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Superfund De Minimis Settlements

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Before the
Subcommittee on Oversight and Investigations,
Committee on Energy and Commerce
House of Representatives



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Mr. Chairman and Members of the Subcommittee:

We are pleased to be here today to assist the Subcommittee in assessing the Environmental Protection Agency's (EPA) progress in implementing the Superfund Amendments and Reauthorization Act of 1986 (SARA). Specifically, you asked that we determine whether EPA's de minimis settlement guidance and actions reflect an aggressive settlement process. As requested by the Subcommittee on April 22, 1988, we focused on the de minimis activities at two sites in EPA's region V (Chicago)--the Liquid Disposal, Inc., site in Utica, Michigan, and the Laskin/Poplar Oil Co. site in Jefferson Township, Ohio.

As you know, section 122(g) of SARA authorizes EPA, under certain conditions, to settle promptly with de minimis parties for some portion of a site's overall cleanup costs. These parties involve those that have caused a relatively small share of the pollution at some of the nation's worst hazardous waste sites.

In summary, Mr. Chairman, EPA has not yet reached de minimis settlements at the two sites. Although the potentially responsible parties and their contributions to the pollution at these two sites were generally known for several years, EPA region V's Office of Regional Counsel believed that it did not have sufficient information to reliably estimate cleanup costs to pursue de minimis settlements until September/October 1987. EPA region V is currently drafting a de minimis proposal for parties at the Liquid Disposal site, and EPA and the Department of Justice are reviewing a proposal for the Laskin/Poplar site.

Since SARA's enactment, EPA has reached 8 de minimis settlements--one of which has been finalized--at 8 of the 799 Superfund sites nationwide. While the number of Superfund sites that could be candidates for such settlements is not fully known, EPA has not given these settlements a high priority, as evidenced by (1) the

limited staff resources available in the regions for this activity, (2) the absence of a specific number of de minimis settlements that EPA expects to achieve with its resources, and (3) the lack of specific guidance on the timing of these settlements. Similarly, our two case studies in region V showed that regional enforcement staff shortages and the large caseload of the site attorneys have limited EPA's involvement in de minimis activities at the Liquid Disposal and the Laskin/Poplar sites.

Our work also showed that until March 1988, EPA has been essentially advocating a reactive role for its regional offices in achieving de minimis settlements. Regions were expected to encourage small parties to organize and present settlement offers to EPA. Guidance to the EPA regions was silent on the degree and timing of EPA's direct involvement in negotiating a settlement. In March, however, EPA suggested to its regional offices that they "consider pursuing a more proactive approach towards de minimis settlements." EPA also recognized that it needs to improve and expand its guidance on such settlements. While these are steps in the right direction, it is too early to predict whether these actions alone will result in the de minimis process becoming the useful enforcement tool envisioned by the Congress.

We conducted our work during May and June, 1988. It included interviews with EPA headquarters and region V officials; discussions with legal counsel representing de minimis parties at each of the two sites on the progress of settlements; and reviews of region V enforcement records and files, the legislative history of SARA section 122(g), and EPA's implementing guidance.

Before presenting the detailed results of our work, I would like to begin with an overview of the Superfund program and de minimis settlements.

BACKGROUND

The Superfund program, enacted in 1980, provided EPA with \$1.6 billion to (1) remove hazardous substances, (2) initiate long-term remedies to clean up contaminated land and groundwater, and (3) initiate legal action to secure cleanup or cost recovery from responsible parties. In 1986 SARA provided an additional \$8.5 billion and set time frames for assessing sites and initiating cleanup actions. It also authorized EPA's use of various additional enforcement tools, including de minimis settlements.

