zone (GMZ). The prior experiences and analytical data gained at these sites typify the type of site where a Presumptive Remedy may be appropriate.

The presumptive remedy approach for brownfield sites within the City of Wilmington will be required to fit a select set of “model criteria” that lend themselves to a standard remedy, such as a restrictive environmental covenant and/or capping of the site with proposed development. DNREC, upon its discretion, will accept a party’s use of the presumptive remedy approach, upon meeting all of the following model criteria:

- site to be investigated will be utilized for restricted use only,
- shall be used within the City of Wilmington’s established GMZ,
- a mass loading calculation must be performed as part of the investigation to demonstrate no adverse impact of the site from groundwater to surface water bodies,
- site investigation activities will be required to demonstrate (through direct testing, groundwater modeling, or other means acceptable to the Department) that contaminant concentrations in groundwater at the site boundaries do not exceed the Uniform Risk-based Standards (URSS) for Protection of Human Health.
- site investigation must demonstrate no volatile organic compound (VOC) vapor intrusion risks, in accordance with the DNREC established Policy Concerning the Investigation, Risk Determination and Remediation for the Vapor Intrusion Pathway, January, 2007
- there is a low expectation of finding unknown underground storage tanks (USTs) and confirmation of non-aqueous free product layers throughout the subsurface of the site.
- at a minimum, media samples collected (i.e. soil, groundwater, sediment, etc.) will be screened by DNREC, with confirmation by a contract laboratory of DNREC’s satisfaction, for polycyclic aromatic hydrocarbons (PAHs), inorganics (metals), VOCs, polychlorinated biphenyls (PCBs) and pesticides and herbicides, in accordance with Delaware HSCA Standard operating Procedures (SOP).
- The analyzed media sample results of PAHs and metals for the site investigation would be required to conform to a cumulative potential risk of less than 1.0E-04 or hazard index (HI)<10. Investigations completed with cumulative potential risk greater than 1.0E-04 or HI>10 would be excluded from use of the presumptive remedy approach.

The potential risk would need to be calculated from one (1) of the three (3) established remediation standard options presented in *Section 2.0 Remediation Standards* in the Remediation Standards Guidance under HSCA. Brownfield sites with cumulative potential risk from PAH’s and metals greater than 1.0E-04 or HI>10 would not imply ineffectiveness of a containment remedy, however, in order to proceed with implementation of a containment remedy, use of the standard Brownfields/HSCA process would be required, which may include, but not be limited to, additional sampling and characterization being performed.

The results of the presumptive remedy approach investigation and report will be confirmed by the analyzing of media samples in accordance with the DNREC approved site workplan and conformance to established HSCA protocols.

III. Safeguards to the Policy: If existing data on a brownfield site is not available, the site will be presented to DNREC under the presumption that it meets the model criteria, based on existing immediate surrounding site data. A formal public notice will be issued announcing both the entering into of negotiations of a BDA and the intended Proposed Plan of Remedial Action (Proposed Plan), followed by a second formal public notice announcing the entering into a BDA. The public notice and the Proposed Plan will clearly state that the desired remedy will only take place, in the event that the actual site conditions conform to the presumptive remedy model criteria established above.

Subsequent to the initial public notice the site will still undergo an investigation in accordance with HSCA to determine actual site conditions. The scope of the brownfield investigation will be agreed upon by DNREC and the developer. If the results of the investigation indicate that the site meets the model criteria established above, then DNREC will publish, and issue a public notice of, the Final Plan of Remedial Action (Final Plan).

If the investigation identifies environmental conditions inconsistent with the model site criteria (i.e., does not meet the model criteria), then developer will be required to undertake additional investigation activity in order for an Amended Proposed Plan of Remedial Action to be published that states the actual conditions and amended proposed remedy, followed by a Final Plan. Completion of the final remedy and close out of the site will lead to DNREC issuing a COCR for the site.

The main objective of this policy is to use past data/experience in neighboring site investigations and remediations to streamline the ultimate selection of any required cleanup actions at the brownfield site. This will ensure consistency in remedy selection and reduce the cost of the overall project. Attachment A illustrates the new presumptive remedy approach compared to the previous investigatory process. It is believed that the new process will better expedite sites through the BDP. As already mentioned, if there are unusual site specific circumstances, the use of the presumptive remedy approach will not be acceptable by DNREC for the site.

