



United States
Environmental Protection
Agency

EPA Proposes Quarry Drain, Trench for Creek Cleanup

Bennett's Dump Superfund Site

Bloomington, Indiana

February 2006

Share your opinions

EPA invites your comments on this proposed cleanup plan for PCB-contamination coming from Bennett's Dump. Your input is important. EPA may modify its recommendations based on information and comments from area residents.

Public Comment Period Feb. 3 – March 4 (midnight postmark), 2006

You may fill out and return the enclosed form, or you may mail, fax or e-mail your comments to:

Thomas Alcamo

EPA Remedial Project Manager
EPA Region 5 (SR-6J)
77 W. Jackson Blvd.
Chicago, IL 60604-3590
(800) 621-8431 ext. 67278, weekdays
10 a.m. – 5:30 p.m.
Fax: (312) 886-4071
E-mail: alcamo.thomas@epa.gov

You may also share your views and ask questions at a public meeting scheduled for:

**Tuesday, Feb. 14
6 p.m – 9 p.m.**

**Monroe County Public Library
303 E. Kirkwood Ave.
Bloomington, Ind.**

During the meeting, EPA will explain the proposed cleanup plan. After the presentation, the public may comment on the project or ask questions. A court reporter will record the meeting and all comments. People can also submit their written comments at the meeting. If you have any questions or need special accommodations for the meeting contact:

Stuart Hill

EPA Community Involvement
Coordinator
(800) 621-8431 ext. 60689, weekdays
10 a.m. – 5:30 p.m.
hill.stuart@epa.gov

U.S. Environmental Protection Agency wants to modify the cleanup plan for the Bennett's Dump Superfund site by drawing down the water level of nearby quarries and building a trench that will intercept and treat polluted water before it reaches a local creek. This second phase of the cleanup will help reduce or stop a hazardous chemical compound called polychlorinated biphenyls or PCBs from seeping into the creek. Four small springs on the site and the underground water that is flowing underneath are picking up PCBs that come from electrical equipment disposed of at Bennett's Dump 40 years ago.

The underground water and springs flow into Stout's Creek where the PCBs are settling in the mud (sediment) and being swallowed by fish. After extensive tests, EPA and state partner Indiana Department of Environmental Management concluded the PCBs pose a health risk to people and animals that eat fish from Stout's Creek near the Bennett's Dump site. The creek runs along the western border of Bennett's Dump. EPA and IDEM are negotiating with legally responsible party CBS Corp. to pay for the cleanup of Bennett's Dump and several other disposal sites in the area.

EPA came up with five alternatives for reducing PCB contamination from getting into Stout's Creek. The Agency examined the costs and effectiveness of each option. The Agency's preferred alternative calls for lowering the water level in two or three quarries near Bennett's Dump and evaluating the ground-water levels, then designing and building an interceptor trench and treatment system for contaminated ground water (*see quarry area map on Page 3*). It has been determined that the water-filled quarries near the site feed the underground water supplies and springs so lowering the water level in the pits will reduce the flow of polluted water into Stout's Creek. If the proposed cleanup plan is approved after a public comment period and public meeting, it will be announced with a newspaper notice and in an EPA document called record of decision amendment or ROD amendment.¹

These cleanup approaches will be discussed at a public meeting Feb. 14 in Bloomington, and people will have 30 days (from Feb. 3 until March 4) to file written comments about the proposed plan (*see adjacent box*). EPA could alter the selected remedy further or even choose a new alternative based on public comments. If the preferred cleanup alternative is approved, work on the quarry drain system could begin by this fall with final construction of the interceptor trench coming in 2007.

¹ Section 117(a) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA known as the Superfund law) requires the publication of a notice announcing the proposed ROD amendment and a brief analysis. It also requires an opportunity for a public hearing and comment period. This fact sheet summarizes the technical documents and other information about the ground water and sediment cleanup that are available for viewing at the official site repository located in the Monroe County Public Library.

Cleanup options

EPA considered five alternatives for managing and cleaning up contaminated underground water supplies and creek water and mud. The Agency evaluated each option against nine criteria required by law (*see box for an explanation of the criteria on Page 4*). The five alternatives are summarized below, but full details are available in the technical documents on file in the Monroe County Public Library.