The first step in the cleanup process involves inspecting, assessing, and ranking the site. Only the worst sites are included on EPA's National Priorities List, and only listed sites, currently totaling 799, are eligible for long-term cleanup under Superfund. When a site is submitted to EPA headquarters for listing, a search is begun to determine if financially viable responsible parties are available to perform or finance the cleanup. Following this, a remedial investigation and feasibility study is conducted to evaluate cleanup options and their cost. This study is used to prepare a Record of Decision, which sets forth EPA's selected cleanup remedy for the site and its estimated cleanup costs. In the final step, a remedial design is prepared to carry out the selected remedy and cleanup action is initiated.

For enforcement cases, EPA first attempts to get the responsible parties to conduct the remedial investigation and feasibility study, the remedial design, and site cleanup through negotiations and voluntary settlements. Failing this, EPA can initiate legal action either to compel the responsible parties to carry out the remedy or to reimburse EPA for any cleanup costs it incurs in carrying out the remedy with its own funds.

DE MINIMIS SETTLEMENT PROVISIONS

Aside from reaching a settlement with responsible parties, section 122(g) of SARA gives EPA discretionary authority to enter into expedited final settlements with de minimis waste contributors and landowners, that is, private parties that have caused only a small share of the pollution at a hazardous waste site (by amount and toxicity) in comparison with other hazardous substances at the site. Specifically, section 122(g) provides that when EPA determines that a settlement is "practicable and in the public interest," the agency shall seek to reach a final settlement "as promptly as possible" with de minimis parties for some share of the site's cleanup costs. It also states that EPA is to reach such settlements "as soon as possible" after it has available information.

This section was one of several SARA added to expedite settlements and to ensure the effective cleanup of Superfund sites by avoiding costly and protracted litigation. By settling to pay for a share of the site's cleanup costs, de minimis parties are relieved of the responsibility and liability of carrying out EPA's cleanup remedy, and EPA can obtain revenues early in the process to help finance cleanup. Following a de minimis settlement, EPA has a smaller number of parties--the major parties--to negotiate site cleanup with, thereby simplifying these negotiations. In addition, the revenues generated from these settlements may increase the likelihood of reaching a settlement with the major parties by reducing the funds they need to contribute.

De minimis settlements also protect small parties against any claims by nonsettling parties for contributions toward the cleanup costs. But unlike settlements with major parties, de minimis settlements generally provide for the payment of a premium at the time of settlement, in addition to a share of the cleanup costs, to

cover potential cost overruns and any future liability resulting from hazardous releases addressed by the cleanup action.

In EPA's regional offices, regional counsel have the primary responsibility for negotiating and concluding these settlements. They are aided by regional project managers and others familiar with the technical aspects of the site cleanup.

Since the passage of SARA, EPA has reached eight de minimis settlements at eight sites as of June 1988,¹ according to an EPA official. Of the eight settlements, one has been finalized and seven await EPA headquarters, the Department of Justice, or court approval. Eight other settlements at an additional seven sites were expected to be completed in the next 3 months, and negotiations were ongoing at seven other sites. EPA, however, does not know the total number of present Superfund sites that might be likely candidates for such settlements.

EPA IMPLEMENTING CRITERIA

While EPA formally recognized and endorsed the concept of de minimis settlements as early as 1985,² guidance on reaching these settlements was not issued until June 1987. This guidance, which was issued to implement SARA section 122(g)(1)(A), indicated that EPA regional offices should essentially play a reactive role in pursuing such settlements. For example, the guidance states that EPA should encourage small parties to organize and present proposed settlements to EPA. The guidance also told EPA regions to

¹Four settlements were at one site, and one settlement covered four sites.

²On February 5, 1985, EPA issued an Interim Settlement Policy (50 FR 5034) that provided for EPA reaching cash settlements with de minimis parties. But according to an EPA official, no agreements of this nature were entered into under this policy.

try to avoid lengthy settlement negotiations with these parties. In addition, EPA published interim guidance on the model language to be used to draft de minimis settlements in November 1987.