This policy is intended to provide the administrative measures needed for additional, meaningful public input early on in the "model criteria" process. DNREC will have an enhanced role to hold public trust as being an objective reviewer of the "model criteria" sites. This is intended to be accomplished by holding public workshop(s) to educate the public and explain the overall process and enhance communication. The policy will provide an opportunity for DNREC to modify the public comment process through regulatory and/or statutory changes. Lastly, DNREC will be able to provide existing data on surrounding sites to support the fact that "model criteria" contaminants exist on contiguous properties that have already undergone successful remediation and redevelopment. In addition, DNREC will note the existence of the USEPA's Presumptive Remedy Guidance and its use through the U.S. to successfully remediate similar properties.

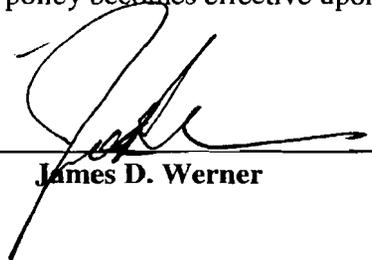
IV. Policy: Therefore, based on the discussions and information above DNREC's SIRB may use the presumptive remedy approach for brownfield sites, initially within the City of Wilmington, in accordance with HSCA, where appropriate. The Presumptive Remedy Approach for Brownfield Sites may be substituted in whole or part of a Feasibility Study (FS) as required by the Regulations at a brownfield site, if consistent with the model criteria established above. A cost estimate of the Presumptive Remedy Approach may still be required, as deemed necessary, in the event of use of brownfield funding, via DNREC's HSCA Fund.

Accepting this new approach will allow an early opportunity for public comment, however, as mentioned, DNREC will likely have to conduct a workshop(s) and outreach to educate public on "model criteria." In addition, regulatory and statutory changes may be needed to afford the public additional comment opportunity, since environmental data will be generated after the Proposed Plan is initially published.

This policy becomes effective upon approval.

Approved:

Director:

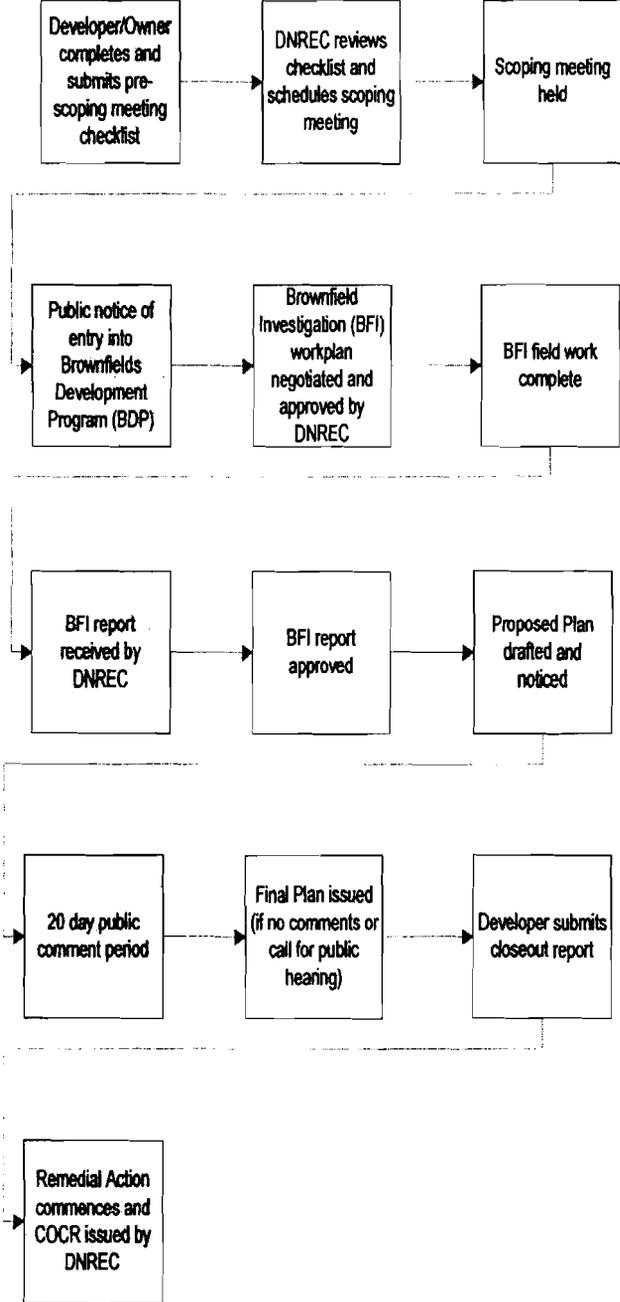


James D. Werner

Date: 16 Nov 2007

ATTACHMENT A

Pre-emptive Remedy Approach



New Pre-emptive Remedy Approach