Alternative 1 – No further action: Nothing would be done to clean up or monitor the PCB contamination. EPA always includes a “no action” option for comparison purposes.

Cost - \$0

Alternative 2 – Long-term ground-water monitoring: No additional cleanup measures would be taken, but the underground water supplies would be tested every three months around the on-site springs and Stout’s Creek. Deed restrictions would prevent residential development, digging in the former quarry pits and placement of water wells on-site.

Cost - \$73,322

Alternative 3 – Passive quarry drain system: Tests revealed the water level in the Wedge, Wedge South and Icebox quarries southeast and east of Bennett’s Dump affects the water flow of the on-site springs. By building a passive drainage system from the quarries into Stout’s Creek, the water levels in the quarries can be maintained at a lower level. This will result in lowering the groundwater level at the site which should dry up or reduce the PCB-polluted water getting into Stout’s Creek. Building a drain for Icebox Quarry east of Bennett’s Dump will be further evaluated in this alternative because the costs may outweigh the benefits. Tests have already found the Wedge and Wedge South quarries have the biggest effect on reducing groundwater levels at the site. Alternative 3 also includes the deed restrictions of Alternative 2.

Cost - \$417,000

Alternative 4 – Excavation of buried quarry pits and passive quarry drain: This option combines the passive drain system of Alternative 3 with digging up the residual deep pockets of PCB-contaminated rubble and material that have filled the pits on the dump site. Contaminated material would be disposed of off-site at an EPA-approved landfill. The deed restrictions would also be put in place.

Cost - \$1,338,960

Alternative 5 – Passive quarry drains with interceptor trench and carbon treatment (*this is EPA’s preferred cleanup option*): Under this alternative, in addition to lowering the quarry water levels, a trench would be built along the east side of the dump site. The trench would collect underground water flow before it reaches Stout’s Creek and send it through a carbon treatment system before discharging the clean water into Stout’s Creek. More investigation would be needed to find out exactly how draining the water-filled quarries will affect the underground water flows. Deed restrictions would also be placed on the area. If this option is approved, the quarry drains could be constructed this fall. Tests on the water flow would be conducted over the winter before the interceptor trench could be designed and built next year. The treatment system would require a long-term maintenance plan.

Cost - \$1,189,972

Evaluation of alternatives

EPA evaluated each cleanup alternative against the nine criteria required by the Superfund law (*see the comparison chart on Page 4*) and selected Alternative 5. Alternative 5 is a cost-effective way to reduce the PCB-contamination in Stout’s Creek to a safe level and thereby lower or eliminate health risks for people and animals.

The difficulty of excavating the buried rubble in Bennett’s Dump discouraged the selection of Alternative 4, and the passive quarry drains alone in Alternative 3 may not stop enough PCB pollution from reaching the creek.

Map of Quarry Area



Map for reference only. No accompanying data.

LEGEND

- Topographic Contours
- Spot Elevation
- Centerline of Creek
- Creek Elevation
- Red Back M. Creek

Explanation of evaluation criteria

- Overall protection of human health and the environment** addresses how well an option protects people and the environment. This standard can be met by reducing or removing pollution or by reducing exposure to it.
- Compliance with applicable or relevant and appropriate requirements (ARARs)** ensures that options comply with federal, state and local laws.
- Long-term effectiveness and permanence** evaluates how well an option will work over the long-term, including how safely remaining contamination can be managed.
- Reduction of toxicity, mobility or volume through treatment** addresses how well the option reduces the danger, movement and amount of pollution.
- Short-term effectiveness** compares how quickly an option can help the situation and how much risk there will be while the option is under construction.
- Implementability** evaluates how feasible the option is and whether materials and services are available in the area.
- Cost** includes not only buildings, equipment, materials and labor but also the cost of maintaining the option for the life of the cleanup.
- State acceptance** considers whether the state agrees with the selected option. EPA evaluates this criterion after receiving public comments.
- Community acceptance** considers whether the local community agrees with the selected option. EPA checks this standard after a public meeting and comment period.

Evaluating cleanup choices against the nine evaluation criteria

EPA evaluated the cleanup choices against seven of the nine evaluation criteria. (See “Explanation of evaluation criteria” above.) The state and community acceptance criteria will be evaluated after public comments are received by EPA. The degree to which the cleanup choices meet the evaluation criteria, as determined by EPA, is shown in the table below.