Most recently, in a March 4, 1988, memorandum to its regional offices requesting information on their de minimis settlements for the House Committee on Energy and Commerce, EPA headquarters suggested a number of proposals for the regions to increase the likelihood of such settlements. Specifically, headquarters suggested that the regions

- evaluate several sites within their jurisdiction that would be the best candidates for such settlements;
- consider a more "proactive" approach by sending separate letters to de minimis parties encouraging them to organize and develop a proposed settlement; and
- give major parties a limited opportunity to reach a settlement with de minimis parties. If, after a specified period, no agreement has been reached, EPA should begin actively negotiating with de minimis parties to reach a settlement.

STATUS OF ACTIVITIES AT TWO SUPERFUND SITES

I would now like to provide a brief description of the two sites we reviewed and the status of their de minimis activities. (A chronology of the major activities at these two sites is presented in attachments I and II.)

Liquid Disposal Site

Liquid Disposal, Inc., is a 6.8-acre facility located about 20 miles north of Detroit, in Utica, Michigan, in a residential and light industrial area. Operating as a landfill and commercial incinerator of liquid waste from 1964 to 1982, Liquid Disposal

permanently closed in January 1982. The site was put on the National Priorities List in July 1982, and between May 1982 and April 1986, EPA conducted four removal actions to eliminate the surface waste contained in lagoons, storage tanks, and drums at the site. In September 1983, the Michigan Department of Natural Resources, through a cooperative agreement with EPA, initiated a remedial investigation and feasibility study to define the source and extent of off-site contamination, establish the human health risks posed by the site, and identify required remedial action.

In October 1984, EPA compiled site documents and prepared a draft data base from these records, showing each generator's individual waste shipment, volume, cost, and major waste type sent for that shipment. In anticipation of the proposed remedy and estimated cleanup costs, EPA region V sent Special Notice Letters, outlining potential liabilities and responsibilities, in August 1987 to 885 waste contributors. The letters encouraged private party coordination and delineated the time frames to implement and conduct site cleanup. These letters also cited SARA's de minimis settlement provisions and encouraged private parties to coordinate among themselves and present a position paper addressing specific elements of a de minimis proposal. The paper was to address (1) settlement costs based on an expected analysis of the likely response costs at the site, (2) the premium to be paid by settling de minimis parties, (3) a volumetric cutoff to determine eligibility to participate in the settlement, and (4) a complete release from liability to the government and protection from contribution claims from nonsettling parties.

In September 1987, EPA issued a Record of Decision proposing a cleanup action that included disposal of remaining debris and equipment, treatment of soil and waste, and construction of a slurry wall with an impermeable cap. Major responsible parties have verbally agreed to perform the remedial design and cleanup, and an agreement is expected to be signed by June 30, 1988.

In October 1987, five groups of de minimis parties submitted position papers detailing for EPA the elements of a de minimis settlement. EPA analyzed each of the proposals and in February 1988 prepared a chart summarizing and comparing their key elements. EPA is currently preparing a draft de minimis settlement and plans to propose it to these parties after June 1988. EPA region V regional counsel estimates that such a settlement will provide about \$5 million toward the projected \$28.8 million total cleanup required for the site. The major parties would be liable for the remainder.

Laskin/Poplar Site

From the 1960s to mid-1970s, the owner of the 9-acre site burned used oil to heat greenhouses. As the greenhouse business deteriorated in the mid-1970s, the owner began purchasing used oil for resale, storing it in storage tanks. In January 1976, the Ohio agency responsible for environmental protection received complaints from the county health department concerning pungent odors emanating from the property. Subsequent tests detected hazardous wastes in used oil stored at the site. Efforts to get the company to clean up the site failed because the company lacked the required funds, and between 1980 and 1987, EPA performed eight removal actions at the site. These actions included cleaning up oil spills from holding ponds, collecting contaminated soil, and incinerating oil from pits and tanks.

During the summer of 1982, EPA added the site to the National Priorities List and sent general notice letters to a group of potentially responsible parties informing them of their liability for cleaning up the site. In 1983, EPA began a remedial investigation and feasibility study to assess contamination and cleanup alternatives. Inadequate work by an EPA subcontractor made

additional studies necessary, and results are now expected in September 1988, according to EPA.

EPA has conducted various enforcement efforts against potentially responsible parties for past cost recoveries and future cleanup actions. EPA filed suit against seven major parties for recovery of past costs in late 1984. This action led to EPA's signing, in December 1987, an agreement with a group of about 150 parties, both major and minor waste contributors, to recover past removal costs totaling about \$1.5 million. A group of nonsettling parties, however, has filed an objection to the agreement; this matter was awaiting court resolution as of June 1988. In October 1985, the seven major parties initiated an interim cleanup action costing \$2.2 million.

In August 1987, EPA sent Special Notice Letters to 307 potentially responsible parties--including those mentioned above--seeking their participation in the remedial design and action for a portion of the site cleanup. Subsequent negotiations failed to produce an agreement, and in February 1988, EPA issued a unilateral administrative order to 46 private parties, who EPA now considers the major waste contributors, ordering them to conduct this portion of the site cleanup. To date, 18 parties have agreed to conduct only the remedial design, while EPA continues to negotiate with the remaining 28 parties.

EPA first considered the possibility of settling with small contributors to the Laskin/Poplar site in 1986, but no formal discussions ever began. However, after SARA authorized de minimis settlements, some small contributor legal counsel inquired about the possibility of such settlements. The EPA site regional counsel then encouraged the small contributors' counsel to submit settlement proposals. He also referred the counsel to EPA's related policies and procedures.

As a result of these discussions, counsel for de minimis parties submitted three proposals to EPA. The first, in October 1987 on behalf of 17 parties, was rejected by EPA for missing and incorrect information. The second, submitted in December 1987 and covering 62 parties, including the previous 17, received an EPA response in June 1988, pointing out deficiencies. EPA used parts of this proposal to develop a counter proposal, which is currently with the Department of Justice for review and approval. The third proposal, received in May 1988 and covering 6 parties, also received an EPA response in June 1988, pointing out deficiencies.

EPA region V regional counsel has determined that the approximately 261 de minimis parties should contribute 14 percent, or about \$9.7 million, of the \$69 million in total estimated cleanup costs at the Laskin/Poplar site, with the major parties being liable for the remainder. This total cleanup cost includes EPA past removals, remedial investigations and feasibility studies, EPA oversight, and all future cleanup costs as estimated in October 1987 by EPA's contractor. According to regional counsel, EPA's forthcoming de minimis proposal will take into account any funds the parties may have already contributed to the site cleanup. In addition, a premium will be applied to the settlement costs for each party, although a specific figure has yet to be determined.

DE MINIMIS SETTLEMENTS
ARE A LOW PRIORITY

Our work indicates that de minimis settlements have received a relatively low priority in EPA's Superfund enforcement program. According to EPA region V Office of Regional Counsel officials, settlements for the overall site cleanup have a higher priority than the attainment of de minimis settlements, although these officials are aware of the benefits such settlements can provide to the overall settlement process. An official stated that prior to SARA, limited funding slowed Superfund work, creating a backlog of

site studies and cleanup decisions. Since SARA, with its mandated cleanup time frames, region V's focus has been on completing the studies and remedy selections and obtaining overall site cleanup agreements with responsible parties. As a result, the de minimis process has received little regional staff time and effort, especially in light of the limited number of regional counsel and their multiple site assignments.³

At the Liquid Disposal site, the assigned EPA region V counsel did not negotiate with de minimis parties because such actions might have prolonged the cleanup process and drained already limited resources. Instead, he encouraged the parties to coordinate, requested position papers, and is currently developing an EPA settlement proposal for presentation to the parties. According to the regional counsel, he spends very little of his time on de minimis matters. Most of his time is spent negotiating an overall site cleanup at Liquid Disposal and on activities at 19 other Superfund and non-Superfund sites.