Evaluation Criteria	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5
Overall Protection of Human Health and the Environment	☐	☐	❖	■	■
Compliance with ARARs	☐	☐	■	■	■
Long-Term Effectiveness and Permanence	☐	☐	❖	■	■
Reduction of Toxicity, Mobility, or Volume through Treatment	☐	☐	☐	❖	■
Short-Term Effectiveness	■	■	■	■	■
Implementability	■	■	■	■	■
Cost	\$0	\$73,322	\$417,000	\$1,338,960	\$1,189,972
State Acceptance	Will be evaluated after the comment period.				
Community Acceptance	Will be evaluated after the comment period.				

■ = Meets Criteria

☐ = Does Not Meet Criteria

❖ = Partially Meets Criteria

Bennett's Dump Superfund Site Comment Sheet

Detach, fold, stamp, and mail

Name _____
Address _____
City _____ State _____
Zip _____

Place
Stamp
Here

Stuart Hill
Community Involvement Coordinator
Office of Public Affairs (P-19J)
EPA Region 5
77 W. Jackson Blvd.
Chicago, IL 60604-3590

Health risks to people and the environment

People and animals that eat fish from Stout's Creek could face health risks from PCBs in the mud, water and fish. PCBs can cause liver cancer in humans, and scientists who studied the situation concluded a person who regularly ate fish from Stout's Creek over a lifetime could face a slightly elevated risk of developing cancer. PCBs can also cause non-cancer health effects. With enough exposure to PCBs, they can cause problems in the immune, reproductive, nervous and endocrine systems of humans. Children are especially susceptible to the ill effects of PCBs, which can cause learning disorders and lower IQs.

Local wildlife that eat fish from Stout's Creek include kingfisher birds and mink, and the PCBs could cause reproductive problems in those species.

About Bennett's Dump

A former Westinghouse Corp. capacitor plant in Bloomington used Bennett's Quarry during the 1960s to dump parts containing PCBs. The dump site is separated into two adjacent segments and covers about 4 acres, 2 ½ miles northwest of Bloomington. Monroe County asked EPA to investigate the site in 1983, and the Agency took some immediate cleanup measures such as erecting a fence, removing more than 200 visible capacitors lying on the ground and capping the area with clay and topsoil.

The dump site was placed on the National Priorities List in 1984. The sites on this list are among the nation's most hazardous waste areas and are eligible for cleanup under the EPA Superfund program. Bennett's Dump was among several sites in the area used for disposing of PCB and other hazardous waste. The others have been and continue to be addressed in separate cleanup plans. An initial cleanup plan for Bennett's Dump called for an on-site incinerator to burn PCB-contaminated waste, but public opposition caused the responsible party and EPA to change that plan. In 1999, PCB-contaminated soil and creek mud were dug up and disposed of in an off-site landfill. After the cleanup was completed, springs on-site continued to flow into Stout's Creek and the water contained low levels of PCBs. This proposed cleanup plan is meant to tackle this problem.

The next step

EPA, in consultation with Indiana Department of Environmental Management, will evaluate public comments received during the public comment period before deciding whether to amend the cleanup plan for the site. Based on new information or public comments, EPA may modify its proposed option or select another cleanup option presented in this plan. EPA encourages you to review and comment on the cleanup options. EPA will respond to the comments in a document called a responsiveness summary. The responsiveness summary will be a part of the final decision document called the record of decision that describes the final cleanup plan selected for the site. EPA will announce the final cleanup plan in the local newspaper and will send a copy of the record of decision to the information repository for the site where it will be available for public review. (See the back page of this fact sheet for the location of the information repository.) After a final plan is chosen, it will be designed and implemented.


Information repository

Official documents about the site can be viewed at:

Monroe County Public Library
303 E. Kirkwood Ave.
Bloomington, Ind.

Bennett's Dump Web site

<http://cfpub.epa.gov/supercpad/cursites/csitinfo.cfm?id=0501343>

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BENNETT'S DUMP SUPERFUND SITE: EPA Proposes Modification to Cleanup Plan

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