According to legal counsel for one group of de minimis parties at the Liquid Disposal site, however, some negotiations with EPA would be necessary to bring about a settlement. The counsel said that EPA had hoped the de minimis parties and the steering committee (or negotiation unit) for the major parties could come to an agreement. However, this did not occur because of conflicting interests among the parties. As a result, a large group of small contributors was formed to represent the interests of all of these parties. This group is now attempting to meet with the EPA regional counsel to move the process forward. While recognizing

³GAO has previously discussed EPA's shortages of staff resources and the impact of multiple site responsibilities in its reports Superfund: Improvements Needed in Work Force Management (GAO/RCED-88-1, Oct. 26, 1987), Hazardous Waste: Adequacy of EPA Attorney Resource Levels (GAO/RCED-86-81FS, Jan. 31, 1986), and Hazardous Waste: Responsible Party Clean Up Efforts Require Improved Oversight (GAO/RCED-86-123, May 6, 1986).

that EPA officials are often overworked and in pursuit of overall site cleanup, the de minimis parties' counsel told us that too much time has been spent at Liquid Disposal on side issues, such as attempting to perfect the volumetric data base identifying waste contributors.

The EPA region V counsel assigned to the Laskin/Poplar site believes that it is to EPA's advantage to "cash out" the de minimis parties as quickly as possible but views EPA's primary responsibility as obtaining overall site cleanup settlements. The counsel said that this and other responsibilities prevented pursuit of de minimis agreements. This counsel is also responsible for 5 other Superfund cases in various stages of enforcement, as well as 21 non-Superfund assignments. Accordingly, little time is spent on de minimis matters at the Laskin/Poplar site.

Overall, EPA allocated a total of 4.6 technical and legal staff years to its 10 regional offices for de minimis activities in fiscal year 1988, or an average of about one-half staff year per region. Although the March 1988 memorandum encouraged greater attention to de minimis, it did not set expectations as to what EPA hoped to achieve with its resources in terms of de minimis settlement goals. With limited resources and no targets, EPA's regions may, in fact, be reluctant to take a more active role in pursuing these settlements.

Furthermore, we found that although EPA's guidance to its regional offices discusses many aspects of the de minimis process, it does not clearly indicate (1) when and how regions should encourage potential de minimis parties to settle and (2) when and to what extent regions should conduct negotiations to bring about a settlement. In the absence of more specific guidance, we could not determine whether the level of regional effort or timing of de minimis settlements at the two sites we reviewed met the promptness objective contained in SARA's de minimis provisions.

According to EPA's April 6, 1988, letter to the Chairman, House Committee on Energy and Commerce, EPA is currently developing a national strategy to streamline and promote de minimis settlements. This effort is expected to result in additional guidance on such issues as the selection of sites appropriate for settlements, the appropriate timing for pursuing settlements, and the methods that can be used to achieve these settlements and overcome impediments to this process.

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In closing, Mr. Chairman, although de minimis settlements have not yet been reached at the Liquid Disposal and Laskin/Poplar sites, EPA region V regional counsel officials tell us that proposals for such settlements are in process, with agreements expected shortly. Delays in obtaining settlements at these two sites can be attributed to the unavailability of reliable information on estimated cleanup costs, the large number of parties involved, and the priority EPA's region V gave to de minimis settlements at these two sites.

Overall, our review indicates that de minimis settlements have been a relatively low priority and that EPA itself has not been satisfied with the results of its reactive policies for pursuing such settlements. EPA's recent and planned actions for improving its de minimis guidance, however, suggest that this situation may be changing. EPA could assign such settlements a higher priority by allocating more staff resources to them and by setting specific targets on the number of de minimis settlements. However, we would caution that such actions, in light of the present staff resources available to EPA, could have a detrimental effect on other Superfund activities, possibly impairing EPA's ability to meet SARA targets for initiating cleanup actions.

Mr. Chairman, this concludes my prepared statement. I would be pleased to respond to any questions you or other members might have.

CHRONOLOGY OF SIGNIFICANT EVENTSAT THE LIQUID DISPOSAL, INC. (LDI), SITE

- January 1982: LDI was permanently closed after two workers were killed in an industrial accident.
- May - June 1982: Removal Action: A PCB-contaminated oil spill from the waste liquid lagoon occurred. The spill traveled along a small creek that fed into the Clinton River. About 200 gallons of oil and 750 cubic yards of contaminated sediment and debris were recovered.
- July 1982: LDI was placed on the National Priorities List.
- July - August 1982: Removal Action: Action was taken to abate liquid losses from the overflowing waste liquid and scrubber lagoons. Site safety and security were improved.
- August 1983: Notice letters were first sent to the facility president, vice president, and bankruptcy trustee offering them an opportunity to perform the remedial investigation and feasibility study. Notice letters and information requests were later sent to all known potentially responsible parties.
- April 1983 - April 1984: Removal Action: An extensive surface cleanup was undertaken, and approximately 1.3 million gallons of liquid, 15,000 cubic yards of solids, and 1,800 drums were removed from the site.
- September 1983: The Michigan Department of Natural Resources, through a cooperative agreement with EPA, initiated a remedial investigation and feasibility study to define the source and extent of on- and off-site contamination, establish the human health risks posed by the site, and identify required remedial action. In conjunction with this study, EPA performed an endangerment assessment to quantitatively determine the public health and environmental risk posed by the site. This assessment

concluded that public health was threatened by conditions presented in the realistic worst case scenario. The remedial investigation and feasibility study was completed in May 1987.

- October 1984: EPA's National Enforcement Investigation Center compiled documents received from information requests along with the site records. The Center compiled site documents and prepared a draft data base from these records to show each generator's individual waste shipment, volume, cost, and major waste type sent for that shipment. Because of the evolving nature of the process, the data base was most recently updated on January 20, 1988.
- July 1985 -
April 1986: Removal Action: Flammable liquids and sludge in 22 above ground and 8 below-ground tanks were incinerated off-site.
- August 1987: EPA sent Special Notice Letters to about 885 potentially responsible parties for the LDI site. These letters included language on the de minimis settlement provision and requested position papers on specific aspects of a comprehensive de minimis proposal, including settlement costs, premiums, volumetric cutoff, and release from liability.
- September 1987: EPA issued a Record of Decision that provided for disposal of all existing debris and equipment on site, treatment of soil and waste, and construction of a slurry wall with an impermeable cap. The major parties, however, did not initially agree with EPA's remedy. They believed that soil flushing was the appropriate remedy. The major parties agreed to EPA's remedy on April 12, 1988, after EPA decided that soil flushing would not be protective of human health.
- October 1987: Deadline for Submission of Position Papers on De Minimis Settlements: Five groups submitted proposals and one indicated an interest to become involved in the process at a later date.
- February 1988: EPA summarized and compared the key elements contained in the October 1987 proposals and continued negotiations with the major parties

for overall site cleanup. Although EPA did not formally communicate with de minimis parties regarding their proposals, EPA made its position known through its frequent telephone conversations with the parties.

April 1988:

Major parties verbally committed to EPA's Record of Decision. EPA will work to get a consent decree by June 30, 1988. Further negotiation will be required to do this.

June 1988:

EPA is developing a proposal to send to de minimis parties if a settlement can not be reached between the major and de minimis parties by June 30, 1988.

CHRONOLOGY OF SIGNIFICANT EVENTS
AT THE LASKIN/POPLAR OIL COMPANY SITE

January 1976: Ohio state agency received complaints concerning pungent odors emanating from the property.

February 1977: EPA determined the site has no spill prevention control and countermeasure plan. Laskin was subsequently fined \$750.

April 1977: EPA inspected the site for possible National Pollution Discharge Elimination System violations.

April 1979: Department of Justice/EPA filed lawsuit against Laskin for land, air, and water pollution violations.

November 1979: Ohio state agency filed a complaint against Laskin for violation of state plan approval requirements and for odor and discharge nuisances.

July 1980: Ohio court ordered Laskin to clean up the site.

November 1980: Laskin told EPA that there was no money to perform a cleanup.

December 1980: Removal Action: Oil was skimmed off one pond. The remaining water in that pond and another pond was treated. Laskin was found in contempt of court and ordered to shut down.

February 1981: Removal Action: The height of the pond's walls were increased to prevent overflow.

March 1981: Removal Action: The pond walls were rebuilt after mud slide. Oil was pumped into on-site storage tanks.

May 1981: Removal Action: Siphon pumps were installed between two ponds and a creek.

July 1981: Removal Action: Oil and water were removed from pits and then covered with canvas. A pond was backfilled with clay.

June 1982: General Notice Letters were sent to 92 potentially responsible parties.

July 1982: The site was listed on National Priorities List.

July-November 1982: Removal Action: PCB-contaminated oil was removed from site. Water was treated, sludge was solidified, and one pit was covered with clean clay soil.

November 1982: The county court's final judgment permanently enjoined Poplar Oil Company from operating a waste disposal facility and ordered the liquidation of Poplar Oil's assets.

August 1983: Remedial investigation and feasibility study was begun. (This study is not expected to be finished until September 1988.)

April 1984: A Focused Feasibility Study, concerning the interim remedial measure, was released.

August 1984: EPA issued a Record of Decision for the Interim Remedial Measure.

November 1984: EPA filed a complaint against seven major parties for recovery of past costs. The seven major parties began meeting with all other parties in the fall of 1987. Ultimately, EPA signed a consent decree with approximately 150 parties in December 1987 for recovery of removal costs.

October 1985 -- February 1986: Removal Action: Oil was removed from pits and tanks and taken to treatment facility. This was the Interim Remedial Measure. The seven major parties conducted this cleanup under a unilateral administrative order at a cost of \$2.2 million.

July 1986: Seven major parties file suit against 425 parties for cost recovery. A unilateral order was signed by parties committing them to gather information on the site. This information will be used in the Phased Feasibility Study.

- August 1987: Phased Feasibility Study on a source control operable unit was released. Special Notice Letters were sent to 307 parties seeking participation in the operable unit remedial action.
- September 1987: EPA issued its Record of Decision with respect to the source control operable unit for a portion of the site cleanup.
- October 1987: EPA received an estimate of all future costs to clean up the entire site from its contractor.
- The first de minimis proposal was submitted to EPA on behalf of 17 parties.
- Removal Action: The site was secured with fence, pit covers were repaired, and signs were posted.
- November 1987: EPA rejected the first de minimis proposal in a letter that noted the proposal's deficiencies and encouraged another submission.
- December 1987: Approximately 150 parties signed a consent decree with EPA agreeing to pay past removal costs and other costs totaling \$1.5 million. The Decree will not be official until it is signed by a federal judge, which has not occurred yet.
- The negotiations that were initiated pursuant to the August 1987 Special Notice Letters were terminated because an acceptable proposal was not submitted to EPA. As a result, EPA issued a unilateral administrative order in February 1988.
- A second de minimis proposal was submitted to EPA on behalf of 62 parties. On the basis of this proposal, EPA region V decided to use the 7,500-gallon contribution level to separate major contributors from de minimis parties.
- February 1988: EPA issued a unilateral administrative order to 46 parties ordering them to conduct the remedial design and site cleanup for the source control operable unit.

May 1988:

A third de minimis proposal was submitted to EPA on behalf of six additional parties.

EPA received a work plan for the remedial design.

EPA formally submitted its de minimis proposal to the Department of Justice for approval.

June 1988:

EPA responded to the December 1987 de minimis proposal submitted on behalf of 62 parties and the May 1988 proposal submitted on behalf of 6 parties. In both responses, EPA pointed out deficiencies with the proposals and informed the parties that EPA's proposal was forthcoming.